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History Sheet

Rev	Date	Reason for revision	Revised by
0	17 Jun 11	Initial Draft	David Blumenkranz

Contents

History Sheet ii

Introduction. iv

1 Tabulation of Available Inputs 1-1

2 Constituent Physical Parameters 2-1

3 Vegetation Bioaccumulation Factors 3-1

4 Animal Biotransfer and Bioconcentration Factors for Human Health Risk Assessment 4-1

5 Human Toxicological Data 5-1

6 Bioconcentration Factors for Ecological Receptors 6-1

7 Toxicity Reference Values for Ecological Receptors 7-1

8 Radionuclide-Specific Parameters for Ecological Risk Assessment 8-1

Introduction

This document presents the input data used in the environmental risk assessment for the Hanford Tank Waste Treatment and Immobilization Plant (WTP). Only risk assessment modeling input relevent to constituents and their toxicity is included. The *Environmental Risk Assessment Work Plan for the Hanford Tank Waste Treatment and Immobilization Plant* (24590-WTP-RPT-ENS-03-006) describes the site-specific inputs and receptor exposure parameters. Data presented below are done so with a reference indicator (in brackets) in the right-hand column, adjacent to the data and applicable units. At the end of each data table, the reference indicators and their corresponding references are described. The figure below further illustrates the association of data with references. Note that a blank or empty table cell is used to indicate where no data was available.

Table 3-4 Permeability Constant, Octanol/Water Partition

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition
100-00-5	p-Nitrochlorobenzene	1.16E-02	cm/hr	[3]	2.88E
100-02-7	4-Nitrophenol	6.13E-03	cm/hr	[3]	8.13E
100-21-0	p-Phthalic acid	4.86E-03	cm/hr	[3]	1.00E+0
100-25-4	1,4-Dinitrobenzene	1.95E-03	cm/hr	[3]	2.88E+0
100-40-3	4-Vinylcyclohexene				8.51E
100-41-4	Ethyl benzene	7.39E-02	cm/hr	[3]	1.26
	Styren	5.48E-02			1.00

Data (value) and units

Reference indicator

A blank cell indicates no data available.

Reference	Reference (source) for Molecular Weight
[3]	ORNL. *The Risk Assessment Information System (RAIS) Database*. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.

Contents

1 Tabulation of Available Inputs..... 1-1

Tables

Table 1-1 Available COPC/ROPC Physical Parameters..... 1-1
Table 1-2 Available Plant Uptake Parameters..... 1-19
Table 1-3 Available Animal and Fish Uptake Parameters..... 1-35
Table 1-4 Available Chronic Toxicity Data..... 1-50

1 Tabulation of Available Inputs

Note regarding tables: Inputs available in literature and database references are indicated by an "X." Inputs that are calculated during the risk assessment modeling process are identified with "calc" (refer the Appendix A of the HHRAP, EPA 2005). Inputs that are obtained from surrogate constituents are identified with "surr" (refer the CCN 097844). Blank table entries indicate where data are unavailable or not applicable (e.g., radiological half-lives are not applicable to nonradionuclides).

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
100-02-7	4-Nitrophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
100-21-0	p-Phthalic acid	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
100-25-4	1,4-Dinitrobenzene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
100-40-3	4-Vinylcyclohexene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
100-41-4	Ethyl benzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
100-42-5	Styrene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
100-44-7	Benzyl chloride	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
100-47-0	Benzonitrile	X	X	X	X	X	X	X		calc.	calc.	calc.	X	X		
100-51-6	Benzyl alcohol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
100-52-7	Benzaldehyde	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
10028-15-6	Ozone	X	X	calc.	X	calc.	calc.	calc.						X		
10028-17-8	Tritium	X		X		calc.	calc.									X
10045-97-3	Cesium-137	X		X		calc.	calc.			X	X	X				X
10061-01-5	cis-1,3-Dichloropropene	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X		
10061-02-6	trans-1,3-Dichloropropene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
10098-91-6	Yttrium-90	X		X		calc.	calc.			X	X	X				X
10098-97-2	Strontium-90	X		X		calc.	calc.			X	X	X				X
101-55-3	4-Bromophenylphenyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
101-77-9	4,4-Methylenedianiline	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
10102-44-0	Nitrogen dioxide	X	X	calc.	X	calc.	calc.		X							

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
10198-40-0	Cobalt-60	X		X		calc.	calc.			X	X	X				X
103-33-3	Azobenzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
103-65-1	n-Propyl benzene (Isocumene)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
104-51-8	n-Butylbenzene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X		
104-76-7	2-Ethyl-1-Hexanol	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
105-67-9	2,4-Dimethylphenol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
10595-95-6	N-Methyl-N-Nitrosoethamine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
106-44-5	p-Cresol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
106-46-7	1,4-Dichlorobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
106-47-8	p-Chloroaniline	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
106-49-0	p-Toluidine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
106-51-4	Quinone	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
106-88-7	1,2-Epoxybutane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
106-89-8	Epichlorohydrin	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
106-93-4	Ethylene dibromide	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
106-99-0	1,3-Butadiene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
107-02-8	Acrolein	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
107-05-1	3-Chloropropene (Allyl chloride)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
107-06-2	1,2-Dichloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
107-12-0	Propionitrile	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
107-13-1	Acrylonitrile	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
107-19-7	Propargyl alcohol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
107-21-1	Ethylene glycol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
107-98-2	Propylene glycol monomethyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
108-05-4	Vinyl acetate	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
108-10-1	Hexone (4-Methyl-2-pentanone or MIBK)	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
108-39-4	m-Cresol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
108-60-1	Dichloroisopropyl ether (2,2'-Oxybis (1-chloropropane))	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
108-67-8	1,3,5-Trimethyl benzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
108-86-1	Bromobenzene (Phenyl bromide)	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
108-87-2	Methylcyclohexane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
108-88-3	Toluene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
108-90-7	Chlorobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
108-94-1	Cyclohexanone	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
108-95-2	Phenol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
109-74-0	Butyronitrile	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
109-75-1	3-Butenenitrile	X	X	calc.	X	calc.	calc.	X								
109-77-3	Malononitrile	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
109-86-4	2-Methoxyethanol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
109-99-9	Tetrahydrofuran	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
110-00-9	Furan	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
110-54-3	n-Hexane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
110-59-8	Valeronitrile	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
110-80-5	2-Ethoxyethanol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
110-82-7	Cyclohexane	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
110-83-8	Cyclohexene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
110-86-1	Pyridine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
111-15-9	Ethylene glycol monoethyl ether acetate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
111-44-4	Bis(2-chloroethyl) ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
111-65-9	n-Octane	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
111-76-2	Ethylene glycol monobutyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
111-84-2	n-Nonane	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
111-91-1	Bis(2-chloroethoxy) methane	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
112-30-1	1-Decanol	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X		
112-31-2	Decanal	X	X	calc.	X	calc.	calc.	X								
112-40-3	Dodecane	X	X	calc.	X	calc.	calc.	X								
1120-21-4	Undecane	X	X	calc.	X	calc.	calc.	X								
1120-71-4	1,3-Propane sultone	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
117-84-0	n-Dioctyl phthalate	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
118-74-1	Hexachlorobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
119-90-4	3,3'-Dimethoxybenzidine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
120-12-7	Anthracene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
120-82-1	1,2,4-Trichlorobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
120-83-2	2,4-Dichlorophenol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
121-14-2	2,4-Dinitrotoluene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
122-39-4	N,N-Diphenylamine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
122-66-7	1,2-Diphenylhydrazine	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
123-33-1	Maleic hydrazide	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
123-38-6	n-Propionaldehyde	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
123-72-8	Butyraldehyde	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
123-91-1	1,4-Dioxane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
124-18-5	Decane	X	X	calc.	X	calc.	calc.	X								
124-38-9	Carbon dioxide	X				calc.	calc.									
124-48-1	Chlorodibromomethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	calc.	X	X	
126-73-8	Tributyl phosphate	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
126-98-7	2-Methyl-2-propenenitrile	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
127-18-4	1,1,2,2-Tetrachloroethene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X		
129-00-0	Pyrene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
131-11-3	Dimethyl phthalate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
132-64-9	Dibenzofuran	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
133-06-2	Captan	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
1330-20-7	Xylenes (mixed isomers)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
1336-36-3	Polychlorinated biphenyls (PCBs)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
134-32-7	1-Naphthylamine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
135-98-8	sec-Butylbenzene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
13966-29-5	Uranium-234	X		X		calc.	calc.			X	X	X				X
13967-48-1	Ruthenium-106	X		X		calc.	calc.			X	X	X				X
13967-70-9	Cesium-134	X		X		calc.	calc.			X	X	X				X
13968-55-3	Uranium-233	X		X		calc.	calc.			X	X	X				X
13981-15-2	Curium-244	X		X		calc.	calc.			X	X	X				X
13981-16-3	Plutonium-238	X		X		calc.	calc.			X	X	X				X
13981-37-8	Nickel-63	X		X		calc.	calc.			X	X	X				X
13982-10-0	Plutonium-242	X		X		calc.	calc.			X	X	X				X
13982-63-3	Radium-226	X		X		calc.	calc.			X	X	X				X
13982-70-2	Uranium-236	X		X		calc.	calc.			X	X	X				X
13994-20-2	Neptunium-237	X		X		calc.	calc.			X	X	X				X
141-78-6	Acetic acid ethyl ester (Ethyl acetate)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
14119-32-5	Plutonium-241	X		X		calc.	calc.			X	X	X				X
14119-33-6	Plutonium-240	X		X		calc.	calc.			X	X	X				X
14133-76-7	Technetium-99	X		X		calc.	calc.			X	X	X				X
14158-29-3	Uranium-232	X		X		calc.	calc.			X	X	X				X
14234-35-6	Antimony-125	X		X		calc.	calc.			X	X	X				X
14265-44-2	Phosphate	X		X		calc.	calc.									
14331-85-2	Protactinium-231	X		X		calc.	calc.			X	X	X				X
14336-70-0	Nickel-59	X		X		calc.	calc.			X	X	X				X
14391-16-3	Europium-155	X		X		calc.	calc.			X	X	X				X
145-73-3	Endothall	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
14596-10-2	Americium-241	X		X		calc.	calc.			X	X	X				X
14683-23-9	Europium-152	X		X		calc.	calc.			X	X	X				X
14762-75-5	Carbon-14	X		X		calc.	calc.			X	X	X				X
14797-55-8	Nitrate	X		X	X	calc.	calc.		X							
14797-65-0	Nitrite	X		X		calc.	calc.		X							
14808-79-8	Sulfate	X	X	X	X	calc.	calc.	calc.	X							
14952-40-0	Actinium-227	X		X		calc.	calc.			X	X	X				X
14993-75-0	Americium-243	X		X		calc.	calc.			X	X	X				X
15046-84-1	Iodine-129	X		calc.	X	calc.	calc.			X	X	X				X
15117-48-3	Plutonium-239	X		X		calc.	calc.			X	X	X				X
15117-96-1	Uranium-235	X		X		calc.	calc.			X	X	X				X
15262-20-1	Radium-228	X		X		calc.	calc.			X	X	X				X
15510-73-3	Curium-242	X		X		calc.	calc.			X	X	X				X
15585-10-1	Europium-154	X		X		calc.	calc.			X	X	X				X
15594-54-4	Thorium-229	X		X		calc.	calc.			X	X	X				X
156-59-2	cis-1,2-Dichloroethene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	calc.	X		
156-60-5	trans-1,2-Dichloroethylene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
15715-94-3	Samarium-151	X		X		calc.	calc.			X	X	X				X
15751-77-6	Zirconium-93	X		X		calc.	calc.			X	X	X				X

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
15757-87-6	Curium-243	X		X		calc.	calc.			X	X	X				X
15758-45-9	Selenium-79	X		X		calc.	calc.			X	X	X				X
15832-50-5	Tin-126	X		X		calc.	calc.			X	X	X				X
1634-04-4	Methyl tert-butyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
16887-00-6	Chloride	X	X	X	X	calc.	calc.	X	X					X		
16984-48-8	Fluoride	X		X		calc.	calc.									
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
189-55-9	Dibenzo[a,i]pyrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
189-64-0	Dibenzo[a,h]pyrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	surr.	
191-24-2	Benzo[g,h,i]perylene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
191-30-0	Benzo[a,i]pyrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
192-65-4	Dibenzo[a,e]pyrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
192-97-2	Benzo[e]pyrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
193-39-5	Indeno[1,2,3-cd]pyrene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
205-82-3	Benzo[j]fluoranthene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
205-99-2	Benzo[b]fluoranthene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
206-44-0	Fluoranthene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
207-08-9	Benzo[k]fluoranthene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
208-96-8	Acenaphthylene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
218-01-9	Chrysene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
224-42-0	Dibenz[a,j]acridine	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
2245-38-7	2,3,5-Trimethylnaphthalene	X	X	calc.	X	calc.	calc.	X								
226-36-8	Dibenz[a,h]acridine	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
22967-92-6	Methylmercury	X	X	X	X	X	X	X	X	X	X	X				
23950-58-5	Pronamide	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
24959-67-9	Bromide	X	X	X	X	calc.	calc.	X						X		
27154-33-2	Trichlorofluoroethane	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PBC 118)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
319-84-6	alpha-BHC	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
319-85-7	beta-BHC	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
3268-87-9	1,2,3,4,6,7,8,9 Octachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
3697-24-3	5-Methylchrysene	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
378253-40-8	Barium-137m	X		X		calc.	calc.			X	X	X				X
378253-44-2	Cadmium-113m	X		X		calc.	calc.			X	X	X				X
378782-82-2	Niobium-93m	X		X		calc.	calc.			X	X	X				X
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
39001-02-0	1,2,3,4,6,7,8,9 Octachlorodibenzofuran	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	

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39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
4170-30-3	2-Butenaldehyde (2-Butenal or Crotonaldehyde)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
41851-50-7	Chlorocyclopentadiene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
460-19-5	Cyanogen	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	calc.	X		
4786-20-3	2-Butenenitrile	X	X	calc.	X	calc.	calc.	X								
50-00-0	Formaldehyde	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
50-32-8	Benzo[a]pyrene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
506-68-3	Cyanogen bromide	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X		
506-77-4	Cyanogen chloride	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X		
51-28-5	2,4-Dinitrophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
51-79-6	Ethyl Carbamate (urethane)	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
510-15-6	Chlorobenzilate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
528-29-0	o-Dinitrobenzene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
53-70-3	Dibenz[a,h]anthracene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
532-27-4	2-Chloroacetophenone	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
534-52-1	4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	

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5385-75-1	Dibenzo[a,e]fluor-anthene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
540-59-0	1,2-Dichloroethylene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
540-73-8	1,2-Dimethylhydrazine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
540-84-1	2,2,4-Trimethylpentane	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
541-73-1	1,3-Dichlorobenzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
542-75-6	1,3-Dichloropropene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
542-88-1	Dichloromethyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
56-23-5	Carbon tetrachloride	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
56-49-5	3-Methylcholanthrene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X	X	
56-55-3	Benzo[a]anthracene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
57-12-5	Cyanide	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
57-24-9	Strychnine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
57-74-9	Chlordane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo (p)dioxin	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
58-89-9	gamma-BHC (Lindane)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	

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58-90-2	2,3,4,6-Tetrachlorophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
581-42-0	2,6-Dimethylnaphthalene	X	X	calc.	X	calc.	calc.	X								
584-84-9	2,4-Toluene diisocyante	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
589-38-8	3-Hexanone	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X		
59-50-7	4-Chloro-3-methylphenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
59-89-2	N-Nitrosomorpholine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
591-50-4	Benzene, iodo-	X	X	calc.	X	calc.	calc.	X								
591-78-6	2-Hexanone	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X		
593-60-2	Bromoethene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
593-74-8	Dimethyl Mercury	X	X	calc.	X	calc.	calc.	X								
60-11-7	Dimethyl aminoazobenzene	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
60-29-7	Ethyl ether	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
60-35-5	Acetamide	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
602-87-9	5-Nitroacenaphthene	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	surr.	
606-20-2	2,6-Dinitrotoluene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
608-93-5	Pentachlorobenzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
61626-71-9	Dichloropentadiene	X	X	X	X	calc.	calc.	X	surr.	calc.	calc.	calc.	surr.	X		
62-50-0	Ethyl methanesulfonate	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
62-53-3	Aniline	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
62-75-9	N-Nitroso-N,N-dimethylamine (Dimethylnitrosamine)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
621-64-7	di-n-Propylnitrosamine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
624-83-9	Methyl isocyanate	X	X	calc.	X	surr.	surr.	X	surr.	surr.	surr.	surr.	surr.	X	X	
628-73-9	Hexanenitrile	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		

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630-08-0	Carbon monoxide	X	X	calc.	X	calc.	calc.	calc.						X		
630-20-6	1,1,1,2-Tetrachloroethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
64-18-6	Formic acid	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
65-85-0	Benzoic acid	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
67-56-1	Methyl alcohol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
67-63-0	2-Propyl alcohol (Isopropanol; Propan-2-o1)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
67-64-1	2-Propanone (Acetone)	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
67-66-3	Chloroform	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
67-72-1	Hexachloroethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	calc.	X		
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
70-30-4	Hexachlorophene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
71-36-3	n-Butyl alcohol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
71-43-2	Benzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
71-55-6	1,1,1-Trichloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
72-43-5	Methoxychlor	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
72-55-9	4,4'-DDE	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	

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72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X	X	
74-83-9	Bromomethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
74-87-3	Chloromethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
74-88-4	Iodomethane (Methyl iodide)	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
74-95-3	Methylene bromide	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
74-97-5	Bromochloromethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
7429-90-5	Aluminum	X	X	X	X	calc.	calc.	X	X	X	X	X				
7439-89-6	Iron	X	X	X		calc.	calc.	X	X	X	X	X				
7439-92-1	Lead	X	X	X	X	X	X	X	X	X	X	X		X		
7439-93-2	Lithium	X	X	X		calc.	calc.		X	X	X	X				
7439-95-4	Magnesium	X	X	X		calc.	calc.		X	X	X	X				
7439-96-5	Manganese	X	X	X	X	calc.	calc.	X	X	X	X	X				
7439-97-6	Mercury - elemental	X	X	X	X	X	X	X	X	X	X	X		X		
7439-98-7	Molybdenum	X	X	X	X	calc.	calc.	X	X	X	X	X				
7440-02-0	Nickel	X	X	X	X	X	X	X	X	X	X	X		X		
7440-16-6	Rhodium	X		X		calc.	calc.			X	X	X				
7440-22-4	Silver	X	X	X	X	X	X	X	X	X	X	X		X		
7440-23-5	Sodium	X	X	X		calc.	calc.		X	X	X	X				
7440-24-6	Strontium (total)	X	X	X	X	calc.	calc.	X	X	X	X	X		X		
7440-25-7	Tantalum	X		X		calc.	calc.			X	X	X				
7440-28-0	Thallium	X	X	X	X	X	X	X	X	X	X	X		X		
7440-29-1	Thorium-232	X	X	X		calc.	calc.		X	X	X	X				X
7440-31-5	Tin	X	X	X	X	calc.	calc.	X	X	X	X	X				
7440-33-7	Tungsten	X	X	X	X	calc.	calc.		X	X	X	X				
7440-36-0	Antimony	X	X	X	X	X	X	X	X	X	X	X		X		
7440-38-2	Arsenic	X	X	X	X	X	X	X	X	X	X	X		X		
7440-39-3	Barium	X	X	X	X	X	X	X	X	X	X	X		X		

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
7440-41-7	Beryllium	X	X	X	X	X	X	X	X	X	X	X		X		
7440-43-9	Cadmium	X	X	X	X	X	X	X	X	X	X	X		X		
7440-47-3	Chromium	X	X	X	X	X	X	X	X	X	X	X	calc.	X		
7440-48-4	Cobalt	X	X	X	X	calc.	calc.		X	X	X	X				
7440-50-8	Copper	X	X	X	X	calc.	calc.	X	X	X	X	X				
7440-61-1	Uranium	X	X	X	X	calc.	calc.		X	X	X	X				
7440-61-1R	Uranium-238	X		X		calc.	calc.			X	X	X				X
7440-62-2	Vanadium	X	X	X		calc.	calc.	X	X	X	X	X				
7440-65-5	Yttrium	X		X		calc.	calc.			X	X	X				
7440-66-6	Zinc	X	X	X	X	X	X	X	X	X	calc.	calc.		X		
7440-67-7	Zirconium	X	X	X	X	calc.	calc.		X	X	X	X				
7446-09-5	Sulfur dioxide	X	X	calc.	X	calc.	calc.	X						X		
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	
7487-94-7	Mercury (Hg^{+2})	X	X	X	X	X	X	X	X	X	X	X		X		
75-00-3	Chloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
75-01-4	1-Chloroethene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	calc.	X	X	
75-02-5	Vinyl Fluoride	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X		
75-05-8	Acetonitrile	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
75-07-0	Acetaldehyde	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
75-09-2	Dichloromethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
75-15-0	Carbon disulfide	X	X	calc.	X	X	X	X	X	X	calc.	calc.	calc.	X		
75-21-8	Oxirane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
75-25-2	Bromoform	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
75-27-4	Bromodichloromethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	calc.	X		
75-29-6	2-Chloropropane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
75-34-3	1,1-Dichloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
75-35-4	1,1-Dichloroethene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
75-44-5	Phosgene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X	X	

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
75-45-6	Chlorodifluoromethane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
75-50-3	Trimethylamine	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	X	X		
75-69-4	Trichlorofluoromethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
75-71-8	Dichlorodifluoro-methane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
76-01-7	Pentachloroethane	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane (Freon 113)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
76-44-8	Heptachlor	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
764-41-0	1,4-Dichloro-2-butene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
7647-01-0	Hydrogen Chloride	X	X	calc.	X	X	X	X	X				X			
765-34-4	Glycidylaldehyde	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	X	X	X	
7664-39-3	Hydrogen Fluoride	X	X	calc.	X	calc.	calc.	calc.					X	X		
7664-41-7	Ammonia/Ammonium	X	X	calc.	X	calc.	calc.	X	X				X	X		
77-47-4	Hexachlorocyclopenta-diene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
77-78-1	Dimethyl sulfate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
7704-34-9	Total Sulfur (thermodynamically stable)	X				calc.	calc.									
7723-14-0	Phosphorous	X	X	X	X	calc.	calc.	X	X	X	X	X	X	X		
7782-41-4	Fluorine gas (F_2)	X	X	calc.	X	calc.	calc.		X	X						
7782-49-2	Selenium	X	X	X	X	X	X	X	X	X	X	X		X		
7782-50-5	Chlorine	X	X	calc.	X	X	X	X	X	X				X		
78-83-1	2-Methylpropyl alcohol (Isobutyl alcohol)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
78-87-5	1,2-Dichloropropane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
78-93-3	2-Butanone	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
79-00-5	1,1,2-Trichloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
79-01-6	1,1,2-Trichloroethylene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
79-10-7	2-Propenoic acid	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
79-34-5	1,1,2,2-Tetrachloroethane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
79-46-9	2-Nitropropane	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
80-62-6	Methyl methacrylate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
82-68-8	Pentachloronitro-benzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
822-06-0	Hexamethylene-1,5-diisocyanate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
823-40-5	Toluene-2,6-diamine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
83-32-9	Acenaphthene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
832-69-9	1-Methylphenanthrene	X	X	calc.	X	calc.	calc.	X								
84-66-2	Diethyl phthalate	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
84-74-2	Dibutyl phthalate	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
85-01-8	Phenanthrene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
85-44-9	Phthalic anhydride	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
85-68-7	Butylbenzyl phthalate	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
86-73-7	Fluorene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
87-61-6	1,2,3-Trichlorobenzene	X	X	calc.	X	X	X	X		calc.	calc.	calc.	X	X		
87-68-3	Hexachlorobutadiene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
87-86-5	Pentachlorophenol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
88-06-2	2,4,6-Trichlorophenol	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
88-74-4	o-Nitroaniline	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
88-75-5	2-Nitrophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
90-04-0	o-Anisidine	X	X	calc.	X	calc.	calc.	X	X	calc.	calc.	calc.	calc.	X	X	
90-12-0	1-Methylnaphthalene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
91-20-3	Naphthalene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
91-22-5	Quinoline	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
91-57-6	2-Methylnaphthalene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
91-58-7	2-Chloronaphthalene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
91-94-1	3,3'-Dichlorobenzidine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	calc.	X	X	
92-52-4	1,1`-Biphenyl	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
924-16-3	N-Nitrosodi-n-butylamine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
94-59-7	Safrole	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
94-75-7	2,4-D and esters (160C typed)	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
95-48-7	o-Cresol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
95-49-8	2-Chlorotoluene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
95-50-1	1,2-Dichlorobenzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
95-53-4	o-Toluidine	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
95-57-8	2-Chlorophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
95-63-6	1,2,4-Trimethyl benzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
95-94-3	1,2,4,5-Tetrachlorobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
95-95-4	2,4,5-Trichlorophenol	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
96-12-8	1,2-Dibromo-3-chloropropane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
96-18-4	1,2,3-Trichloropropane	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	
96-45-7	Ethylene thiourea	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
97-63-2	Ethyl methacrylate	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
98-01-1	Furfural	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
98-06-6	tert-Butyl benzene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
98-07-7	Benzotrichloride	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
98-82-8	Cumene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
98-83-9	alpha-Methylstyrene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
98-86-2	Acetophenone	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X		
98-95-3	Nitrobenzene	X	X	calc.	X	X	X	X	X	calc.	calc.	calc.	X	X	X	
99-35-4	1,3,5-Trinitrobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X		
99-65-0	1,3-Dinitrobenzene	X	X	calc.	X	X	X	X	X	X	calc.	calc.	X	X	X	

Table 1-1 Available COPC/ROPC Physical Parameters

CAS Registry Number	Constituent Name	Molar Weight	Solubility	Vapor Fraction	Vapor Pressure	Air Diffusivity	Water Diffusivity	Henry's Law Constant	Permeability Constant	Soil-Water Partitioning Coeff.	Sediment-Water Partitioning Coeff.	Bed Sediment-Pore Water Partitioning Coeff.	Org. Carbon-Water Partitioning Coeff.	Octanol-Water Partitioning Coeff.	Half-life in Soil	Radiological Half-life
99-87-6	p-Cymene	X	X	calc.	X	calc.	calc.	X		calc.	calc.	calc.	calc.	X		
N/A	Particulate matter															

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
100-02-7	4-Nitrophenol	X	calc.	X	X	X	X	X	X	X	X
100-21-0	p-Phthalic acid	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
100-25-4	1,4-Dinitrobenzene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
100-40-3	4-Vinylcyclohexene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
100-41-4	Ethyl benzene	X	calc.	X	X	X	X	X	X	X	X
100-42-5	Styrene	X	calc.	X	X	X	X	X	X	X	X
100-44-7	Benzyl chloride	X	calc.	X	X	X	X	X	X	X	X
100-47-0	Benzonitrile	X	calc.	X	X	X	X	X	X	X	X
100-51-6	Benzyl alcohol	X	calc.	X	X	X	X	X	X	X	X
100-52-7	Benzaldehyde	X	calc.	X	X	X	X	X	X	X	X
10028-15-6	Ozone	calc.		calc.	calc.	calc.	calc.			calc.	calc.
10028-17-8	Tritium										
10045-97-3	Cesium-137		X	X	X	X	X	X	X	X	X
10061-01-5	cis-1,3-Dichloropropene	surr.	surr.	X	X	surr.	X	surr.	surr.	X	X
10061-02-6	trans-1,3-Dichloropropene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
10098-91-6	Yttrium-90		X	X	X	X	X	X	X	X	X
10098-97-2	Strontium-90		X	X	X	X	X	X	X	X	X
101-55-3	4-Bromophenylphenyl ether	X	calc.	X	X	X	X	X	X	X	X
101-77-9	4,4-Methylenedianiline	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
10102-44-0	Nitrogen dioxide										
10198-40-0	Cobalt-60		X	X	X	X	X	X	X	X	X
103-33-3	Azobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
103-65-1	n-Propyl benzene (Isocumene)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
104-51-8	n-Butylbenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
104-76-7	2-Ethyl-1-Hexanol	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
105-67-9	2,4-Dimethylphenol	X	calc.	X	X	X	X	X	X	X	X
10595-95-6	N-Methyl-N-Nitrosoethamine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
106-44-5	p-Cresol	X	calc.	X	X	X	X	X	X	X	X
106-46-7	1,4-Dichlorobenzene	X	calc.	X	X	X	X	X	X	X	X
106-47-8	p-Chloroaniline	X	calc.	X	X	X	X	X	X	X	X
106-49-0	p-Toluidine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
106-51-4	Quinone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
106-88-7	1,2-Epoxybutane	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
106-89-8	Epichlorohydrin	X	calc.	X	X	X	X	X	X	X	X
106-93-4	Ethylene dibromide	X	calc.	X	X	X	X	X	X	X	X
106-99-0	1,3-Butadiene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
107-02-8	Acrolein	X	calc.	X	X	X	X	X	X	X	X
107-05-1	3-Chloropropene (Allyl chloride)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
107-06-2	1,2-Dichloroethane	X	calc.	X	X	X	X	X	X	X	X
107-12-0	Propionitrile	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
107-13-1	Acrylonitrile	X	calc.	X	X	X	X	X	X	X	X
107-19-7	Propargyl alcohol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
107-21-1	Ethylene glycol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
107-98-2	Propylene glycol monomethyl ether	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
108-05-4	Vinyl acetate	X	calc.	X	X	X	X	X	X	X	X
108-10-1	Hexone (4-Methyl-2-pentanone or MIBK)	X	calc.	X	X	X	X	X	X	X	X
108-39-4	m-Cresol	X	calc.	X	X	X	X	X	X	X	X
108-60-1	Dichloroisopropyl ether (2,2'-Oxybis (1-chloropropane))	calc.	calc.	X	calc.	calc.	X	calc.	calc.	X	X
108-67-8	1,3,5-Trimethyl benzene	X	calc.	X	X	X	X	X	X	X	X
108-86-1	Bromobenzene (Phenyl bromide)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
108-87-2	Methylcyclohexane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
108-88-3	Toluene	X	calc.	X	X	X	X	X	X	X	X
108-90-7	Chlorobenzene	X	calc.	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
108-94-1	Cyclohexanone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
108-95-2	Phenol	X	calc.	X	X	X	X	X	X	X	X
109-74-0	Butyronitrile	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
109-75-1	3-Butenenitrile			X	X	X	X			X	X
109-77-3	Malononitrile	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
109-86-4	2-Methoxyethanol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
109-99-9	Tetrahydrofuran	X	calc.	X	X	X	X	X	X	X	X
110-00-9	Furan	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
110-54-3	n-Hexane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
110-59-8	Valeronitrile	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
110-80-5	2-Ethoxyethanol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
110-82-7	Cyclohexane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
110-83-8	Cyclohexene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
110-86-1	Pyridine	X	calc.	X	X	X	X	X	X	X	X
111-15-9	Ethylene glycol monoethyl ether acetate	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
111-44-4	Bis(2-chloroethyl) ether	X	calc.	X	X	X	X	X	X	X	X
111-65-9	n-Octane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
111-76-2	Ethylene glycol monobutyl ether	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
111-84-2	n-Nonane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
111-91-1	Bis(2-chloroethoxy)methane	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
112-30-1	1-Decanol	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
112-31-2	Decanal			X	X	X	X			X	X
112-40-3	Dodecane			X	X	X	X			X	X
1120-21-4	Undecane			X	X	X	X			X	X
1120-71-4	1,3-Propane sultone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)	X	calc.	X	X	X	X	X	X	X	X
117-84-0	n-Dioctyl phthalate	X	calc.	X	X	X	X	X	X	X	X
118-74-1	Hexachlorobenzene	X	calc.	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
119-90-4	3,3'-Dimethoxybenzidine	X	calc.	X	X	X	X	X	X	X	X
120-12-7	Anthracene	X	calc.	X	X	X	X	X	X	X	X
120-82-1	1,2,4-Trichlorobenzene	X	calc.	X	X	X	X	X	X	X	X
120-83-2	2,4-Dichlorophenol	X	calc.	X	X	X	X	X	X	X	X
121-14-2	2,4-Dinitrotoluene	X	calc.	X	X	X	X	X	X	X	X
122-39-4	N,N-Diphenylamine	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
122-66-7	1,2-Diphenylhydrazine	X	calc.	X	X	X	X	X	X	X	X
123-33-1	Maleic hydrazide	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
123-38-6	n-Propionaldehyde	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
123-72-8	Butyraldehyde	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
123-91-1	1,4-Dioxane	X	calc.	X	X	X	X	X	X	X	X
124-18-5	Decane			X	X	X	X			X	X
124-38-9	Carbon dioxide			X	X	X	X			X	X
124-48-1	Chlorodibromomethane	X	calc.	X	X	X	X	X	X	X	X
126-73-8	Tributyl phosphate	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
126-98-7	2-Methyl-2-propenenitrile	X	calc.	X	X	X	X	X	X	X	X
127-18-4	1,1,2,2-Tetrachloroethene	X	calc.	X	X	X	X	X	X	X	X
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
129-00-0	Pyrene	X	calc.	X	X	X	X	X	X	X	X
131-11-3	Dimethyl phthalate	X	calc.	X	X	X	X	X	X	X	X
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
132-64-9	Dibenzofuran	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
133-06-2	Captan	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
1330-20-7	Xylenes (mixed isomers)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
1336-36-3	Polychlorinated biphenyls (PCBs)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
134-32-7	1-Naphthylamine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
135-98-8	sec-Butylbenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
13966-29-5	Uranium-234		X	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
13967-48-1	Ruthenium-106		X	X	X	X	X	X	X	X	X
13967-70-9	Cesium-134		X	X	X	X	X	X	X	X	X
13968-55-3	Uranium-233		X	X	X	X	X	X	X	X	X
13981-15-2	Curium-244		X	X	X	X	X	X	X	X	X
13981-16-3	Plutonium-238		X	X	X	X	X	X	X	X	X
13981-37-8	Nickel-63		X	X	X	X	X	X	X	X	X
13982-10-0	Plutonium-242		X	X	X	X	X	X	X	X	X
13982-63-3	Radium-226		X	X	X	X	X	X	X	X	X
13982-70-2	Uranium-236		X	X	X	X	X	X	X	X	X
13994-20-2	Neptunium-237		X	X	X	X	X	X	X	X	X
141-78-6	Acetic acid ethyl ester (Ethyl acetate)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
14119-32-5	Plutonium-241		X	X	X	X	X	X	X	X	X
14119-33-6	Plutonium-240		X	X	X	X	X	X	X	X	X
14133-76-7	Technetium-99		X	X	X	X	X	X	X	X	X
14158-29-3	Uranium-232		X	X	X	X	X	X	X	X	X
14234-35-6	Antimony-125		X	X	X	X	X	X	X	X	X
14265-44-2	Phosphate										
14331-85-2	Protactinium-231		X	X	X	X	X	X	X	X	X
14336-70-0	Nickel-59		X	X	X	X	X	X	X	X	X
14391-16-3	Europium-155		X	X	X	X	X	X	X	X	X
145-73-3	Endothall	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
14596-10-2	Americium-241		X	X	X	X	X	X	X	X	X
14683-23-9	Europium-152		X	X	X	X	X	X	X	X	X
14762-75-5	Carbon-14		X	X	X	X	X			X	X
14797-55-8	Nitrate										
14797-65-0	Nitrite										
14808-79-8	Sulfate										
14952-40-0	Actinium-227		X	X	X	X	X	X	X	X	X
14993-75-0	Americium-243		X	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
15046-84-1	Iodine-129		X	X	X	X	X			X	X
15117-48-3	Plutonium-239		X	X	X	X	X	X	X	X	X
15117-96-1	Uranium-235		X	X	X	X	X	X	X	X	X
15262-20-1	Radium-228		X	X	X	X	X	X	X	X	X
15510-73-3	Curium-242		X	X	X	X	X	X	X	X	X
15585-10-1	Europium-154		X	X	X	X	X	X	X	X	X
15594-54-4	Thorium-229		X	X	X	X	X	X	X	X	X
156-59-2	cis-1,2-Dichloroethene	X	calc.	X	X	X	X	X	X	X	X
156-60-5	trans-1,2-Dichloroethylene	X	calc.	X	X	X	X	X	X	X	X
15715-94-3	Samarium-151		X	X	X	X	X	X	X	X	X
15751-77-6	Zirconium-93		X	X	X	X	X	X	X	X	X
15757-87-6	Curium-243		X	X	X	X	X	X	X	X	X
15758-45-9	Selenium-79		X	X	X	X	X	X	X	X	X
15832-50-5	Tin-126		X	X	X	X	X	X	X	X	X
1634-04-4	Methyl tert-butyl ether	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
16887-00-6	Chloride	calc.		calc.	calc.	calc.	calc.			calc.	calc.
16984-48-8	Fluoride										
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
189-55-9	Dibenzo[a,i]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
189-64-0	Dibenzo[a,h]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
191-24-2	Benzo[g,h,i]perylene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
191-30-0	Benzo[a,i]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
192-65-4	Dibenzo[a,e]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
192-97-2	Benzo[e]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
193-39-5	Indeno[1,2,3-cd]pyrene	X	calc.	X	X	X	X	X	X	X	X
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
205-82-3	Benzo[j]fluoranthene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
205-99-2	Benzo[b]fluoranthene	X	calc.	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
206-44-0	Fluoranthene	X	calc.	X	X	X	X	X	X	X	X
207-08-9	Benzo[k]fluoranthene	X	calc.	X	X	X	X	X	X	X	X
208-96-8	Acenaphthylene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
218-01-9	Chrysene	X	calc.	X	X	X	X	X	X	X	X
224-42-0	Dibenz[a,j]acridine	surr.	surr.	surr.	surr.	surr.	X	surr.	surr.	X	X
2245-38-7	2,3,5-Trimethylnaphthalene			X	X	X	X			X	X
226-36-8	Dibenz[a,h]acridine	surr.	surr.	surr.	surr.	surr.	X	surr.	surr.	X	X
22967-92-6	Methylmercury		X	X	X	X	X	X	X	X	X
23950-58-5	Pronamide	X	calc.	X	X	X	X	X	X	X	X
24959-67-9	Bromide	calc.		calc.	calc.	calc.	calc.			calc.	calc.
27154-33-2	Trichlorofluoroethane	surr.	surr.	X	surr.	surr.	X	surr.	surr.	X	X
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PBC 118)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
319-84-6	alpha-BHC	X	calc.	X	X	X	X	X	X	X	X
319-85-7	beta-BHC	X	calc.	X	X	X	X	X	X	X	X
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
3268-87-9	1,2,3,4,6,7,8,9 Octachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
3697-24-3	5-Methylchrysene	surr.	surr.	surr.	surr.	surr.	X	surr.	surr.	X	X
378253-40-8	Barium-137m		X	X	X	X	X	X	X	X	X
378253-44-2	Cadmium-113m		X	X	X	X	X	X	X	X	X
378782-82-2	Niobium-93m		X	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
39001-02-0	1,2,3,4,6,7,8,9 Octachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
4170-30-3	2-Butenaldehyde (2-Butenal or Crotonaldehyde)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
41851-50-7	Chlorocyclopentadiene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
460-19-5	Cyanogen	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
4786-20-3	2-Butenenitrile			X	X	X	X			X	X
50-00-0	Formaldehyde	X	calc.	X	X	X	X	X	X	X	X
50-32-8	Benzo[a]pyrene	X	calc.	X	X	X	X	X	X	X	X
506-68-3	Cyanogen bromide	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
506-77-4	Cyanogen chloride	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
51-28-5	2,4-Dinitrophenol	X	calc.	X	X	X	X	X	X	X	X
51-79-6	Ethyl Carbamate (urethane)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
510-15-6	Chlorobenzilate	X	calc.	X	X	X	X	X	X	X	X
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
528-29-0	o-Dinitrobenzene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
53-70-3	Dibenz[a,h]anthracene	X	calc.	X	X	X	X	X	X	X	X
532-27-4	2-Chloroacetophenone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
534-52-1	4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
5385-75-1	Dibenzo[a,e]fluoranthene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
540-59-0	1,2-Dichloroethylene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
540-73-8	1,2-Dimethylhydrazine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
540-84-1	2,2,4-Trimethylpentane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
541-73-1	1,3-Dichlorobenzene	X	calc.	X	X	X	X	X	X	X	X
542-75-6	1,3-Dichloropropene	X	calc.	X	X	X	X	X	X	X	X
542-88-1	Dichloromethyl ether	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
56-23-5	Carbon tetrachloride	X	calc.	X	X	X	X	X	X	X	X
56-49-5	3-Methylcholanthrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
56-55-3	Benzo[a]anthracene	X	calc.	X	X	X	X	X	X	X	X
57-12-5	Cyanide	X	calc.	X	X	X	X	X	X	X	X
57-24-9	Strychnine	X	calc.	X	X	X	X	X	X	X	X
57-74-9	Chlordane	X	calc.	X	X	X	X	X	X	X	X
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	X	calc.	X	X	X	X	X	X	X	X
58-89-9	gamma-BHC (Lindane)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
58-90-2	2,3,4,6-Tetrachlorophenol	X	calc.	X	X	X	X	X	X	X	X
581-42-0	2,6-Dimethylnaphthalene			X	X	X	X			X	X
584-84-9	2,4-Toluene diisocyante	surr.	surr.	X	X	surr.	X	surr.	surr.	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
589-38-8	3-Hexanone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
59-50-7	4-Chloro-3-methylphenol	X	calc.	X	X	X	X	X	X	X	X
59-89-2	N-Nitrosomorpholine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
591-50-4	Benzene, iodo-			X	X	X	X			X	X
591-78-6	2-Hexanone	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
593-60-2	Bromoethene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
593-74-8	Dimethyl Mercury			X	X	X	X			X	X
60-11-7	Dimethyl aminoazobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
60-29-7	Ethyl ether	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
60-35-5	Acetamide	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
602-87-9	5-Nitroacenaphthene	surr.	surr.	surr.	surr.	surr.	X	surr.	surr.	X	X
606-20-2	2,6-Dinitrotoluene	X	calc.	X	X	X	X	X	X	X	X
608-93-5	Pentachlorobenzene	X	calc.	X	X	X	X	X	X	X	X
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
61626-71-9	Dichloropentadiene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
62-50-0	Ethyl methanesulfonate	X	calc.	X	X	X	X	X	X	X	X
62-53-3	Aniline	X	calc.	X	X	X	X	X	X	X	X
62-75-9	N-Nitroso-N,N-dimethylamine (Dimethylnitrosamine)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
621-64-7	di-n-Propylnitrosamine	X	calc.	X	X	X	X	X	X	X	X
624-83-9	Methyl isocyanate	surr.	surr.	X	X	surr.	X	surr.	surr.	X	X
628-73-9	Hexanenitrile	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
630-08-0	Carbon monoxide	calc.		calc.	calc.	calc.	calc.			calc.	calc.
630-20-6	1,1,1,2-Tetrachloroethane	X	calc.	X	X	X	X	X	X	X	X
64-18-6	Formic acid	X	calc.	X	X	X	X	X	X	X	X
65-85-0	Benzoic acid	X	calc.	X	X	X	X	X	X	X	X
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
67-56-1	Methyl alcohol	X	calc.	X	X	X	X	X	X	X	X
67-63-0	2-Propyl alcohol (Isopropanol; Propan-2-o1)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
67-64-1	2-Propanone (Acetone)	X	calc.	X	X	X	X	X	X	X	X
67-66-3	Chloroform	X	calc.	X	X	X	X	X	X	X	X
67-72-1	Hexachloroethane	X	calc.	X	X	X	X	X	X	X	X
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
70-30-4	Hexachlorophene	X	calc.	X	X	X	X	X	X	X	X
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
71-36-3	n-Butyl alcohol	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
71-43-2	Benzene	X	calc.	X	X	X	X	X	X	X	X
71-55-6	1,1,1-Trichloroethane	X	calc.	X	X	X	X	X	X	X	X
72-43-5	Methoxychlor	X	calc.	X	X	X	X	X	X	X	X
72-55-9	4,4'-DDE	X	calc.	X	X	X	X	X	X	X	X
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	X	calc.	X	X	X	X	X	X	X	X
74-83-9	Bromomethane	X	calc.	X	X	X	X	X	X	X	X
74-87-3	Chloromethane	X	calc.	X	X	X	X	X	X	X	X
74-88-4	Iodomethane (Methyl iodide)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
74-95-3	Methylene bromide	X	calc.	X	X	X	X	X	X	X	X
74-97-5	Bromochloromethane	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
7429-90-5	Aluminum		X	X	X	X	X	X	X	X	X
7439-89-6	Iron		X	X	X	X	X	X	X	X	X
7439-92-1	Lead	calc.	X	X	X	X	X	X	X	X	X
7439-93-2	Lithium		X	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
7439-95-4	Magnesium		X	X	X	X	X	X	X	X	X
7439-96-5	Manganese		X	X	X	X	X	X	X	X	X
7439-97-6	Mercury - elemental	calc.	X	X	X	X	X	X	X	X	X
7439-98-7	Molybdenum		X	X	X	X	X	X	X	X	X
7440-02-0	Nickel	calc.	calc.	X	X	X	X	X	X	X	X
7440-16-6	Rhodium		X	X	X	X	X	X	X	X	X
7440-22-4	Silver	calc.	X	X	X	X	X	X	X	X	X
7440-23-5	Sodium		X	X	X	X	X	X	X	X	X
7440-24-6	Strontium (total)	calc.	X	X	X	X	X	X	X	X	X
7440-25-7	Tantalum		X	X	X	X	X	X	X	X	X
7440-28-0	Thallium	calc.	X	X	X	X	X	X	X	X	X
7440-29-1	Thorium-232		X	X	X	X	X	X	X	X	X
7440-31-5	Tin		X	X	X	X	X	X	X	X	X
7440-33-7	Tungsten		X	X	X	X	X	X	X	X	X
7440-36-0	Antimony	calc.	X	X	X	X	X	X	X	X	X
7440-38-2	Arsenic	calc.	calc.	X	X	X	X	X	X	X	X
7440-39-3	Barium	calc.	X	X	X	X	X	X	X	X	X
7440-41-7	Beryllium	calc.	X	X	X	X	X	X	X	X	X
7440-43-9	Cadmium	calc.	calc.	X	X	X	X	X	X	X	X
7440-47-3	Chromium	calc.	X	X	X	X	X			X	X
7440-48-4	Cobalt		X	X	X	X	X	X	X	X	X
7440-50-8	Copper		X	X	X	X	X	X	X	X	X
7440-61-1	Uranium		X	X	X	X	X	X	X	X	X
7440-61-1R	Uranium-238		X	X	X	X	X	X	X	X	X
7440-62-2	Vanadium		X	X	X	X	X	X	X	X	X
7440-65-5	Yttrium		X	X	X	X	X	X	X	X	X
7440-66-6	Zinc	calc.	X	X	X	X	X	X	X	X	X
7440-67-7	Zirconium		X	X	X	X	X	X	X	X	X
7446-09-5	Sulfur dioxide	calc.		calc.	calc.	calc.	calc.			calc.	calc.

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
7487-94-7	Mercury (Hg^{+2})	calc.	X	X	X	X	X	X	X	X	X
75-00-3	Chloroethane	X	calc.	X	X	X	X	X	X	X	X
75-01-4	1-Chloroethene	X	calc.	X	X	X	X	X	X	X	X
75-02-5	Vinyl Fluoride	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
75-05-8	Acetonitrile	X	calc.	X	X	X	X	X	X	X	X
75-07-0	Acetaldehyde	X	calc.	X	X	X	X	X	X	X	X
75-09-2	Dichloromethane	X	calc.	X	X	X	X	X	X	X	X
75-15-0	Carbon disulfide	X	calc.	X	X	X	X	X	X	X	X
75-21-8	Oxirane	X	calc.	X	X	X	X	X	X	X	X
75-25-2	Bromoform	X	calc.	X	X	X	X	X	X	X	X
75-27-4	Bromodichloromethane	X	calc.	X	X	X	X	X	X	X	X
75-29-6	2-Chloropropane	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
75-34-3	1,1-Dichloroethane	X	calc.	X	X	X	X	X	X	X	X
75-35-4	1,1-Dichloroethene	X	calc.	X	X	X	X	X	X	X	X
75-44-5	Phosgene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
75-45-6	Chlorodifluoromethane	X	calc.	X	X	X	X	X	X	X	X
75-50-3	Trimethylamine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
75-69-4	Trichlorofluoromethane	X	calc.	X	X	X	X	X	X	X	X
75-71-8	Dichlorodifluoromethane	X	calc.	X	X	X	X	X	X	X	X
76-01-7	Pentachloroethane	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane (Freon 113)	calc.	calc.	X	calc.	calc.	X	calc.	calc.	X	X
76-44-8	Heptachlor	X	calc.	X	X	X	X	X	X	X	X
764-41-0	1,4-Dichloro-2-butene	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
7647-01-0	Hydrogen Chloride										
765-34-4	Glycidylaldehyde	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
7664-39-3	Hydrogen Fluoride	calc.		calc.	calc.	calc.	calc.			calc.	calc.
7664-41-7	Ammonia/Ammonium	calc.		calc.	calc.	calc.	calc.			calc.	calc.

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
77-47-4	Hexachlorocyclopentadiene	X	calc.	X	X	X	X	X	X	X	X
77-78-1	Dimethyl sulfate	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
7704-34-9	Total Sulfur (thermodynamically stable)										
7723-14-0	Phosphorous	calc.	X	X	X	X	X			X	X
7782-41-4	Fluorine gas (F_2)			X	X	X	X			X	X
7782-49-2	Selenium	calc.	calc.	X	X	X	X	X	X	X	X
7782-50-5	Chlorine	X	X	X	X	X	X			X	X
78-83-1	2-Methylpropyl alcohol (Isobutyl alcohol)	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
78-87-5	1,2-Dichloropropane	X	calc.	X	X	X	X	X	X	X	X
78-93-3	2-Butanone	X	calc.	X	X	X	X	X	X	X	X
79-00-5	1,1,2-Trichloroethane	X	calc.	X	X	X	X	X	X	X	X
79-01-6	1,1,2-Trichloroethylene	X	calc.	X	X	X	X	X	X	X	X
79-10-7	2-Propenoic acid	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
79-34-5	1,1,2,2-Tetrachloroethane	X	calc.	X	X	X	X	X	X	X	X
79-46-9	2-Nitropropane	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
80-62-6	Methyl methacrylate	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
82-68-8	Pentachloronitrobenzene	X	calc.	X	X	X	X	X	X	X	X
822-06-0	Hexamethylene-1,5-diisocyanate	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
823-40-5	Toluene-2,6-diamine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
83-32-9	Acenaphthene	X	calc.	X	X	X	X	X	X	X	X
832-69-9	1-Methylphenanthrene			X	X	X	X			X	X
84-66-2	Diethyl phthalate	X	calc.	X	X	X	X	X	X	X	X
84-74-2	Dibutyl phthalate	X	calc.	X	X	X	X	X	X	X	X
85-01-8	Phenanthrene	X	calc.	X	X	X	X	X	X	X	X
85-44-9	Phthalic anhydride	X	calc.	X	X	X	X	X	X	X	X
85-68-7	Butylbenzyl phthalate	X	calc.	X	X	X	X	X	X	X	X
86-73-7	Fluorene	X	calc.	X	X	X	X	X	X	X	X
87-61-6	1,2,3-Trichlorobenzene	X	calc.	X	X	X	X	X	X	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
87-68-3	Hexachlorobutadiene	X	calc.	X	X	X	X	X	X	X	X
87-86-5	Pentachlorophenol	X	calc.	X	X	X	X	X	X	X	X
88-06-2	2,4,6-Trichlorophenol	X	calc.	X	X	X	X	X	X	X	X
88-74-4	o-Nitroaniline	X	calc.	X	X	X	X	X	X	X	X
88-75-5	2-Nitrophenol	X	calc.	X	X	X	X	X	X	X	X
90-04-0	o-Anisidine	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
90-12-0	1-Methylnaphthalene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
91-20-3	Naphthalene	X	calc.	X	X	X	X	X	X	X	X
91-22-5	Quinoline	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
91-57-6	2-Methylnaphthalene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
91-58-7	2-Chloronaphthalene	X	calc.	X	X	X	X	X	X	X	X
91-94-1	3,3'-Dichlorobenzidine	X	calc.	X	X	X	X	X	X	X	X
92-52-4	1,1`-Biphenyl	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
924-16-3	N-Nitrosodi-n-butylamine	X	calc.	X	X	X	X	X	X	X	X
94-59-7	Safrole	X	calc.	X	X	X	X	X	X	X	X
94-75-7	2,4-D and esters (160C typed)	calc.	calc.	X	calc.	calc.	X	calc.	calc.	X	X
95-48-7	o-Cresol	X	calc.	X	X	X	X	X	X	X	X
95-49-8	2-Chlorotoluene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
95-50-1	1,2-Dichlorobenzene	X	calc.	X	X	X	X	X	X	X	X
95-53-4	o-Toluidine	X	calc.	X	X	X	X	X	X	X	X
95-57-8	2-Chlorophenol	X	calc.	X	X	X	X	X	X	X	X
95-63-6	1,2,4-Trimethyl benzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
95-94-3	1,2,4,5-Tetrachlorobenzene	X	calc.	X	X	X	X	X	X	X	X
95-95-4	2,4,5-Trichlorophenol	X	calc.	X	X	X	X	X	X	X	X
96-12-8	1,2-Dibromo-3-chloropropane	X	calc.	X	X	X	X	X	X	X	X
96-18-4	1,2,3-Trichloropropane	X	calc.	X	X	X	X	X	X	X	X
96-45-7	Ethylene thiourea	calc.	calc.	X	X	calc.	X	calc.	calc.	X	X
97-63-2	Ethyl methacrylate	X	calc.	X	X	X	X	X	X	X	X
98-01-1	Furfural	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X

Table 1-2 Available Plant Uptake Parameters

CAS Registry Number	Constituent Name	Root Concentration Factor	Root Vegetable BCF	Wild Produce Soil-Plant BCF	Domestic Produce Soil-Plant BCF	Forage Aboveground BCF	Silage Aboveground BCF	Produce Air-Plant BCF	Forage Silage Air-Plant BCF	Wild Grain Air-Plant BCF	Domestic Grain Air-Plant BCF
98-06-6	tert-Butyl benzene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
98-07-7	Benzotrichloride	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
98-82-8	Cumene	X	calc.	X	X	X	X	X	X	X	X
98-83-9	alpha-Methylstyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
98-86-2	Acetophenone	X	calc.	X	X	X	X	X	X	X	X
98-95-3	Nitrobenzene	X	calc.	X	X	X	X	X	X	X	X
99-35-4	1,3,5-Trinitrobenzene	X	calc.	X	X	X	X	X	X	X	X
99-65-0	1,3-Dinitrobenzene	X	calc.	X	X	X	X	X	X	X	X
99-87-6	p-Cymene	calc.	calc.	calc.	calc.	calc.	X	calc.	calc.	X	X
N/A	Particulate matter										

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
100-02-7	4-Nitrophenol	calc.	calc.	calc.	calc.	calc.	X	X	
100-21-0	p-Phthalic acid	calc.	calc.	calc.	calc.	calc.	calc.	X	
100-25-4	1,4-Dinitrobenzene	calc.	calc.	calc.	calc.	calc.	calc.	X	
100-40-3	4-Vinylcyclohexene	calc.	calc.	calc.	calc.	calc.	X		
100-41-4	Ethyl benzene	calc.	calc.	calc.	calc.	calc.	X	X	
100-42-5	Styrene	calc.	calc.	calc.	calc.	calc.	X	X	
100-44-7	Benzyl chloride	calc.	calc.	calc.	calc.	calc.	X	X	
100-47-0	Benzonitrile	calc.	calc.	calc.	calc.	calc.	X		
100-51-6	Benzyl alcohol	calc.	calc.	calc.	calc.	calc.	X	X	
100-52-7	Benzaldehyde	calc.	calc.	calc.	calc.	calc.	X	X	
10028-15-6	Ozone						calc.		
10028-17-8	Tritium			X				X	
10045-97-3	Cesium-137	X		X	X	X	X	X	
10061-01-5	cis-1,3-Dichloropropene	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
10061-02-6	trans-1,3-Dichloropropene	calc.	calc.	calc.	calc.	calc.	calc.		
10098-91-6	Yttrium-90	X		X	X	X	X	X	
10098-97-2	Strontium-90	X		X	X	X	X	X	
101-55-3	4-Bromophenylphenyl ether	calc.	calc.	calc.	calc.	calc.	X	calc.	
101-77-9	4,4-Methylenedianiline	calc.	calc.	calc.	calc.	calc.	X	X	
10102-44-0	Nitrogen dioxide							X	
10198-40-0	Cobalt-60	X		X	X	X	X	X	
103-33-3	Azobenzene	calc.	calc.	calc.	calc.	calc.	calc.	X	
103-65-1	n-Propyl benzene (Isocumene)	calc.	calc.	calc.	calc.	calc.	calc.		
104-51-8	n-Butylbenzene	calc.	calc.	calc.	calc.	calc.	calc.		
104-76-7	2-Ethyl-1-Hexanol	calc.	calc.	calc.	calc.	calc.	calc.		
105-67-9	2,4-Dimethylphenol	calc.	calc.	calc.	calc.	calc.	X	X	
10595-95-6	N-Methyl-N-Nitrosoethamine	calc.	calc.	calc.	calc.	calc.	calc.	X	
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	calc.	calc.	calc.	calc.	calc.	X		

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
106-44-5	p-Cresol	calc.	calc.	calc.	calc.	calc.	X	X	
106-46-7	1,4-Dichlorobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
106-47-8	p-Chloroaniline	calc.	calc.	calc.	calc.	calc.	X	X	
106-49-0	p-Toluidine	calc.	calc.	calc.	calc.	calc.	calc.	X	
106-51-4	Quinone	calc.	calc.	calc.	calc.	calc.	calc.		
106-88-7	1,2-Epoxybutane	calc.	calc.	calc.	calc.	calc.	calc.	X	
106-89-8	Epichlorohydrin	calc.	calc.	calc.	calc.	calc.	X	X	
106-93-4	Ethylene dibromide	calc.	calc.	calc.	calc.	calc.	X	X	
106-99-0	1,3-Butadiene	calc.	calc.	calc.	calc.	calc.	calc.	X	
107-02-8	Acrolein	calc.	calc.	calc.	calc.	calc.	X	X	
107-05-1	3-Chloropropene (Allyl chloride)	calc.	calc.	calc.	calc.	calc.	X	X	
107-06-2	1,2-Dichloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
107-12-0	Propionitrile	calc.	calc.	calc.	calc.	calc.	calc.		
107-13-1	Acrylonitrile	calc.	calc.	calc.	calc.	calc.	X	X	
107-19-7	Propargyl alcohol	calc.	calc.	calc.	calc.	calc.	calc.	X	
107-21-1	Ethylene glycol	calc.	calc.	calc.	calc.	calc.	calc.	X	
107-98-2	Propylene glycol monomethyl ether	calc.	calc.	calc.	calc.	calc.	calc.	X	
108-05-4	Vinyl acetate	calc.	calc.	calc.	calc.	calc.	X	X	
108-10-1	Hexone (4-Methyl-2-pentanone or MIBK)	calc.	calc.	calc.	calc.	calc.	X	X	
108-39-4	m-Cresol	calc.	calc.	calc.	calc.	calc.	X	X	
108-60-1	Dichloroisopropyl ether (2,2'-Oxybis(1-chloropropane))	calc.	calc.	calc.	calc.	calc.	X	X	
108-67-8	1,3,5-Trimethyl benzene	calc.	calc.	calc.	calc.	calc.	X	X	
108-86-1	Bromobenzene (Phenyl bromide)	calc.	calc.	calc.	calc.	calc.	X	X	
108-87-2	Methylcyclohexane	calc.	calc.	calc.	calc.	calc.	X	X	
108-88-3	Toluene	calc.	calc.	calc.	calc.	calc.	X	X	
108-90-7	Chlorobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
108-94-1	Cyclohexanone	calc.	calc.	calc.	calc.	calc.	calc.	X	
108-95-2	Phenol	calc.	calc.	calc.	calc.	calc.	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
109-74-0	Butyronitrile	calc.	calc.	calc.	calc.	calc.	calc.		
109-75-1	3-Butenenitrile								
109-77-3	Malononitrile	calc.	calc.	calc.	calc.	calc.	calc.	X	
109-86-4	2-Methoxyethanol	calc.	calc.	calc.	calc.	calc.	calc.	X	
109-99-9	Tetrahydrofuran	calc.	calc.	calc.	calc.	calc.	X		
110-00-9	Furan	calc.	calc.	calc.	calc.	calc.	calc.	X	
110-54-3	n-Hexane	calc.	calc.	calc.	calc.	calc.	calc.	X	
110-59-8	Valeronitrile	calc.	calc.	calc.	calc.	calc.	calc.		
110-80-5	2-Ethoxyethanol	calc.	calc.	calc.	calc.	calc.	calc.	X	
110-82-7	Cyclohexane	calc.	calc.	calc.	calc.	calc.	X		
110-83-8	Cyclohexene	calc.	calc.	calc.	calc.	calc.	calc.		
110-86-1	Pyridine	calc.	calc.	calc.	calc.	calc.	X	X	
111-15-9	Ethylene glycol monoethyl ether acetate	calc.	calc.	calc.	calc.	calc.	calc.	X	
111-44-4	Bis(2-chloroethyl) ether	calc.	calc.	calc.	calc.	calc.	X	X	
111-65-9	n-Octane	calc.	calc.	calc.	calc.	calc.	calc.		
111-76-2	Ethylene glycol monobutyl ether	calc.	calc.	calc.	calc.	calc.	calc.	X	
111-84-2	n-Nonane	calc.	calc.	calc.	calc.	calc.	calc.		
111-91-1	Bis(2-chloroethoxy)methane	calc.	calc.	calc.	calc.	calc.	calc.	X	
112-30-1	1-Decanol	calc.	calc.	calc.	calc.	calc.	calc.		
112-31-2	Decanal								
112-40-3	Dodecane								
1120-21-4	Undecane								
1120-71-4	1,3-Propane sultone	calc.	calc.	calc.	calc.	calc.	calc.		
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)	calc.	calc.	calc.	calc.	calc.	X	calc.	
117-84-0	n-Dioctyl phthalate	calc.	calc.	calc.	calc.	calc.	X	calc.	
118-74-1	Hexachlorobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	
119-90-4	3,3'-Dimethoxybenzidine	calc.	calc.	calc.	calc.	calc.	X	X	
120-12-7	Anthracene	calc.	calc.	calc.	calc.	calc.	X	calc.	
120-82-1	1,2,4-Trichlorobenzene	calc.	calc.	calc.	calc.	calc.	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
120-83-2	2,4-Dichlorophenol	calc.	calc.	calc.	calc.	calc.	X	X	
121-14-2	2,4-Dinitrotoluene	calc.	calc.	calc.	calc.	calc.	X	X	
122-39-4	N,N-Diphenylamine	calc.	calc.	calc.	calc.	calc.	X	X	
122-66-7	1,2-Diphenylhydrazine	calc.	calc.	calc.	calc.	calc.	X	X	
123-33-1	Maleic hydrazide	calc.	calc.	calc.	calc.	calc.	calc.	X	
123-38-6	n-Propionaldehyde	calc.	calc.	calc.	calc.	calc.	calc.		
123-72-8	Butyraldehyde	calc.	calc.	calc.	calc.	calc.	calc.		
123-91-1	1,4-Dioxane	calc.	calc.	calc.	calc.	calc.	X	X	
124-18-5	Decane								
124-38-9	Carbon dioxide								
124-48-1	Chlorodibromomethane	calc.	calc.	calc.	calc.	calc.	X	X	
126-73-8	Tributyl phosphate	calc.	calc.	calc.	calc.	calc.	X	X	
126-98-7	2-Methyl-2-propenenitrile	calc.	calc.	calc.	calc.	calc.	X	X	
127-18-4	1,1,2,2-Tetrachloroethene	calc.	calc.	calc.	calc.	calc.	X	X	
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	calc.	calc.	calc.	calc.	calc.	X		
129-00-0	Pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	
131-11-3	Dimethyl phthalate	calc.	calc.	calc.	calc.	calc.	X	X	
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	calc.	calc.	calc.	calc.	calc.	calc.	X	
132-64-9	Dibenzofuran	calc.	calc.	calc.	calc.	calc.	X	X	
133-06-2	Captan	calc.	calc.	calc.	calc.	calc.	calc.	X	
1330-20-7	Xylenes (mixed isomers)	calc.	calc.	calc.	calc.	calc.	calc.	X	
1336-36-3	Polychlorinated biphenyls (PCBs)	calc.	calc.	calc.	calc.	calc.	X	X	X
134-32-7	1-Naphthylamine	calc.	calc.	calc.	calc.	calc.	X		
135-98-8	sec-Butylbenzene	calc.	calc.	calc.	calc.	calc.	calc.		
13966-29-5	Uranium-234	X		X	X	X	X	X	
13967-48-1	Ruthenium-106	X		X	X	X	X	X	
13967-70-9	Cesium-134	X		X	X	X	X	X	
13968-55-3	Uranium-233	X		X	X	X	X	X	
13981-15-2	Curium-244	X		X	X	X	X	X	
13981-16-3	Plutonium-238	X		X	X	X	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
13981-37-8	Nickel-63	X		X	X	X	X	X	
13982-10-0	Plutonium-242	X		X	X	X	X	X	
13982-63-3	Radium-226	X		X	X	X	X	X	
13982-70-2	Uranium-236	X		X	X	X	X	X	
13994-20-2	Neptunium-237	X		X	X	X	X	X	
141-78-6	Acetic acid ethyl ester (Ethyl acetate)	calc.	calc.	calc.	calc.	calc.	calc.	X	
14119-32-5	Plutonium-241	X		X	X	X	X	X	
14119-33-6	Plutonium-240	X		X	X	X	X	X	
14133-76-7	Technetium-99	X		X	X	X	X	X	
14158-29-3	Uranium-232	X		X	X	X	X	X	
14234-35-6	Antimony-125	X		X	X	X	X	X	
14265-44-2	Phosphate								
14331-85-2	Protactinium-231	X		X	X	X	X	X	
14336-70-0	Nickel-59	X		X	X	X	X	X	
14391-16-3	Europium-155	X		X	X	X	X	X	
145-73-3	Endothall	calc.	calc.	calc.	calc.	calc.	calc.	X	
14596-10-2	Americium-241	X		X	X	X	X	X	
14683-23-9	Europium-152	X		X	X	X	X	X	
14762-75-5	Carbon-14						X		
14797-55-8	Nitrate							X	
14797-65-0	Nitrite							X	
14808-79-8	Sulfate							X	
14952-40-0	Actinium-227	X		X	X	X	X	X	
14993-75-0	Americium-243	X		X	X	X	X	X	
15046-84-1	Iodine-129	X		X	X	X	X	X	
15117-48-3	Plutonium-239	X		X	X	X	X	X	
15117-96-1	Uranium-235	X		X	X	X	X	X	
15262-20-1	Radium-228	X		X	X	X	X	X	
15510-73-3	Curium-242	X		X	X	X	X	X	
15585-10-1	Europium-154	X		X	X	X	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
15594-54-4	Thorium-229	X		X	X	X	X	X	
156-59-2	cis-1,2-Dichloroethene	calc.	calc.	calc.	calc.	calc.	X	X	
156-60-5	trans-1,2-Dichloroethylene	calc.	calc.	calc.	calc.	calc.	X	X	
15715-94-3	Samarium-151	X		X	X	X	X		
15751-77-6	Zirconium-93	X		X	X	X	X	X	
15757-87-6	Curium-243	X		X	X	X	X	X	
15758-45-9	Selenium-79	X		X	X	X	X	X	
15832-50-5	Tin-126	X		X	X	X	X	X	
1634-04-4	Methyl tert-butyl ether	calc.	calc.	calc.	calc.	calc.	X	X	
16887-00-6	Chloride						calc.	X	
16984-48-8	Fluoride								
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X	X	X
189-55-9	Dibenzo[a,i]pyrene	calc.	calc.	calc.	calc.	calc.	X		
189-64-0	Dibenzo[a,h]pyrene	calc.	calc.	calc.	calc.	calc.	surr.		
191-24-2	Benzo[g,h,i]perylene	calc.	calc.	calc.	calc.	calc.	X	X	
191-30-0	Benzo[a,i]pyrene	calc.	calc.	calc.	calc.	calc.	calc.		
192-65-4	Dibenzo[a,e]pyrene	calc.	calc.	calc.	calc.	calc.	X		
192-97-2	Benzo[e]pyrene	calc.	calc.	calc.	calc.	calc.	calc.		
193-39-5	Indeno[1,2,3-cd]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X	X	X
205-82-3	Benzo[j]fluoranthene	calc.	calc.	calc.	calc.	calc.	X		
205-99-2	Benzo[b]fluoranthene	calc.	calc.	calc.	calc.	calc.	X	calc.	
206-44-0	Fluoranthene	calc.	calc.	calc.	calc.	calc.	X	calc.	
207-08-9	Benzo[k]fluoranthene	calc.	calc.	calc.	calc.	calc.	X	calc.	
208-96-8	Acenaphthylene	calc.	calc.	calc.	calc.	calc.	X	X	
218-01-9	Chrysene	calc.	calc.	calc.	calc.	calc.	X	calc.	
224-42-0	Dibenz[a,j]acridine	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
2245-38-7	2,3,5-Trimethylnaphthalene								
226-36-8	Dibenz[a,h]acridine	surr.	surr.	surr.	surr.	surr.	X	surr.	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
22967-92-6	Methylmercury	X	X	X	X	X		X	
23950-58-5	Pronamide	calc.	calc.	calc.	calc.	calc.	X	X	
24959-67-9	Bromide						calc.		
27154-33-2	Trichlorofluoroethane	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PBC 118)	calc.	calc.	calc.	calc.	calc.	X		X
319-84-6	alpha-BHC	calc.	calc.	calc.	calc.	calc.	X	X	
319-85-7	beta-BHC	calc.	calc.	calc.	calc.	calc.	X	X	
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	calc.	calc.	calc.	calc.	calc.	X		X
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	calc.	calc.	calc.	calc.	calc.	X		X
3268-87-9	1,2,3,4,6,7,8,9 Octachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X	X	X
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	calc.	calc.	calc.	calc.	calc.	X		X
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X		X
3697-24-3	5-Methylchrysene	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
378253-40-8	Barium-137m	X		X	X	X	X	X	
378253-44-2	Cadmium-113m	X		X	X	X	X	calc.	
378782-82-2	Niobium-93m	X		X	X	X	X	X	
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	calc.	calc.	calc.	calc.	calc.	X		X
39001-02-0	1,2,3,4,6,7,8,9 Octachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X	X	X
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X		X
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	calc.	calc.	calc.	calc.	calc.	X		X
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X		X
4170-30-3	2-Butenaldehyde (2-Butenal or Crotonaldehyde)	calc.	calc.	calc.	calc.	calc.	calc.		

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
41851-50-7	Chlorocyclopentadiene	calc.	calc.	calc.	calc.	calc.	calc.	X	
460-19-5	Cyanogen	calc.	calc.	calc.	calc.	calc.	calc.	X	
4786-20-3	2-Butenenitrile								
50-00-0	Formaldehyde	calc.	calc.	calc.	calc.	calc.	X	X	
50-32-8	Benzo[a]pyrene	calc.	calc.	calc.	calc.	calc.	X	calc.	
506-68-3	Cyanogen bromide	calc.	calc.	calc.	calc.	calc.	calc.	X	
506-77-4	Cyanogen chloride	calc.	calc.	calc.	calc.	calc.	calc.	X	
51-28-5	2,4-Dinitrophenol	calc.	calc.	calc.	calc.	calc.	X	X	
51-79-6	Ethyl Carbamate (urethane)	calc.	calc.	calc.	calc.	calc.	calc.		
510-15-6	Chlorobenzilate	calc.	calc.	calc.	calc.	calc.	X	calc.	
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X	X	X
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	calc.	calc.	calc.	calc.	calc.	X		X
528-29-0	o-Dinitrobenzene	calc.	calc.	calc.	calc.	calc.	calc.	X	
53-70-3	Dibenz[a,h]anthracene	calc.	calc.	calc.	calc.	calc.	X	calc.	
532-27-4	2-Chloroacetophenone	calc.	calc.	calc.	calc.	calc.	calc.	X	
534-52-1	4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	calc.	calc.	calc.	calc.	calc.	X	X	
5385-75-1	Dibenzo[a,e]fluoranthene	calc.	calc.	calc.	calc.	calc.	X		
540-59-0	1,2-Dichloroethylene	calc.	calc.	calc.	calc.	calc.	X	X	
540-73-8	1,2-Dimethylhydrazine	calc.	calc.	calc.	calc.	calc.	calc.	X	
540-84-1	2,2,4-Trimethylpentane	calc.	calc.	calc.	calc.	calc.	calc.		
541-73-1	1,3-Dichlorobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
542-75-6	1,3-Dichloropropene	calc.	calc.	calc.	calc.	calc.	X	X	
542-88-1	Dichloromethyl ether	calc.	calc.	calc.	calc.	calc.	calc.	X	
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X
56-23-5	Carbon tetrachloride	calc.	calc.	calc.	calc.	calc.	X	X	
56-49-5	3-Methylcholanthrene	calc.	calc.	calc.	calc.	calc.	X		
56-55-3	Benzo[a]anthracene	calc.	calc.	calc.	calc.	calc.	X	calc.	
57-12-5	Cyanide	calc.	calc.	calc.	calc.	calc.	X		

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
57-24-9	Strychnine	calc.	calc.	calc.	calc.	calc.	X	X	
57-74-9	Chlordane	calc.	calc.	calc.	calc.	calc.	X	calc.	
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X	X	X
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X	X	X
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	calc.	calc.	calc.	calc.	calc.	X		X
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	calc.	calc.	calc.	calc.	calc.	X		X
58-89-9	gamma-BHC (Lindane)	calc.	calc.	calc.	calc.	calc.	X	X	
58-90-2	2,3,4,6-Tetrachlorophenol	calc.	calc.	calc.	calc.	calc.	X	calc.	
581-42-0	2,6-Dimethylnaphthalene								
584-84-9	2,4-Toluene diisocyante	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
589-38-8	3-Hexanone	calc.	calc.	calc.	calc.	calc.	calc.		
59-50-7	4-Chloro-3-methylphenol	calc.	calc.	calc.	calc.	calc.	X	X	
59-89-2	N-Nitrosomorpholine	calc.	calc.	calc.	calc.	calc.	calc.		
591-50-4	Benzene, iodo-								
591-78-6	2-Hexanone	calc.	calc.	calc.	calc.	calc.	calc.	X	
593-60-2	Bromoethene	calc.	calc.	calc.	calc.	calc.	calc.	X	
593-74-8	Dimethyl Mercury								
60-11-7	Dimethyl aminoazobenzene	calc.	calc.	calc.	calc.	calc.	calc.		
60-29-7	Ethyl ether	calc.	calc.	calc.	calc.	calc.	X	X	
60-35-5	Acetamide	calc.	calc.	calc.	calc.	calc.	calc.		
602-87-9	5-Nitroacenaphthene	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
606-20-2	2,6-Dinitrotoluene	calc.	calc.	calc.	calc.	calc.	X	X	
608-93-5	Pentachlorobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X
61626-71-9	Dichloropentadiene	surr.	calc.	surr.	calc.	calc.	calc.	surr.	
62-50-0	Ethyl methanesulfonate	calc.	calc.	calc.	calc.	calc.	X		
62-53-3	Aniline	calc.	calc.	calc.	calc.	calc.	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
62-75-9	N-Nitroso-N,N-dimethylamine (Dimethylnitrosamine)	calc.	calc.	calc.	calc.	calc.	X	X	
621-64-7	di-n-Propylnitrosamine	calc.	calc.	calc.	calc.	calc.	X	X	
624-83-9	Methyl isocyanate	surr.	surr.	surr.	surr.	surr.	surr.	surr.	
628-73-9	Hexanenitrile	calc.	calc.	calc.	calc.	calc.	calc.		
630-08-0	Carbon monoxide						calc.		
630-20-6	1,1,1,2-Tetrachloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
64-18-6	Formic acid	calc.	calc.	calc.	calc.	calc.	X	X	
65-85-0	Benzoic acid	calc.	calc.	calc.	calc.	calc.	X	X	
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	calc.	calc.	calc.	calc.	calc.	X		X
67-56-1	Methyl alcohol	calc.	calc.	calc.	calc.	calc.	X	X	
67-63-0	2-Propyl alcohol (Isopropanol; Propan-2-ol)	calc.	calc.	calc.	calc.	calc.	calc.	X	
67-64-1	2-Propanone (Acetone)	calc.	calc.	calc.	calc.	calc.	X	X	
67-66-3	Chloroform	calc.	calc.	calc.	calc.	calc.	X	X	
67-72-1	Hexachloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	calc.	calc.	calc.	calc.	calc.	calc.		X
70-30-4	Hexachlorophene	calc.	calc.	calc.	calc.	calc.	X	calc.	
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	calc.	calc.	calc.	calc.	calc.	calc.		X
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X
71-36-3	n-Butyl alcohol	calc.	calc.	calc.	calc.	calc.	calc.	X	
71-43-2	Benzene	calc.	calc.	calc.	calc.	calc.	X	X	
71-55-6	1,1,1-Trichloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
72-43-5	Methoxychlor	calc.	calc.	calc.	calc.	calc.	X	calc.	
72-55-9	4,4'-DDE	calc.	calc.	calc.	calc.	calc.	X	calc.	
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	calc.	calc.	calc.	calc.	calc.	X		X

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
74-83-9	Bromomethane	calc.	calc.	calc.	calc.	calc.	X	X	
74-87-3	Chloromethane	calc.	calc.	calc.	calc.	calc.	X	X	
74-88-4	Iodomethane (Methyl iodide)	calc.	calc.	calc.	calc.	calc.	calc.		
74-95-3	Methylene bromide	calc.	calc.	calc.	calc.	calc.	X	X	
74-97-5	Bromochloromethane	calc.	calc.	calc.	calc.	calc.	X	X	
7429-90-5	Aluminum	X		X				X	
7439-89-6	Iron	X	X	X	X	X	X	X	
7439-92-1	Lead	X		X	X	X	X	X	
7439-93-2	Lithium	X		X					
7439-95-4	Magnesium	X		X	X	X	X		
7439-96-5	Manganese	X	X	X	X	X	X	X	
7439-97-6	Mercury - elemental	X	X	X	X	X	X	X	
7439-98-7	Molybdenum	X		X	X	X	X	X	
7440-02-0	Nickel	X		X	X	X	X	X	
7440-16-6	Rhodium	X		X	X	X	X		
7440-22-4	Silver	X		X	X	X	X	X	
7440-23-5	Sodium	X		X	X	X	X	X	
7440-24-6	Strontium (total)	X		X	X	X	X	X	
7440-25-7	Tantalum	X		X	X	X	X		
7440-28-0	Thallium	X		X	X	X	X	X	
7440-29-1	Thorium-232	X		X	X	X	X	X	
7440-31-5	Tin	X		X	X	X	X	X	
7440-33-7	Tungsten	X		X	X	X	X	X	
7440-36-0	Antimony	X		X	X	X	X	X	
7440-38-2	Arsenic	X		X	X	X	X	X	
7440-39-3	Barium	X		X	X	X	X	X	
7440-41-7	Beryllium	X		X			X	X	
7440-43-9	Cadmium	X	X	X	X	X	X	X	
7440-47-3	Chromium	X		X			X		
7440-48-4	Cobalt	X	X	X	X	X	X	X	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
7440-50-8	Copper	X	X	X	X	X	X	X	
7440-61-1	Uranium	X	X	X	X	X	X	X	
7440-61-1R	Uranium-238	X		X				X	
7440-62-2	Vanadium	X		X			X		
7440-65-5	Yttrium	X		X	X	X	X		
7440-66-6	Zinc	X	X	X	X	X	X	X	
7440-67-7	Zirconium	X		X	X	X	X	X	
7446-09-5	Sulfur dioxide						calc.		
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	calc.	calc.	calc.	calc.	calc.	X		X
7487-94-7	Mercury (Hg^{+2})	X	X	X	X	X		X	
75-00-3	Chloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-01-4	1-Chloroethene	calc.	calc.	calc.	calc.	calc.	X	X	
75-02-5	Vinyl Fluoride	calc.	calc.	calc.	calc.	calc.	calc.		
75-05-8	Acetonitrile	calc.	calc.	calc.	calc.	calc.	X	X	
75-07-0	Acetaldehyde	calc.	calc.	calc.	calc.	calc.	X	X	
75-09-2	Dichloromethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-15-0	Carbon disulfide	calc.	calc.	calc.	calc.	calc.	X	X	
75-21-8	Oxirane	calc.	calc.	calc.	calc.	calc.	X	X	
75-25-2	Bromoform	calc.	calc.	calc.	calc.	calc.	X	X	
75-27-4	Bromodichloromethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-29-6	2-Chloropropane	calc.	calc.	calc.	calc.	calc.	calc.	X	
75-34-3	1,1-Dichloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-35-4	1,1-Dichloroethene	calc.	calc.	calc.	calc.	calc.	X	X	
75-44-5	Phosgene	calc.	calc.	calc.	calc.	calc.	calc.		
75-45-6	Chlorodifluoromethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-50-3	Trimethylamine	calc.	calc.	calc.	calc.	calc.	calc.		
75-69-4	Trichlorofluoromethane	calc.	calc.	calc.	calc.	calc.	X	X	
75-71-8	Dichlorodifluoromethane	calc.	calc.	calc.	calc.	calc.	X	X	
76-01-7	Pentachloroethane	calc.	calc.	calc.	calc.	calc.	X		

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane (Freon 113)	calc.	calc.	calc.	calc.	calc.	X	X	
76-44-8	Heptachlor	calc.	calc.	calc.	calc.	calc.	X	calc.	
764-41-0	1,4-Dichloro-2-butene	calc.	calc.	calc.	calc.	calc.	calc.	X	
7647-01-0	Hydrogen Chloride	calc.	calc.	calc.	calc.	calc.	X	X	
765-34-4	Glycidylaldehyde	calc.	calc.	calc.	calc.	calc.	calc.	X	
7664-39-3	Hydrogen Fluoride						calc.		
7664-41-7	Ammonia/Ammonium	calc.		calc.			calc.		
77-47-4	Hexachlorocyclopentadiene	calc.	calc.	calc.	calc.	calc.	X	calc.	
77-78-1	Dimethyl sulfate	calc.	calc.	calc.	calc.	calc.	calc.	X	
7704-34-9	Total Sulfur (thermodynamically stable)								
7723-14-0	Phosphorous	X		X	X	X	X	X	
7782-41-4	Fluorine gas (F_2)			X				X	
7782-49-2	Selenium	X	X	X	X	X	X	X	
7782-50-5	Chlorine	calc.	calc.	calc.	calc.	calc.	X	X	
78-83-1	2-Methylpropyl alcohol (Isobutyl alcohol)	calc.	calc.	calc.	calc.	calc.	calc.	X	
78-87-5	1,2-Dichloropropane	calc.	calc.	calc.	calc.	calc.	X	X	
78-93-3	2-Butanone	calc.	calc.	calc.	calc.	calc.	X	X	
79-00-5	1,1,2-Trichloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
79-01-6	1,1,2-Trichloroethylene	calc.	calc.	calc.	calc.	calc.	X	X	
79-10-7	2-Propenoic acid	calc.	calc.	calc.	calc.	calc.	calc.	X	
79-34-5	1,1,2,2-Tetrachloroethane	calc.	calc.	calc.	calc.	calc.	X	X	
79-46-9	2-Nitropropane	calc.	calc.	calc.	calc.	calc.	X	X	
80-62-6	Methyl methacrylate	calc.	calc.	calc.	calc.	calc.	calc.	X	
82-68-8	Pentachloronitrobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	
822-06-0	Hexamethylene-1,5-diisocyanate	calc.	calc.	calc.	calc.	calc.	calc.	X	
823-40-5	Toluene-2,6-diamine	calc.	calc.	calc.	calc.	calc.	calc.	X	
83-32-9	Acenaphthene	calc.	calc.	calc.	calc.	calc.	X	X	
832-69-9	1-Methylphenanthrene								

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
84-66-2	Diethyl phthalate	calc.	calc.	calc.	calc.	calc.	X	X	
84-74-2	Dibutyl phthalate	calc.	calc.	calc.	calc.	calc.	X	calc.	
85-01-8	Phenanthrene	calc.	calc.	calc.	calc.	calc.	X	calc.	
85-44-9	Phthalic anhydride	calc.	calc.	calc.	calc.	calc.	X	X	
85-68-7	Butylbenzyl phthalate	calc.	calc.	calc.	calc.	calc.	X	calc.	
86-73-7	Fluorene	calc.	calc.	calc.	calc.	calc.	X	calc.	
87-61-6	1,2,3-Trichlorobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	
87-68-3	Hexachlorobutadiene	calc.	calc.	calc.	calc.	calc.	X	calc.	
87-86-5	Pentachlorophenol	calc.	calc.	calc.	calc.	calc.	X	calc.	
88-06-2	2,4,6-Trichlorophenol	calc.	calc.	calc.	calc.	calc.	X	X	
88-74-4	o-Nitroaniline	calc.	calc.	calc.	calc.	calc.	X	X	
88-75-5	2-Nitrophenol	calc.	calc.	calc.	calc.	calc.	X		
90-04-0	o-Anisidine	calc.	calc.	calc.	calc.	calc.	calc.		
90-12-0	1-Methylnaphthalene	calc.	calc.	calc.	calc.	calc.	calc.	X	
91-20-3	Naphthalene	calc.	calc.	calc.	calc.	calc.	X	X	
91-22-5	Quinoline	calc.	calc.	calc.	calc.	calc.	X	X	
91-57-6	2-Methylnaphthalene	calc.	calc.	calc.	calc.	calc.	X	X	
91-58-7	2-Chloronaphthalene	calc.	calc.	calc.	calc.	calc.	X	X	
91-94-1	3,3'-Dichlorobenzidine	calc.	calc.	calc.	calc.	calc.	X	X	
92-52-4	1,1`-Biphenyl	calc.	calc.	calc.	calc.	calc.	X	X	
924-16-3	N-Nitrosodi-n-butylamine	calc.	calc.	calc.	calc.	calc.	X	X	
94-59-7	Safrole	calc.	calc.	calc.	calc.	calc.	X		
94-75-7	2,4-D and esters (160C typed)	calc.	calc.	calc.	calc.	calc.	calc.	X	
95-48-7	o-Cresol	calc.	calc.	calc.	calc.	calc.	X	X	
95-49-8	2-Chlorotoluene	calc.	calc.	calc.	calc.	calc.	X	X	
95-50-1	1,2-Dichlorobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
95-53-4	o-Toluidine	calc.	calc.	calc.	calc.	calc.	X	X	
95-57-8	2-Chlorophenol	calc.	calc.	calc.	calc.	calc.	X	X	
95-63-6	1,2,4-Trimethyl benzene	calc.	calc.	calc.	calc.	calc.	X	X	
95-94-3	1,2,4,5-Tetrachlorobenzene	calc.	calc.	calc.	calc.	calc.	X	calc.	

Table 1-3 Available Animal and Fish Uptake Parameters

CAS Registry Number	Constituent Name	Beef Biotransfer Factor	Pork Biotransfer Factor	Milk Biotransfer Factor	Poultry Biotransfer Factor	Egg Biotransfer Factor	Fish Bioconcentration Factor	Fish Bioaccumulation Factor	Fish Biota-Sediment Accumulation Factor
95-95-4	2,4,5-Trichlorophenol	calc.	calc.	calc.	calc.	calc.	X	X	
96-12-8	1,2-Dibromo-3-chloropropane	calc.	calc.	calc.	calc.	calc.	X	X	
96-18-4	1,2,3-Trichloropropane	calc.	calc.	calc.	calc.	calc.	X	X	
96-45-7	Ethylene thiourea	calc.	calc.	calc.	calc.	calc.	X	X	
97-63-2	Ethyl methacrylate	calc.	calc.	calc.	calc.	calc.	X	X	
98-01-1	Furfural	calc.	calc.	calc.	calc.	calc.	calc.	X	
98-06-6	tert-Butyl benzene	calc.	calc.	calc.	calc.	calc.	calc.		
98-07-7	Benzotrichloride	calc.	calc.	calc.	calc.	calc.	calc.	X	
98-82-8	Cumene	calc.	calc.	calc.	calc.	calc.	X	X	
98-83-9	alpha-Methylstyrene	calc.	calc.	calc.	calc.	calc.	X	X	
98-86-2	Acetophenone	calc.	calc.	calc.	calc.	calc.	X	X	
98-95-3	Nitrobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
99-35-4	1,3,5-Trinitrobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
99-65-0	1,3-Dinitrobenzene	calc.	calc.	calc.	calc.	calc.	X	X	
99-87-6	p-Cymene	calc.	calc.	calc.	calc.	calc.	calc.		
N/A	Particulate matter								

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
100-02-7	4-Nitrophenol		calc.	X			X		X	calc.	
100-21-0	p-Phthalic acid		calc.	calc.			X		X	calc.	
100-25-4	1,4-Dinitrobenzene		calc.	calc.			X		X	calc.	
100-40-3	4-Vinylcyclohexene										
100-41-4	Ethyl benzene	X	X	X	calc.		X	calc.	X	calc.	calc.
100-42-5	Styrene	calc.	X	calc.	X	calc.	X	X	X	calc.	calc.
100-44-7	Benzyl chloride	X	X	X	X	X	X	X	X	calc.	calc.
100-47-0	Benzonitrile										
100-51-6	Benzyl alcohol		calc.	calc.			X		X	calc.	
100-52-7	Benzaldehyde		calc.	X			X		X	calc.	
10028-15-6	Ozone								X		
10028-17-8	Tritium	calc.			X			calc.			
10045-97-3	Cesium-137	calc.			X			calc.			
10061-01-5	cis-1,3-Dichloropropene		calc.	calc.			surr.		X	surr.	
10061-02-6	trans-1,3-Dichloropropene								X		
10098-91-6	Yttrium-90	calc.			X			calc.			
10098-97-2	Strontium-90	calc.			X			calc.			
101-55-3	4-Bromophenylphenyl ether								X		
101-77-9	4,4-Methylenedianiline				calc.	calc.		X	X		calc.
10102-44-0	Nitrogen dioxide		calc.	calc.			X		X	calc.	
10198-40-0	Cobalt-60	calc.			X			calc.			
103-33-3	Azobenzene	X			calc.	X		X	X		calc.
103-65-1	n-Propyl benzene (Isocumene)								X		
104-51-8	n-Butylbenzene								X		
104-76-7	2-Ethyl-1-Hexanol										
105-67-9	2,4-Dimethylphenol		calc.	X			X		X	calc.	
10595-95-6	N-Methyl-N-Nitrosoethamine				calc.	X		X	X		calc.
106-43-4	4-Chlorotoluene (p-Tolyl chloride)								X		
106-44-5	p-Cresol		calc.	X			X		X	calc.	
106-46-7	1,4-Dichlorobenzene	X	X	calc.	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
106-47-8	p-Chloroaniline		calc.	X	calc.	calc.	X	X	X	calc.	calc.
106-49-0	p-Toluidine				calc.	X		X	X		calc.
106-51-4	Quinone		X	X			calc.		X	calc.	
106-88-7	1,2-Epoxybutane		X	calc.			calc.		X	calc.	
106-89-8	Epichlorohydrin	X	X	calc.	calc.	X	X	X	X	calc.	calc.
106-93-4	Ethylene dibromide	X	X	X	calc.	X	X	X	X	calc.	calc.
106-99-0	1,3-Butadiene	X	X	X	calc.	calc.	X	X	X	calc.	calc.
107-02-8	Acrolein		X	X			X		X	calc.	
107-05-1	3-Chloropropene (Allyl chloride)		X	X			X		X	calc.	
107-06-2	1,2-Dichloroethane	X	X	X	calc.	X	X	X	X	calc.	calc.
107-12-0	Propionitrile		X	X			calc.		X	calc.	
107-13-1	Acrylonitrile	X	X	X	calc.	X	X	X	X	calc.	calc.
107-19-7	Propargyl alcohol		X	X			X		X	calc.	
107-21-1	Ethylene glycol		calc.	calc.			X		X	calc.	
107-98-2	Propylene glycol monomethyl ether		X	calc.			X		X	calc.	
108-05-4	Vinyl acetate		X	calc.			X		X	calc.	
108-10-1	Hexone (4-Methyl-2-pentanone or MIBK)		X	calc.			X		X	calc.	
108-39-4	m-Cresol		calc.	X			X		X	calc.	
108-60-1	Dichloroisopropyl ether (2,2'-Oxybis(1-chloropropane))	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
108-67-8	1,3,5-Trimethyl benzene		X	calc.			X		X	calc.	
108-86-1	Bromobenzene (Phenyl bromide)		X	X			X		X	calc.	
108-87-2	Methylcyclohexane		X	calc.			calc.		X	calc.	
108-88-3	Toluene		X	calc.			X		X	calc.	
108-90-7	Chlorobenzene		X	X			X		X	calc.	
108-94-1	Cyclohexanone		X	X			X		X	calc.	
108-95-2	Phenol		X	X			X		X	calc.	
109-74-0	Butyronitrile		X	X			calc.				
109-75-1	3-Butenenitrile										

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
109-77-3	Malononitrile		calc.	calc.			X		X	calc.	
109-86-4	2-Methoxyethanol		X	calc.			X		X	calc.	
109-99-9	Tetrahydrofuran	X	X	X	calc.	calc.	X	X	X	calc.	calc.
110-00-9	Furan		calc.	calc.			X		X	calc.	
110-54-3	n-Hexane		X	calc.			X		X	calc.	
110-59-8	Valeronitrile										
110-80-5	2-Ethoxyethanol		X	calc.			X		X	calc.	
110-82-7	Cyclohexane		X	X			X		X	calc.	
110-83-8	Cyclohexene		X	X			calc.		X	calc.	
110-86-1	Pyridine		calc.	X			X		X	calc.	
111-15-9	Ethylene glycol monoethyl ether acetate		calc.	calc.			X		X	calc.	
111-44-4	Bis(2-chloroethyl) ether	X			calc.	X		X	X		calc.
111-65-9	n-Octane		X	X			X		X	calc.	
111-76-2	Ethylene glycol monobutyl ether		X	calc.			X		X	calc.	
111-84-2	n-Nonane		X	X			X		X	calc.	
111-91-1	Bis(2-chloroethoxy)methane		calc.	calc.			X		X	calc.	
112-30-1	1-Decanol										
112-31-2	Decanal										
112-40-3	Dodecane										
1120-21-4	Undecane										
1120-71-4	1,3-Propane sultone								X		
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)		calc.	calc.	calc.	X	X	X	X	calc.	calc.
117-84-0	n-Dioctyl phthalate		calc.	calc.			X		X	calc.	
118-74-1	Hexachlorobenzene	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
119-90-4	3,3'-Dimethoxybenzidine	calc.			calc.	X		X	X		calc.
120-12-7	Anthracene		calc.	X			X		X	calc.	
120-82-1	1,2,4-Trichlorobenzene		X	calc.	calc.	calc.	X	X	X	calc.	calc.
120-83-2	2,4-Dichlorophenol		calc.	X			X		X	calc.	
121-14-2	2,4-Dinitrotoluene	X	X	X	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
122-39-4	N,N-Diphenylamine		calc.	calc.			X		X	calc.	
122-66-7	1,2-Diphenylhydrazine	X			calc.	X		X	X		calc.
123-33-1	Maleic hydrazide		calc.	calc.			X		X	calc.	
123-38-6	n-Propionaldehyde		X	X			X		X	calc.	
123-72-8	Butyraldehyde										
123-91-1	1,4-Dioxane	calc.	X	X	calc.	X	calc.	X	X	calc.	calc.
124-18-5	Decane										
124-38-9	Carbon dioxide										
124-48-1	Chlorodibromomethane	calc.	calc.	X	calc.	X	X	X	X	calc.	calc.
126-73-8	Tributyl phosphate		calc.	calc.	calc.	calc.	X	X	X	calc.	calc.
126-98-7	2-Methyl-2-propenenitrile		X	X			X		X	calc.	
127-18-4	1,1,2,2-Tetrachloroethene	X	X	X	calc.	calc.	X	X	X	calc.	calc.
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol								X		
129-00-0	Pyrene		calc.	X			X		X	calc.	
131-11-3	Dimethyl phthalate		calc.	calc.			X		X	calc.	
131-89-5	2-Cyclohexyl-4,6-dinitrophenol		calc.	calc.			X		X	calc.	
132-64-9	Dibenzofuran		calc.	calc.			X		X	calc.	
133-06-2	Captan		calc.	calc.	calc.	X	X	X	X	calc.	calc.
1330-20-7	Xylenes (mixed isomers)		X	calc.			X		X	calc.	
1336-36-3	Polychlorinated biphenyls (PCBs)	X	calc.	calc.	X	calc.	X	X	X	calc.	calc.
134-32-7	1-Naphthylamine										
135-98-8	sec-Butylbenzene								X		
13966-29-5	Uranium-234	calc.			X			calc.			
13967-48-1	Ruthenium-106	calc.			X			calc.			
13967-70-9	Cesium-134	calc.			X			calc.			
13968-55-3	Uranium-233	calc.			X			calc.			
13981-15-2	Curium-244	calc.			X			calc.			
13981-16-3	Plutonium-238	calc.			X			calc.			
13981-37-8	Nickel-63	calc.			X			calc.			
13982-10-0	Plutonium-242	calc.			X			calc.			

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
13982-63-3	Radium-226	calc.			X			calc.			
13982-70-2	Uranium-236	calc.			X			calc.			
13994-20-2	Neptunium-237	calc.			X			calc.			
141-78-6	Acetic acid ethyl ester (Ethyl acetate)		X	X			X		X	calc.	
14119-32-5	Plutonium-241	calc.			X			calc.			
14119-33-6	Plutonium-240	calc.			X			calc.			
14133-76-7	Technetium-99	calc.			X			calc.			
14158-29-3	Uranium-232	calc.			X			calc.			
14234-35-6	Antimony-125	calc.			X			calc.			
14265-44-2	Phosphate								X		
14331-85-2	Protactinium-231	calc.			X			calc.			
14336-70-0	Nickel-59	calc.			X			calc.			
14391-16-3	Europium-155	calc.			X			calc.			
145-73-3	Endothall		calc.	calc.			X		X	calc.	
14596-10-2	Americium-241	calc.			X			calc.			
14683-23-9	Europium-152	calc.			X			calc.			
14762-75-5	Carbon-14	calc.			X			calc.			
14797-55-8	Nitrate		calc.	calc.			X		X	calc.	
14797-65-0	Nitrite		calc.	calc.			X		X	calc.	
14808-79-8	Sulfate								X		
14952-40-0	Actinium-227	calc.			X			calc.			
14993-75-0	Americium-243	calc.			X			calc.			
15046-84-1	Iodine-129	calc.			X			calc.			
15117-48-3	Plutonium-239	calc.			X			calc.			
15117-96-1	Uranium-235	calc.			X			calc.			
15262-20-1	Radium-228	calc.			X			calc.			
15510-73-3	Curium-242	calc.			X			calc.			
15585-10-1	Europium-154	calc.			X			calc.			
15594-54-4	Thorium-229	calc.			X			calc.			
156-59-2	cis-1,2-Dichloroethene		calc.	calc.			X		X	calc.	
156-60-5	trans-1,2-Dichloroethylene		calc.	calc.			X		X	calc.	

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
15715-94-3	Samarium-151	calc.			X			calc.			
15751-77-6	Zirconium-93	calc.			X			calc.			
15757-87-6	Curium-243	calc.			X			calc.			
15758-45-9	Selenium-79	calc.			X			calc.			
15832-50-5	Tin-126	calc.			X			calc.			
1634-04-4	Methyl tert-butyl ether	calc.	X	calc.	X	calc.	X	X	X	calc.	calc.
16887-00-6	Chloride								X		
16984-48-8	Fluoride		calc.	calc.			X		X	calc.	
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
189-55-9	Dibenzo[a,i]pyrene								X		
189-64-0	Dibenzo[a,h]pyrene								X		
191-24-2	Benzo[g,h,i]perylene								X		
191-30-0	Benzo[a,i]pyrene	calc.			surr.	calc.		surr.	X		calc.
192-65-4	Dibenzo[a,e]pyrene								X		
192-97-2	Benzo[e]pyrene								X		
193-39-5	Indeno[1,2,3-cd]pyrene	X			calc.	calc.		calc.	X		calc.
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	X			calc.	X		X	X		calc.
205-82-3	Benzo[j]fluoranthene								X		
205-99-2	Benzo[b]fluoranthene	X			calc.	calc.		calc.	X		calc.
206-44-0	Fluoranthene		calc.	X			X		X	calc.	
207-08-9	Benzo[k]fluoranthene	X			calc.	calc.		calc.	X		calc.
208-96-8	Acenaphthylene								X		
218-01-9	Chrysene	X			calc.	calc.		calc.	X		calc.
224-42-0	Dibenz[a,j]acridine								X		
2245-38-7	2,3,5-Trimethylnaphthalene										
226-36-8	Dibenz[a,h]acridine								X		
22967-92-6	Methylmercury		calc.				X		X	calc.	
23950-58-5	Pronamide		calc.	X			X		X	calc.	
24959-67-9	Bromide								X		
27154-33-2	Trichlorofluoroethane		surr.	surr.			surr.		surr.	surr.	

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PBC 118)								X		
319-84-6	alpha-BHC	X	calc.	calc.	calc.	X	calc.	X	X	calc.	calc.
319-85-7	beta-BHC	X	calc.	calc.	calc.	X	calc.	X	X	calc.	calc.
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)								X		
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)								X		
3268-87-9	1,2,3,4,6,7,8,9 Octachlorodibenzo(p)dioxin	X			calc.	X		X	X		calc.
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)								X		
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin								X		
3697-24-3	5-Methylchrysene								X		
378253-40-8	Barium-137m										
378253-44-2	Cadmium-113m	calc.			X			calc.			
378782-82-2	Niobium-93m	calc.			X			calc.			
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)								X		
39001-02-0	1,2,3,4,6,7,8,9 Octachlorodibenzofuran	X			calc.	X		X	X		calc.
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin								X		
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)								X		
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin								X		
4170-30-3	2-Butenaldehyde (2-Butenal or Crotonaldehyde)		X	X			calc.		X	calc.	
41851-50-7	Chlorocyclopentadiene								X		
460-19-5	Cyanogen		X	X			X		X	calc.	

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
4786-20-3	2-Butenenitrile										
50-00-0	Formaldehyde	X	X	X	calc.	calc.	X	X	X	calc.	calc.
50-32-8	Benzo[a]pyrene	X			calc.	X		X	X		calc.
506-68-3	Cyanogen bromide		calc.	calc.			X		X	calc.	
506-77-4	Cyanogen chloride		calc.	calc.			X		X	calc.	
51-28-5	2,4-Dinitrophenol		calc.	X			X		X	calc.	
51-79-6	Ethyl Carbamate (urethane)								X		
510-15-6	Chlorobenzilate	X	calc.	X	calc.	X	X	X	X	calc.	calc.
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	X			calc.	X		X	X		calc.
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)								X		
528-29-0	o-Dinitrobenzene		calc.	calc.			X		X	calc.	
53-70-3	Dibenz[a,h]anthracene	X			calc.	calc.		calc.	X		calc.
532-27-4	2-Chloroacetophenone		X	X			calc.		X	calc.	
534-52-1	4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)		calc.	calc.			X		X	calc.	
5385-75-1	Dibenzo[a,e]fluoranthene								X		
540-59-0	1,2-Dichloroethylene		calc.	calc.			X		X	calc.	
540-73-8	1,2-Dimethylhydrazine								X		
540-84-1	2,2,4-Trimethylpentane		X	X			calc.		X	calc.	
541-73-1	1,3-Dichlorobenzene		calc.	X			X		X	calc.	
542-75-6	1,3-Dichloropropene	X	X	calc.	calc.	X	X	X	X	calc.	calc.
542-88-1	Dichloromethyl ether	X			calc.	X		X	X		calc.
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran								X		
56-23-5	Carbon tetrachloride	X	X	X	calc.	X	X	X	X	calc.	calc.
56-49-5	3-Methylcholanthrene								X		
56-55-3	Benzo[a]anthracene	X			calc.	calc.		calc.	X		calc.
57-12-5	Cyanide		calc.	X			X		X	calc.	
57-24-9	Strychnine		calc.	X			X		X	calc.	
57-74-9	Chlordane	X	X	calc.	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	X			calc.	X		X	X		calc.
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	X			calc.	X		X	X		calc.
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran								X		
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)								X		
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	X			calc.	X		X	X		calc.
58-89-9	gamma-BHC (Lindane)		calc.	calc.	calc.	X	X	X	X	calc.	calc.
58-90-2	2,3,4,6-Tetrachlorophenol		calc.	X			X		X	calc.	
581-42-0	2,6-Dimethylnaphthalene										
584-84-9	2,4-Toluene diisocyante	surr.	X	surr.	calc.	surr.	X	X	X	surr.	calc.
589-38-8	3-Hexanone										
59-50-7	4-Chloro-3-methylphenol								X		
59-89-2	N-Nitrosomorpholine								X		
591-50-4	Benzene, iodo-										
591-78-6	2-Hexanone		X	X			X		X	calc.	
593-60-2	Bromoethene	X	X	calc.	calc.		calc.	calc.	X	calc.	calc.
593-74-8	Dimethyl Mercury										
60-11-7	Dimethyl aminoazobenzene								X		
60-29-7	Ethyl ether		X	X			X		X	calc.	
60-35-5	Acetamide		X	X			calc.		X	calc.	
602-87-9	5-Nitroacenaphthene		surr.	X			surr.		X	surr.	
606-20-2	2,6-Dinitrotoluene		X	X	calc.	X	X	X	X	calc.	calc.
608-93-5	Pentachlorobenzene		calc.	X			X		X	calc.	
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran								X		
61626-71-9	Dichloropentadiene								X		
62-50-0	Ethyl methanesulfonate								X		
62-53-3	Aniline	X	X	X	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
62-75-9	N-Nitroso-N,N-dimethylamine (Dimethylnitrosamine)	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
621-64-7	di-n-Propylnitrosamine	calc.			calc.	X		X	X		calc.
624-83-9	Methyl isocyanate	X	X	surr.	surr.	surr.	surr.	X	surr.	surr.	calc.
628-73-9	Hexanenitrile										
630-08-0	Carbon monoxide								X		
630-20-6	1,1,1,2-Tetrachloroethane	X	calc.	X	calc.	X	X	X	X	calc.	calc.
64-18-6	Formic acid		X	calc.			X		X	calc.	
65-85-0	Benzoic acid		calc.	X			X		X	calc.	
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)								X		
67-56-1	Methyl alcohol		X	X			X		X	calc.	
67-63-0	2-Propyl alcohol (Isopropanol; Propan-2-ol)		X	X			calc.		X	calc.	
67-64-1	2-Propanone (Acetone)		calc.	X			X		X	calc.	
67-66-3	Chloroform	X	X	X	X	X	X	calc.	X	calc.	calc.
67-72-1	Hexachloroethane	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran								X		
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)								X		
70-30-4	Hexachlorophene		calc.	X			X		X	calc.	
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)								X		
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran								X		
71-36-3	n-Butyl alcohol		X	X			X		X	calc.	
71-43-2	Benzene	X	X	X	calc.	X	X	X	X	calc.	calc.
71-55-6	1,1,1-Trichloroethane		X	X			X		X	calc.	
72-43-5	Methoxychlor		calc.	X			X		X	calc.	
72-55-9	4,4'-DDE	calc.			calc.	X		X	X		calc.
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran								X		

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
74-83-9	Bromomethane		X	X			X		X	calc.	
74-87-3	Chloromethane	X	X	X	calc.	X	calc.	X	X	calc.	calc.
74-88-4	Iodomethane (Methyl iodide)								X		
74-95-3	Methylene bromide		calc.	X			X		X	calc.	
74-97-5	Bromochloromethane								X		
7429-90-5	Aluminum		X	calc.			X		X	calc.	
7439-89-6	Iron		calc.	calc.			X		X	calc.	
7439-92-1	Lead	X	X	X	calc.	calc.	calc.	X	X	calc.	calc.
7439-93-2	Lithium								X		
7439-95-4	Magnesium								X		
7439-96-5	Manganese		X	calc.			X		X	calc.	
7439-97-6	Mercury - elemental		X	X			calc.		X	calc.	
7439-98-7	Molybdenum		calc.	calc.			X		X	calc.	
7440-02-0	Nickel	X	X	X	calc.		X	calc.	X	calc.	calc.
7440-16-6	Rhodium								X		
7440-22-4	Silver		calc.	X			X		X	calc.	
7440-23-5	Sodium								X		
7440-24-6	Strontium (total)		calc.	calc.			X		X	calc.	
7440-25-7	Tantalum								X		
7440-28-0	Thallium		calc.	calc.			X		X	calc.	
7440-29-1	Thorium-232	calc.			X			calc.	X		calc.
7440-31-5	Tin		calc.	calc.			X		X	calc.	
7440-33-7	Tungsten								X		
7440-36-0	Antimony		calc.	X			X		X	calc.	
7440-38-2	Arsenic	X	X	X	calc.	X	X	X	X	calc.	calc.
7440-39-3	Barium		X	X			X		X	calc.	
7440-41-7	Beryllium	X	X	calc.	calc.	X	X	X	X	calc.	calc.
7440-43-9	Cadmium	X	X	X	calc.	calc.	X	X	X	calc.	calc.
7440-47-3	Chromium		calc.	X			X		X	calc.	
7440-48-4	Cobalt	X	X	calc.	calc.		X	calc.	X	calc.	calc.
7440-50-8	Copper		calc.	calc.			X		X	calc.	

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
7440-61-1	Uranium		calc.	calc.			X		X	calc.	
7440-61-1R	Uranium-238	calc.			X			calc.			
7440-62-2	Vanadium		calc.	calc.			X		X	calc.	
7440-65-5	Yttrium		X	X			calc.		X	calc.	
7440-66-6	Zinc		calc.	X			X		X	calc.	
7440-67-7	Zirconium								X		
7446-09-5	Sulfur dioxide								X		
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)								X		
7487-94-7	Mercury (Hg^{+2})		calc.				X		X	calc.	
75-00-3	Chloroethane	calc.	X	calc.	X	calc.	X	X	X	calc.	calc.
75-01-4	1-Chloroethene	X	X	calc.	calc.	X	X	X	X	calc.	calc.
75-02-5	Vinyl Fluoride										
75-05-8	Acetonitrile		X	X			X		X	calc.	
75-07-0	Acetaldehyde	X	X	X	calc.		X	calc.	X	calc.	calc.
75-09-2	Dichloromethane	X	X	calc.	calc.	X	X	X	X	calc.	calc.
75-15-0	Carbon disulfide		X	X			X		X	calc.	
75-21-8	Oxirane	X			calc.	X		X	X		calc.
75-25-2	Bromoform	X	calc.	X	calc.	X	X	X	X	calc.	calc.
75-27-4	Bromodichloromethane	calc.	calc.	X	calc.	X	X	X	X	calc.	calc.
75-29-6	2-Chloropropane		X	X			calc.		X	calc.	
75-34-3	1,1-Dichloroethane	X	X	X	calc.	calc.	X	X	X	calc.	calc.
75-35-4	1,1-Dichloroethene	X	X	calc.	calc.	X	X	X	X	calc.	calc.
75-44-5	Phosgene		X	X			calc.				
75-45-6	Chlorodifluoromethane		X	X			calc.		X	calc.	
75-50-3	Trimethylamine		X	X			calc.		X	calc.	
75-69-4	Trichlorofluoromethane		X	X			X		X	calc.	
75-71-8	Dichlorodifluoromethane		X	X			X		X	calc.	
76-01-7	Pentachloroethane		X	X			X		X	calc.	
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane (Freon 113)		X	calc.			X		X	calc.	
76-44-8	Heptachlor	X	calc.	X	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
764-41-0	1,4-Dichloro-2-butene	X			calc.			calc.	X		calc.
7647-01-0	Hydrogen Chloride		X	calc.			calc.		X	calc.	
765-34-4	Glycidylaldehyde		X	calc.			X		X	calc.	
7664-39-3	Hydrogen Fluoride								X		
7664-41-7	Ammonia/Ammonium		X	calc.			calc.		X	calc.	
77-47-4	Hexachlorocyclopentadiene		X	calc.			X		X	calc.	
77-78-1	Dimethyl sulfate								X		
7704-34-9	Total Sulfur (thermodynamically stable)										
7723-14-0	Phosphorous		calc.	calc.			X		X	calc.	
7782-41-4	Fluorine gas (F_2)		calc.	calc.			X		X	calc.	
7782-49-2	Selenium		X	X			X		X	calc.	
7782-50-5	Chlorine		X	X			X		X	calc.	
78-83-1	2-Methylpropyl alcohol (Isobutyl alcohol)		X	X			X		X	calc.	
78-87-5	1,2-Dichloropropane	X	X	calc.	calc.	X	calc.	X	X	calc.	calc.
78-93-3	2-Butanone		X	calc.			X		X	calc.	
79-00-5	1,1,2-Trichloroethane	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
79-01-6	1,1,2-Trichloroethylene	X	X	X	calc.	calc.	X	X	X	calc.	calc.
79-10-7	2-Propenoic acid		X	X			X		X	calc.	
79-34-5	1,1,2,2-Tetrachloroethane	X	calc.	X	calc.	X	X	X	X	calc.	calc.
79-46-9	2-Nitropropane	X	X	calc.	calc.	calc.	calc.	X	X	calc.	calc.
80-62-6	Methyl methacrylate		X	calc.			X		X	calc.	
82-68-8	Pentachloronitrobenzene	calc.	calc.	X	calc.	X	X	X	X	calc.	calc.
822-06-0	Hexamethylene-1,5-diisocyanate		X	calc.			calc.		X	calc.	
823-40-5	Toluene-2,6-diamine		X	X			X		X	calc.	
83-32-9	Acenaphthene		calc.	X			X		X	calc.	
832-69-9	1-Methylphenanthrene										
84-66-2	Diethyl phthalate		calc.	calc.			X		X	calc.	
84-74-2	Dibutyl phthalate		calc.	X			X		X	calc.	
85-01-8	Phenanthrene								X		

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
85-44-9	Phthalic anhydride		X	calc.			X		X	calc.	
85-68-7	Butylbenzyl phthalate	calc.	calc.	X	calc.	calc.	X	X	X	calc.	calc.
86-73-7	Fluorene		calc.	X			X		X	calc.	
87-61-6	1,2,3-Trichlorobenzene								X		
87-68-3	Hexachlorobutadiene	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
87-86-5	Pentachlorophenol	X	calc.	calc.	calc.	X	X	X	X	calc.	calc.
88-06-2	2,4,6-Trichlorophenol	X			calc.	X		X	X		calc.
88-74-4	o-Nitroaniline		X	calc.			X		X	calc.	
88-75-5	2-Nitrophenol								X		
90-04-0	o-Anisidine								X		
90-12-0	1-Methylnaphthalene		calc.	calc.			X		X	calc.	
91-20-3	Naphthalene		X	calc.			X		X	calc.	
91-22-5	Quinoline				calc.	X		X	X		calc.
91-57-6	2-Methylnaphthalene		calc.	calc.			X		X	calc.	
91-58-7	2-Chloronaphthalene		calc.	X			X		X	calc.	
91-94-1	3,3'-Dichlorobenzidine	X			calc.	X		X	X		calc.
92-52-4	1,1`-Biphenyl		X	X			X		X	calc.	
924-16-3	N-Nitrosodi-n-butylamine	X			calc.	X		X	X		calc.
94-59-7	Safrole								X		
94-75-7	2,4-D and esters (160C typed)		calc.	calc.			X		X	calc.	
95-48-7	o-Cresol		calc.	X			X		X	calc.	
95-49-8	2-Chlorotoluene		calc.	calc.			X		X	calc.	
95-50-1	1,2-Dichlorobenzene		X	X			X		X	calc.	
95-53-4	o-Toluidine	X			calc.	X		X	X		calc.
95-57-8	2-Chlorophenol		calc.	X			X		X	calc.	
95-63-6	1,2,4-Trimethyl benzene		X	X			X		X	calc.	
95-94-3	1,2,4,5-Tetrachlorobenzene		calc.	X			X		X	calc.	
95-95-4	2,4,5-Trichlorophenol		calc.	X			X		X	calc.	
96-12-8	1,2-Dibromo-3-chloropropane	X	X	X	calc.	X	X	X	X	calc.	calc.
96-18-4	1,2,3-Trichloropropane	calc.	calc.	X	calc.	X	X	X	X	calc.	calc.
96-45-7	Ethylene thiourea		calc.	calc.	calc.	X	X	X	X	calc.	calc.

Table 1-4 Available Chronic Toxicity Data

CAS Registry Number	Constituent Name	Inhalation Unit Risk	Inhalation Reference Concentration	Inhalation Reference Dose	Inhalation Slope Factor	Drinking Water Unit Risk	Oral Reference Dose	Oral Slope Factor	Percent Gastrointestinal Absorption	Dermal Reference Dose	Dermal Slope Factor
97-63-2	Ethyl methacrylate		calc.	X			X		X	calc.	
98-01-1	Furfural		X	X			X		X	calc.	
98-06-6	tert-Butyl benzene								X		
98-07-7	Benzotrichloride				calc.	X		X	X		calc.
98-82-8	Cumene		X	X			X		X	calc.	
98-83-9	alpha-Methylstyrene		calc.	calc.			X		X	calc.	
98-86-2	Acetophenone		calc.	X			X		X	calc.	
98-95-3	Nitrobenzene		X	X			X		X	calc.	
99-35-4	1,3,5-Trinitrobenzene		calc.	X			X		X	calc.	
99-65-0	1,3-Dinitrobenzene		calc.	X			X		X	calc.	
99-87-6	p-Cymene		X	X			X		X	calc.	
N/A	Particulate matter										

Contents

2 Constituent Physical Parameters 2-1

Tables

Table 2-1 Molar Weight, Vapor Pressure and Solubility 2-1

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant 2-20

Table 2-3 Air and Water Diffusivity 2-36

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient 2-51

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient 2-72

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant 2-99

Table 2-7 Radiological Half-life and Radiological Degradation Constant 2-112

2 Constituent Physical Parameters

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
100-02-7	p-Nitrophenol	139.11064	g/mol	[1]	5.39E-08	atm	[8]	1.16E+04	mg/L	[4]
100-21-0	Phthalic acid	166.13324	g/mol	[1]	1.21E-08	atm	[8]	1.50E+01	mg/L	[6]
100-25-4	1,4-Dinitrobenzene	168.10884	g/mol	[1]	3.43E-08	atm	[10]	6.90E+01	mg/L	[6]
100-40-3	4-Ethenylcyclohexene	108.18328	g/mol	[1]	2.07E-02	atm	[4]	5.00E+01	mg/L	[2]
100-41-4	Ethyl benzene	106.1674	g/mol	[1]	1.26E-02	atm	[8]	1.70E+02	mg/L	[4]
100-42-5	Styrene	104.15152	g/mol	[1]	8.03E-03	atm	[14]	3.10E+02	mg/L	[4]
100-44-7	Benzyl chloride	126.58528	g/mol	[1]	1.72E-03	atm	[8]	5.25E+02	mg/L	[4]
100-47-0	Benzonitrile	103.12344	g/mol	[1]	1.01E-03	atm	[3]	2.00E+03	mg/L	[4]
100-51-6	Benzyl alcohol	108.13992	g/mol	[1]	8.24E-05	atm	[8]	4.00E+04	mg/L	[4]
100-52-7	Benzaldehyde	106.12404	g/mol	[1]	1.67E-03	atm	[10]	3.00E+03	mg/L	[4]
10028-15-6	Ozone	47.9982	g/mol	[1]	3.14E-11	atm	[6]	7.44E+05	mg/L	[5]
10028-17-8	Tritium	18.01528	g/mol	[3]						
10045-97-3	Cesium-137	136.907089	g/mol	[5]						
10061-01-5	cis-1,3-Dichloropropene	110.97016	g/mol	[1]	3.46E-02	atm	[10]	2.18E+03	mg/L	[9]
10061-02-6	trans-1,3-Dichloropropene	110.97016	g/mol	[1]	4.47E-02	atm	[10]	2.80E+03	mg/L	[9]
10098-91-6	Yttrium-90	89.9071503	g/mol	[5]						
10098-97-2	Strontium-90	89.9077377	g/mol	[5]						
101-55-3	4-Bromophenylphenyl ether	249.10686	g/mol	[1]	1.97E-06	atm	[8]	4.60E+00	mg/L	[4]
101-77-9	4,4-Methylenedianiline	198.26764	g/mol	[1]	1.82E-02	atm	[8]	1.00E+03	mg/L	[6]
10102-44-0	Nitrogen dioxide	46.00554	g/mol	[1]	1.18E+00	atm	[8]	0.00E+00	mg/L	[6]
10198-40-0	Cobalt-60	59.9338226	g/mol	[5]						
103-33-3	Azobenzene	182.22488	g/mol	[1]	4.75E-07	atm	[10]	6.40E+00	mg/L	[6]
103-65-1	n-Propyl benzene (Isocumene)	120.19428	g/mol	[1]	4.50E-03	atm	[8]	5.22E+01	mg/L	[2]
104-51-8	n-Butylbenzene	134.22116	g/mol	[1]	1.39E-03	atm	[10]	1.18E+01	mg/L	[2]
104-76-7	2-Ethyl-1-hexanol	130.23032	g/mol	[1]	1.79E-04	atm	[4]	8.80E+02	mg/L	[2]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
105-67-9	2,4-Dimethylphenol	122.1668	g/mol	[1]	1.29E-04	atm	[8]	7.90E+03	mg/L	[4]
10595-95-6	n-Nitrosomethylethyl-amine	88.1094	g/mol	[1]	2.75E-03	atm	[7]	3.00E+05	mg/L	[6]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	126.58528	g/mol	[1]	3.54E-03	atm	[8]	1.06E+02	mg/L	[2]
106-44-5	p-Cresol (4-methyl phenol)	108.13992	g/mol	[1]	1.45E-04	atm	[8]	2.20E+04	mg/L	[4]
106-46-7	1,4-Dichlorobenzene	147.00316	g/mol	[1]	1.32E-03	atm	[8]	7.90E+01	mg/L	[4]
106-47-8	p-Chloroaniline	127.57308	g/mol	[1]	1.62E-05	atm	[8]	5.30E+03	mg/L	[4]
106-49-0	p-Toluidine	107.1552	g/mol	[1]	3.76E-04	atm	[10]	6.50E+03	mg/L	[6]
106-51-4	Quinone	108.09656	g/mol	[1]	1.18E-04	atm	[8]	1.11E+04	mg/L	[2]
106-88-7	1,2-Epoxybutane	72.10692	g/mol	[1]	2.37E-01	atm	[8]	9.50E+04	mg/L	[6]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	92.5248	g/mol	[1]	2.16E-02	atm	[8]	6.59E+04	mg/L	[4]
106-93-4	Ethylene dibromide	187.86176	g/mol	[1]	1.71E-02	atm	[8]	4.00E+03	mg/L	[4]
106-99-0	1,3-Butadiene	54.09164	g/mol	[1]	2.78E+00	atm	[8]	7.35E+02	mg/L	[6]
107-02-8	Acrolein	56.06416	g/mol	[1]	3.55E-01	atm	[8]	2.10E+05	mg/L	[4]
107-05-1	3-Chloropropene	76.5254	g/mol	[1]	4.84E-01	atm	[8]	3.37E+03	mg/L	[6]
107-06-2	1,2-Dichloroethane	98.95916	g/mol	[1]	1.04E-01	atm	[8]	8.50E+03	mg/L	[4]
107-12-0	Propionitrile	55.07944	g/mol	[1]	6.24E-02	atm	[8]	1.03E+05	mg/L	[2]
107-13-1	Acrylonitrile	53.06356	g/mol	[1]	1.43E-01	atm	[8]	7.40E+04	mg/L	[4]
107-19-7	Propargyl alcohol	56.06416	g/mol	[1]	2.05E-02	atm	[8]	1.00E+06	mg/L	[6]
107-21-1	Ethylene glycol (1,2-ethanediol)	62.06844	g/mol	[1]	1.21E-04	atm	[8]	1.00E+06	mg/L	[6]
107-98-2	Propylene glycol monomethyl ether	90.1222	g/mol	[1]	1.64E-02	atm	[8]	1.00E+06	mg/L	[6]
108-05-4	Acetic acid vinyl ester	86.09044	g/mol	[1]	1.18E-01	atm	[8]	2.00E+04	mg/L	[4]
108-10-1	4-Methyl-2-pentanone	100.16068	g/mol	[1]	2.63E-02	atm	[8]	1.90E+04	mg/L	[4]
108-39-4	m-Cresol	108.13992	g/mol	[1]	1.82E-04	atm	[8]	2.27E+04	mg/L	[4]
108-60-1	Bis(2-chloroisopropyl) ether	171.06608	g/mol	[1]	7.37E-04	atm	[8]	1.70E+03	mg/L	[6]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
108-67-8	1,3,5-Trimethylbenzene	120.19428	g/mol	[1]	3.26E-03	atm	[10]	4.82E+01	mg/L	[4]
108-86-1	Bromobenzene (Phenyl bromide)	157.0097	g/mol	[1]	5.50E-03	atm	[10]	4.46E+02	mg/L	[6]
108-87-2	Methylcyclohexane	98.18816	g/mol	[1]	6.05E-02	atm	[10]	1.40E+01	mg/L	[6]
108-88-3	Toluene	92.14052	g/mol	[1]	3.68E-02	atm	[8]	5.30E+02	mg/L	[4]
108-90-7	Chlorobenzene	112.5584	g/mol	[1]	1.58E-02	atm	[8]	4.70E+02	mg/L	[4]
108-94-1	Cyclohexanone	98.1448	g/mol	[1]	5.70E-03	atm	[8]	2.50E+04	mg/L	[6]
108-95-2	Phenol	94.11304	g/mol	[1]	3.68E-04	atm	[8]	8.30E+04	mg/L	[4]
109-74-0	n-Butanenitrile	69.10632	g/mol	[1]	2.57E-02	atm	[4]	3.30E+04	mg/L	[2]
109-75-1	3-Butenenitrile	67.09044	g/mol	[1]	2.43E-02	atm	[9]	3.37E+04	mg/L	[7]
109-77-3	Malononitrile	66.06236	g/mol	[1]	2.63E-04	atm	[10]	1.33E+05	mg/L	[6]
109-86-4	2-Methoxyethanol	76.09532	g/mol	[1]	1.25E-02	atm	[8]	1.00E+06	mg/L	[6]
109-99-9	Tetrahydrofuran	72.10692	g/mol	[1]	1.73E-01	atm	[2]	1.00E+06	mg/L	[4]
110-00-9	Furan	68.07516	g/mol	[1]	7.89E-01	atm	[7]	1.00E+04	mg/L	[6]
110-54-3	n-Hexane	86.17716	g/mol	[1]	1.99E-01	atm	[8]	9.50E+00	mg/L	[6]
110-59-8	Pentanenitrile	83.1332	g/mol	[1]	9.61E-03	atm	[4]	7.75E+03	mg/L	[8]
110-80-5	2-Ethoxyethanol	90.1222	g/mol	[1]	6.99E-03	atm	[8]	1.00E+06	mg/L	[6]
110-82-7	Cyclohexane	84.16128	g/mol	[1]	1.28E-01	atm	[8]	5.50E+01	mg/L	[2]
110-83-8	Cyclohexene	82.1454	g/mol	[1]	1.17E-01	atm	[10]	2.13E+02	mg/L	[2]
110-86-1	Pyridine	79.10144	g/mol	[1]	2.74E-02	atm	[8]	1.00E+06	mg/L	[4]
111-15-9	Ethylene glycol monoethyl ether acetate	132.15948	g/mol	[1]	3.08E-03	atm	[8]	2.47E+05	mg/L	[6]
111-44-4	Bis(2-chloroethyl)ether	143.01232	g/mol	[1]	2.04E-03	atm	[8]	1.72E+04	mg/L	[4]
111-65-9	n-Octane	114.23092	g/mol	[1]	1.86E-02	atm	[10]	6.60E-01	mg/L	[2]
111-76-2	2-Butoxyethanol	118.17596	g/mol	[1]	1.16E-03	atm	[8]	1.00E+06	mg/L	[6]
111-84-2	n-Nonane	128.2578	g/mol	[1]	5.86E-03	atm	[8]	2.20E+02	mg/L	[2]
111-91-1	Bis(2-chloroethoxy) methane	173.0386	g/mol	[1]	1.74E-04	atm	[8]	7.80E+03	mg/L	[6]
112-30-1	1-Decanol	158.28408	g/mol	[1]	1.12E-05	atm	[9]	3.70E+01	mg/L	[7]
112-31-2	Decanal	156.2682	g/mol	[1]	1.36E-04	atm	[9]	6.08E+01	mg/L	[7]
112-40-3	Dodecane	170.33844	g/mol	[1]	1.78E-04	atm	[9]	3.70E-03	mg/L	[7]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
1120-21-4	Undecane	156.31156	g/mol	[1]	5.42E-04	atm	[9]	4.40E-03	mg/L	[7]
1120-71-4	1,3-Propane sultone	122.14484	g/mol	[1]	3.55E-04	atm	[8]	1.71E+05	mg/L	[9]
117-81-7	Bis(2-ethylhexyl) phthalate	390.56332	g/mol	[1]	8.95E-11	atm	[8]	3.40E-01	mg/L	[4]
117-84-0	Di-n-octylphthalate	390.56332	g/mol	[1]	3.42E-09	atm	[8]	2.00E-02	mg/L	[4]
118-74-1	Hexachlorobenzene	284.7822	g/mol	[1]	2.37E-08	atm	[8]	6.20E-06	mg/L	[4]
119-90-4	3,3'-Dimethoxybenzidine	244.29332	g/mol	[1]	2.79E-10	atm	[8]	6.00E+01	mg/L	[4]
120-12-7	Anthracene	178.2334	g/mol	[1]	3.55E-09	atm	[8]	4.30E-02	mg/L	[4]
120-82-1	1,2,4-Trichlorobenzene	181.44792	g/mol	[1]	5.66E-04	atm	[8]	3.50E+01	mg/L	[4]
120-83-2	2,4-Dichlorophenol	163.00256	g/mol	[1]	8.82E-05	atm	[8]	4.50E+03	mg/L	[4]
121-14-2	2,4-Dinitrotoluene	182.13572	g/mol	[1]	1.93E-07	atm	[8]	2.70E+02	mg/L	[4]
122-39-4	N,N-Diphenylamine	169.22608	g/mol	[1]	1.06E-06	atm	[8]	5.30E+01	mg/L	[6]
122-66-7	1,2-Diphenylhydrazine	184.24076	g/mol	[1]	5.66E-07	atm	[8]	6.80E+01	mg/L	[4]
123-33-1	Maleic hydrazide	112.08804	g/mol	[1]	3.64E-09	atm	[10]	4.51E+03	mg/L	[6]
123-38-6	Propionaldehyde	58.08004	g/mol	[1]	4.17E-01	atm	[8]	3.06E+05	mg/L	[2]
123-72-8	Butanal	72.10692	g/mol	[1]	1.47E-01	atm	[4]	7.10E+04	mg/L	[2]
123-91-1	1,4-Dioxan	88.10632	g/mol	[1]	5.01E-02	atm	[8]	1.00E+06	mg/L	[4]
124-18-5	Decane	142.28468	g/mol	[1]	1.88E-03	atm	[9]	5.20E-02	mg/L	[7]
124-38-9	Carbon dioxide	44.0098	g/mol	[1]						
124-48-1	Chlorodibromo-methane	208.27964	g/mol	[1]	6.45E-03	atm	[8]	2.60E+03	mg/L	[4]
126-73-8	Tributyl phosphate	266.317742	g/mol	[1]	1.49E-06	atm	[8]	2.80E+02	mg/L	[6]
126-98-7	2-Methyl-2-propenenitrile	67.09044	g/mol	[1]	9.37E-02	atm	[8]	2.54E+04	mg/L	[4]
127-18-4	1,1,2,2-Tetrachloroethene	165.8328	g/mol	[1]	2.50E-02	atm	[8]	2.00E+02	mg/L	[4]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	220.35496	g/mol	[1]	6.79E-06	atm	[10]	6.00E-01	mg/L	[2]
129-00-0	Pyrene	202.2554	g/mol	[1]	6.05E-09	atm	[8]	1.40E+00	mg/L	[4]
131-11-3	Dimethyl Phthalate	194.187	g/mol	[1]	2.17E-06	atm	[8]	4.00E+03	mg/L	[4]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	266.25364	g/mol	[1]	5.51E-11	atm	[10]	1.50E+01	mg/L	[6]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
132-64-9	Dibenzofuran	168.19492	g/mol	[1]	3.26E-06	atm	[10]	3.10E+00	mg/L	[6]
133-06-2	Captan	300.59216	g/mol	[1]	1.18E-10	atm	[8]	5.10E+00	mg/L	[6]
1330-20-7	Xylenes (mixed isomers)	106.1674	g/mol	[1]	1.05E-02	atm	[7]	1.06E+02	mg/L	[6]
1336-36-3	Polychlorinated biphenyls	360.87996	g/mol	[2]	6.50E-07	atm	[8]	2.77E-01	mg/L	[6]
134-32-7	alpha-Naphthylamine	143.1882	g/mol	[1]	5.50E-06	atm	[4]	1.70E+03	mg/L	[2]
135-98-8	sec-Butylbenzene	134.22116	g/mol	[1]	2.30E-03	atm	[10]	1.76E+01	mg/L	[2]
13966-29-5	Uranium-234	234.040939	g/mol	[5]						
13967-48-1	Ruthenium-106	105.907326	g/mol	[5]						
13967-70-9	Cesium-134	133.904511	g/mol	[5]						
13968-55-3	Uranium-233	233.039627	g/mol	[5]						
13981-15-2	Curium-244	244.062744	g/mol	[5]						
13981-16-3	Plutonium-238	238.049561	g/mol	[5]						
13981-37-8	Nickel-63	62.9296722	g/mol	[1]						
13982-10-0	Plutonium-242	242.058731	g/mol	[5]						
13982-63-3	Radium-226	226.025406	g/mol	[5]						
13982-70-2	Uranium-236	236.045563	g/mol	[5]						
13994-20-2	Neptunium-237	237.048172	g/mol	[5]						
141-78-6	Acetic acid ethyl ester	88.10632	g/mol	[1]	1.23E-01	atm	[8]	8.00E+04	mg/L	[6]
14119-32-5	Plutonium-241	241.056839	g/mol	[5]						
14119-33-6	Plutonium-240	240.053802	g/mol	[5]						
14133-76-7	Technetium-99	98.9062576	g/mol	[5]						
14158-29-3	Uranium-232	232.03714	g/mol	[5]						
14234-35-6	Antimony-125	124.905251	g/mol	[5]						
14265-44-2	Phosphate	94.971362	g/mol	[1]						
14331-85-2	Protactinium-231	231.035873	g/mol	[5]						
14336-70-0	Nickel-59	58.9343529	g/mol	[5]						
14391-16-3	Europium-155	154.922882	g/mol	[5]						
145-73-3	Endothall	186.1644	g/mol	[1]	3.08E-07	atm	[10]	1.00E+05	mg/L	[6]
14596-10-2	Americium-241	241.056824	g/mol	[5]						
14683-23-9	Europium-152	151.921738	g/mol	[5]						

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
14762-75-5	Carbon-14	13.87973	g/mol	[5]						
14797-55-8	Nitrate	62.00494	g/mol	[1]	8.30E-02	atm	[7]			
14797-65-0	Nitrite	46.00554	g/mol	[1]						
14808-79-8	Sulfate	64.0648	g/mol	[1]	7.80E-08	atm	[7]	1.00E+06	mg/L	[6]
14952-40-0	Actinium-227	227.02774	g/mol	[5]						
14993-75-0	Americium-243	243.061371	g/mol	[5]						
15046-84-1	Iodine-129	128.904984	g/mol	[5]	3.07E-04	atm	[10]			
15117-48-3	Plutonium-239	239.052155	g/mol	[5]						
15117-96-1	Uranium-235	235.04393	g/mol	[5]						
15262-20-1	Radium-228	228.031067	g/mol	[5]						
15510-73-3	Curium-242	242.058823	g/mol	[5]						
15585-10-1	Europium-154	153.922974	g/mol	[5]						
15594-54-4	Thorium-229	229.031754	g/mol	[5]						
156-59-2	cis-1,2-Dichloroethene	96.94328	g/mol	[1]	2.63E-01	atm	[8]	3.50E+03	mg/L	[4]
156-60-5	1,2-trans-Dichloroethene	96.94328	g/mol	[1]	4.34E-01	atm	[8]	6.30E+03	mg/L	[4]
15715-94-3	Samarium-151	150.919922	g/mol	[5]						
15751-77-6	Zirconium-93	92.9064789	g/mol	[5]						
15757-87-6	Curium-243	243.061386	g/mol	[5]						
15758-45-9	Selenium-79	78.9185028	g/mol	[5]						
15832-50-5	Tin-126	125.907654	g/mol	[5]						
1634-04-4	Methyl tert-butyl ether	88.14968	g/mol	[1]	3.29E-01	atm	[8]	5.10E+04	mg/L	[6]
16887-00-6	Chloride	35.4527	g/mol	[1]	5.47E-11	atm	[11]	4.24E+04	mg/L	[9]
16984-48-8	Fluoride	18.9984032	g/mol	[1]						
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	321.97336	g/mol	[1]	1.97E-12	atm	[12]	1.93E-05	mg/L	[4]
189-55-9	Dibenzo[a,i]pyrene	302.37516	g/mol	[1]	3.29E-01	atm	[8]	5.54E-04	mg/L	[9]
189-64-0	Dibenzo[a,h]pyrene	302.37516	g/mol	[1]	8.43E-15	atm	[10]	3.50E-05	mg/L	[9]
191-24-2	Benzo(g,h,i)perylene	276.33728	g/mol	[1]	3.29E-01	atm	[8]	2.60E-04	mg/L	[6]
191-30-0	Dibenzo(a,l)pyrene	302.37516	g/mol	[1]	8.43E-15	atm	[10]	3.60E-04	mg/L	[9]
192-65-4	Dibenzo[a,e]pyrene	302.37516	g/mol	[1]	9.25E-14	atm	[10]	8.02E-05	mg/L	[9]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
192-97-2	Benzo(e)pyrene	252.31528	g/mol	[1]	7.50E-12	atm	[10]	6.30E-03	mg/L	[2]
193-39-5	Indeno(1,2,3-cd)pyrene	276.33728	g/mol	[1]	1.32E-13	atm	[8]	2.20E-05	mg/L	[4]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	390.86288	g/mol	[1]	6.45E-14	atm	[12]	4.40E-06	mg/L	[4]
205-82-3	Benzo[j]fluoranthene	252.31528	g/mol	[1]	3.45E-11	atm	[10]	2.50E-03	mg/L	[2]
205-99-2	Benzo(b)fluor-anthene	252.31528	g/mol	[1]	6.58E-10	atm	[8]	1.50E-03	mg/L	[4]
206-44-0	Fluoranthene	202.2554	g/mol	[1]	1.03E-08	atm	[8]	2.10E-01	mg/L	[4]
207-08-9	Benzo(k)fluor-anthene	252.31528	g/mol	[1]	2.63E-12	atm	[8]	8.00E-04	mg/L	[4]
208-96-8	Acenaphthylene	152.19552	g/mol	[1]	1.20E-06	atm	[8]	1.61E+01	mg/L	[6]
218-01-9	Chrysene	228.29328	g/mol	[1]	8.16E-12	atm	[8]	6.30E-03	mg/L	[4]
224-42-0	Dibenz[a,j]acridine	279.34096	g/mol	[1]	2.43E-12	atm	[10]	1.80E-02	mg/L	[9]
2245-38-7	2,3,5-Trimethyl-naphthalene	170.25416	g/mol	[1]	3.32E-06	atm	[9]	4.78E+00	mg/L	[7]
226-36-8	Dibenz[a,h]acridine	279.34096	g/mol	[1]	2.43E-12	atm	[10]	1.59E-01	mg/L	[2]
22967-92-6	Methyl mercury	215.62482	g/mol	[1]	1.12E-05	atm	[1]	1.00E+02	mg/L	[3]
23950-58-5	Pronamide	256.13088	g/mol	[1]	5.72E-10	atm	[10]	1.50E+01	mg/L	[4]
24959-67-9	Bromide	79.904	g/mol	[1]	1.04E-11	atm	[10]	3.80E+04	mg/L	[9]
27154-33-2	Trichlorofluoro-ethane	151.394383	g/mol	[1]	7.51E-02	atm	[16]	4.33E+02	mg/L	[10]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	326.4352	g/mol	[1]	1.18E-08	atm	[12]	1.34E-02	mg/L	[2]
319-84-6	alpha-BHC	290.82984	g/mol	[1]	5.92E-08	atm	[8]	2.00E+00	mg/L	[4]
319-85-7	beta-BHC	290.82984	g/mol	[1]	6.18E-10	atm	[8]	2.40E-01	mg/L	[4]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	291.99044	g/mol	[1]	2.16E-08	atm	[12]	5.69E-04	mg/L	[2]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	326.4352	g/mol	[1]	8.59E-09	atm	[12]	3.40E-03	mg/L	[2]
3268-87-9	Octachlorodibenzo (p)dioxin	459.7524	g/mol	[1]	1.09E-15	atm	[12]	7.40E-08	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	360.87996	g/mol	[1]	8.59E-09	atm	[12]	5.10E-04	mg/L	[2]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	425.30764	g/mol	[1]	7.37E-15	atm	[12]	2.40E-06	mg/L	[4]
3697-24-3	5-Methylchrysene	242.32016	g/mol	[1]	3.33E-10	atm	[10]	6.20E-02	mg/L	[2]
378253-40-8	Barium-137m	136.905823	g/mol	[5]						
378253-44-2	Cadmium-113m	112.904404	g/mol	[5]						
378782-82-2	Niobium-93m	92.9063797	g/mol	[5]						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	360.87996	g/mol	[1]	2.12E-09	atm	[12]	5.33E-03	mg/L	[2]
39001-02-0	Octachlorodibenzo-furan	443.753	g/mol	[1]	4.93E-15	atm	[12]	1.16E-06	mg/L	[4]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	390.86288	g/mol	[1]	5.00E-14	atm	[12]	4.42E-06	mg/L	[4]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	395.32472	g/mol	[1]	1.72E-11	atm	[13]	7.53E-04	mg/L	[2]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	356.41812	g/mol	[1]	5.79E-13	atm	[12]	1.18E-04	mg/L	[4]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	70.09104	g/mol	[1]	2.12E-09	atm	[10]	1.81E+05	mg/L	[2]
41851-50-7	Chlorocyclopenta-diene	100.5474	g/mol	[1]	2.12E-09	atm	[10]	9.70E+02	mg/L	[6]
460-19-5	Cyanogen (oxalonitrile)	52.03548	g/mol	[1]	5.66E+00	atm	[8]	1.05E+04	mg/L	[6]
4786-20-3	2-Butenenitrile	67.09044	g/mol	[1]	4.21E-02	atm	[9]	2.50E+04	mg/L	[7]
50-00-0	Formaldehyde	30.02628	g/mol	[1]	6.89E+00	atm	[8]	5.50E+05	mg/L	[4]
50-32-8	Benzo(a)pyrene	252.31528	g/mol	[1]	7.24E-12	atm	[8]	1.60E-03	mg/L	[4]
506-68-3	Cyanogen bromide (bromocyanide)	105.92174	g/mol	[1]	1.61E-01	atm	[10]	1.08E+05	mg/L	[9]
506-77-4	Cyanogen chloride	61.47044	g/mol	[1]	1.62E+00	atm	[8]	6.00E+04	mg/L	[6]
51-28-5	2,4-Dinitrophenol	184.10824	g/mol	[1]	6.71E-06	atm	[8]	2.79E+03	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
51-79-6	Ethyl carbamate (urethane)	89.09412	g/mol	[1]	3.45E-04	atm	[8]	4.80E+05	mg/L	[2]
510-15-6	Chlorobenzilate	325.19076	g/mol	[1]	2.89E-09	atm	[8]	1.30E+01	mg/L	[4]
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	305.97396	g/mol	[1]	1.97E-11	atm	[12]	4.19E-04	mg/L	[4]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	360.87996	g/mol	[1]	7.64E-10	atm	[12]	2.23E-03	mg/L	[2]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	168.10884	g/mol	[1]	5.99E-08	atm	[10]	5.00E+02	mg/L	[6]
53-70-3	Dibenz[a,h]-anthracene	278.35316	g/mol	[1]	1.32E-13	atm	[8]	2.50E-03	mg/L	[4]
532-27-4	2-Chloroacetophenone	154.59568	g/mol	[1]	7.11E-06	atm	[8]	1.64E+03	mg/L	[6]
534-52-1	4,6-Dinitro-o-cresol	198.13512	g/mol	[1]	1.39E-07	atm	[8]	1.98E+02	mg/L	[6]
5385-75-1	Dibenzo(a,e)fluor-anthene	302.37516	g/mol	[1]	9.64E-14	atm	[10]	4.25E-02	mg/L	[9]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	96.94328	g/mol	[1]	2.64E-01	atm	[8]	3.50E+03	mg/L	[6]
540-73-8	1,2-Dimethylhydrazine	60.099	g/mol	[1]	9.20E-02	atm	[8]	1.00E+06	mg/L	[6]
540-84-1	2,2,4-Trimethylpentane	114.23092	g/mol	[1]	6.49E-02	atm	[10]	2.44E+00	mg/L	[2]
541-73-1	1,3-Dichlorobenzene	147.00316	g/mol	[1]	2.83E-03	atm	[8]	1.34E+02	mg/L	[4]
542-75-6	1,3-Dichloropropene	110.97016	g/mol	[1]	4.47E-02	atm	[8]	2.80E+03	mg/L	[4]
542-88-1	Bis(chloromethyl) ether	114.95856	g/mol	[1]	3.87E-02	atm	[8]	2.20E+04	mg/L	[6]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	409.30824	g/mol	[1]	4.04E-13	atm	[12]	1.40E-06	mg/L	[4]
56-23-5	Carbon tetrachloride	153.8218	g/mol	[1]	1.58E-01	atm	[8]	7.90E+02	mg/L	[4]
56-49-5	3-Methylcholanthrene	268.35804	g/mol	[1]	2.63E-11	atm	[8]	2.90E-03	mg/L	[2]
56-55-3	Benzo(a)anthracene	228.29328	g/mol	[1]	1.45E-10	atm	[8]	9.40E-03	mg/L	[4]
57-12-5	Cyanide	26.01774	g/mol	[1]	1.82E-02	atm	[10]	9.54E+04	mg/L	[4]
57-24-9	Strychnine	334.41796	g/mol	[1]	1.24E-14	atm	[8]	1.60E+02	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
57-74-9	Chlordane	409.77924	g/mol	[1]	1.29E-08	atm	[8]	5.60E-02	mg/L	[4]
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	340.41872	g/mol	[1]	3.42E-12	atm	[12]	2.36E-04	mg/L	[4]
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	340.41872	g/mol	[1]	2.23E-12	atm	[12]	2.40E-04	mg/L	[4]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	374.86348	g/mol	[1]	2.89E-13	atm	[12]	1.77E-05	mg/L	[4]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	326.4352	g/mol	[1]	3.89E-10	atm	[13]	9.39E-03	mg/L	[10]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	390.86288	g/mol	[1]	4.73E-14	atm	[12]	4.40E-06	mg/L	[4]
58-89-9	gamma-BHC (Lindane)	290.82984	g/mol	[1]	2.07E-01	atm	[8]	8.00E+00	mg/L	[6]
58-90-2	2,3,4,6-Tetrachlorophenol	231.89208	g/mol	[1]	1.89E-06	atm	[8]	1.00E+02	mg/L	[4]
581-42-0	2,6-Dimethylnaphthalene	156.22728	g/mol	[1]	5.67E-03	atm	[9]	2.00E+00	mg/L	[7]
584-84-9	2,4-Toluene diisocyanate	158.15952	g/mol	[1]	2.07E-01	atm	[8]	3.76E+01	mg/L	[9]
589-38-8	3-Hexanone	100.16068	g/mol	[1]	1.83E-02	atm	[10]	1.47E+04	mg/L	[2]
59-50-7	4-Chloro-3-methylphenol	142.58468	g/mol	[1]	6.58E-05	atm	[10]	3.83E+03	mg/L	[4]
59-89-2	N-Nitrosomorpholine	116.1198	g/mol	[1]	4.74E-05	atm	[8]	1.00E+06	mg/L	[2]
591-50-4	Benzene, iodo-	204.01017	g/mol	[1]	1.39E-03	atm	[9]	3.40E+02	mg/L	[7]
591-78-6	2-Hexanone	100.16068	g/mol	[1]	1.53E-02	atm	[8]	1.75E+04	mg/L	[6]
593-60-2	Bromoethene (Vinyl bromide)	106.94982	g/mol	[1]	1.36E+00	atm	[8]	5.08E+03	mg/L	[6]
593-74-8	Dimethyl Mercury	230.65964	g/mol	[1]	8.19E-02	atm	[5]	1.00E+03	mg/L	[1]
60-11-7	Dimethyl aminoazobenzene	225.29332	g/mol	[1]	9.21E-11	atm	[8]	2.30E-01	mg/L	[2]
60-29-7	Ethyl ether	74.1228	g/mol	[1]	7.08E-01	atm	[8]	6.04E+04	mg/L	[6]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
60-35-5	Acetamide	59.06784	g/mol	[1]	5.26E-05	atm	[8]	2.25E+06	mg/L	[2]
602-87-9	5-Nitroacenaphthene	199.209	g/mol	[1]	3.49E-08	atm	[10]	9.10E-01	mg/L	[9]
606-20-2	2,6-Dinitrotoluene	182.13572	g/mol	[1]	7.46E-07	atm	[8]	1.82E+02	mg/L	[4]
608-93-5	Pentachlorobenzene	250.33744	g/mol	[1]	2.88E-06	atm	[8]	1.33E+00	mg/L	[4]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	374.86348	g/mol	[1]	2.63E-13	atm	[12]	1.30E-05	mg/L	[4]
61626-71-9	Dichloropentadiene	143.05568	g/mol	[1]	6.42E-03	atm	[15]	1.62E+02	mg/L	[10]
62-50-0	Ethyl methanesulfonate	124.16072	g/mol	[1]	2.71E-04	atm	[8]	6.30E+03	mg/L	[4]
62-53-3	Aniline	93.12832	g/mol	[1]	6.45E-04	atm	[14]	3.60E+04	mg/L	[4]
62-75-9	N-Nitroso-N,N-dimethylamine	74.08252	g/mol	[1]	3.55E-03	atm	[8]	1.00E+06	mg/L	[6]
621-64-7	N-Nitroso-di-n-propylamine	130.19004	g/mol	[1]	1.71E-04	atm	[8]	9.89E+03	mg/L	[4]
624-83-9	Methyl isocyanate	57.05196	g/mol	[1]	4.58E-01	atm	[4]	2.92E+04	mg/L	[9]
628-73-9	Hexanenitrile	97.16008	g/mol	[1]	3.75E-03	atm	[4]	2.48E+03	mg/L	[8]
630-08-0	Carbon monoxide	28.0104	g/mol	[1]	2.04E+06	atm	[11]	2.29E+03	mg/L	[9]
630-20-6	1,1,1,2-Tetrachloroethane	167.84868	g/mol	[1]	1.58E-02	atm	[8]	1.10E+03	mg/L	[4]
64-18-6	Formic acid (methanoic acid)	46.02568	g/mol	[1]	5.60E-02	atm	[8]	1.00E+06	mg/L	[4]
65-85-0	Benzoic acid	122.12344	g/mol	[1]	9.21E-07	atm	[10]	3.40E+03	mg/L	[4]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	326.4352	g/mol	[1]	1.16E-09	atm	[13]	9.39E-03	mg/L	[10]
67-56-1	Methyl alcohol	32.04216	g/mol	[1]	1.66E-01	atm	[8]	1.00E+06	mg/L	[4]
67-63-0	2-Propyl alcohol	60.09592	g/mol	[1]	3.55E-03	atm	[8]	1.00E+06	mg/L	[6]
67-64-1	2-Propanone (Acetone)	58.08004	g/mol	[1]	3.03E-01	atm	[8]	1.00E+06	mg/L	[4]
67-66-3	Chloroform	119.37704	g/mol	[1]	2.63E-01	atm	[8]	7.90E+03	mg/L	[4]
67-72-1	Hexachloroethane	236.7382	g/mol	[1]	2.76E-04	atm	[8]	5.00E+01	mg/L	[4]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzo-furan	409.30824	g/mol	[1]	4.61E-14	atm	[12]	1.35E-06	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	360.87996	g/mol	[1]	7.20E-11	atm	[13]	1.64E-03	mg/L	[10]
70-30-4	Hexachlorophene	406.90564	g/mol	[1]	1.97E-13	atm	[8]	1.40E+02	mg/L	[4]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	291.99044	g/mol	[1]	1.03E-09	atm	[13]	5.32E-02	mg/L	[10]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	374.86348	g/mol	[1]	3.16E-13	atm	[12]	8.25E-06	mg/L	[4]
71-36-3	n-Butyl alcohol	74.1228	g/mol	[1]	3.55E-03	atm	[8]	6.32E+04	mg/L	[6]
71-43-2	Benzene	78.11364	g/mol	[1]	1.25E-01	atm	[8]	1.80E+03	mg/L	[4]
71-55-6	1,1,1-Trichloroethane	133.40392	g/mol	[1]	1.58E-01	atm	[8]	1.30E+03	mg/L	[4]
72-43-5	Methoxychlor	345.652	g/mol	[1]	7.89E-10	atm	[8]	4.50E-02	mg/L	[4]
72-55-9	4,4-DDE	318.02832	g/mol	[1]	7.89E-09	atm	[8]	1.20E-01	mg/L	[4]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	374.86348	g/mol	[1]	3.68E-13	atm	[12]	1.30E-05	mg/L	[4]
74-83-9	Bromomethane	94.93882	g/mol	[1]	2.13E+00	atm	[8]	1.52E+04	mg/L	[4]
74-87-3	Chloromethane	50.48752	g/mol	[1]	5.66E+00	atm	[8]	5.33E+03	mg/L	[4]
74-88-4	Iodomethane	141.93929	g/mol	[1]	5.33E-01	atm	[8]	1.38E+04	mg/L	[2]
74-95-3	Methylene bromide	173.83488	g/mol	[1]	5.84E-02	atm	[8]	1.19E+04	mg/L	[4]
74-97-5	Bromochloro-methane	129.38358	g/mol	[1]	1.88E-01	atm	[10]	1.67E+04	mg/L	[6]
7429-90-5	Aluminum	26.981539	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7439-89-6	Iron	55.847	g/mol	[1]				0.00E+00	mg/L	[6]
7439-92-1	Lead	207.2	g/mol	[1]	3.97E-12	atm	[3]	9.58E+03	mg/L	[4]
7439-93-2	Lithium	6.941	g/mol	[1]				0.00E+00	mg/L	[6]
7439-95-4	Magnesium	24.305	g/mol	[1]				0.00E+00	mg/L	[6]
7439-96-5	Manganese	54.93805	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7439-97-6	Mercury	200.59	g/mol	[4]	2.63E-06	atm	[3]	6.00E-02	mg/L	[4]
7439-98-7	Molybdenum	95.94	g/mol	[6]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-02-0	Nickel	58.6934	g/mol	[1]	5.58E-12	atm	[3]	4.22E+05	mg/L	[4]
7440-16-6	Rhodium	102.9055	g/mol	[1]						
7440-22-4	Silver	107.8682	g/mol	[1]	5.58E-12	atm	[3]	7.05E+04	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
7440-23-5	Sodium	22.989768	g/mol	[1]				0.00E+00	mg/L	[6]
7440-24-6	Strontium (total)	87.62	g/mol	[6]	5.58E-12	atm	[11]	0.00E+00	mg/L	[6]
7440-25-7	Tantalum	180.9479	g/mol	[1]						
7440-28-0	Thallium	204.3833	g/mol	[1]	5.58E-12	atm	[3]	2.65E+04	mg/L	[4]
7440-29-1	Thorium-232	232	g/mol	[7]	-	-	-	0.00E+00	mg/L	[6]
7440-31-5	Tin	118.71	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-33-7	Tungsten	183.85	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-36-0	Antimony	121.757	g/mol	[1]	9.00E-01	atm	[3]	2.30E+04	mg/L	[4]
7440-38-2	Arsenic	39.948	g/mol	[1]	3.30E-12	atm	[3]	3.47E+04	mg/L	[4]
7440-39-3	Barium	137.327	g/mol	[1]	5.58E-12	atm	[3]	5.48E+04	mg/L	[4]
7440-41-7	Beryllium	9.012182	g/mol	[1]	5.58E-12	atm	[3]	1.49E+05	mg/L	[4]
7440-43-9	Cadmium	112.411	g/mol	[1]	5.45E-12	atm	[3]	1.23E+05	mg/L	[4]
7440-47-3	Chromium	51.9961	g/mol	[1]	5.58E-12	atm	[3]	8.67E+04	mg/L	[4]
7440-48-4	Cobalt	58.9332	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-50-8	Copper	63.546	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-61-1	Uranium	238.0289	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7440-61-1R	Uranium-238	238.050781	g/mol	[5]						
7440-62-2	Vanadium	50.9415	g/mol	[1]				0.00E+00	mg/L	[6]
7440-65-5	Yttrium	88.90585	g/mol	[1]						
7440-66-6	Zinc	65.39	g/mol	[1]	5.09E-12	atm	[3]	3.44E+05	mg/L	[4]
7440-67-7	Zirconium	91.224	g/mol	[1]	0.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7446-09-5	Sulfur dioxide	64.0648	g/mol	[1]	3.95E+00	atm	[11]	1.07E+05	mg/L	[2]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	326.4352	g/mol	[1]	5.50E-10	atm	[13]	1.60E-02	mg/L	[2]
7487-94-7	Mercury (Hg^{+2})	271.52	g/mol	[4]	1.20E-04	atm	[3]	6.90E+04	mg/L	[4]
75-00-3	Chloroethane	64.5144	g/mol	[1]	1.32E+00	atm	[8]	5.70E+03	mg/L	[4]
75-01-4	1-Chloroethene	62.49852	g/mol	[1]	3.95E+00	atm	[8]	8.80E+03	mg/L	[4]
75-02-5	Fluoroethene (Vinyl fluoride)	46.0442232	g/mol	[1]	1.32E+01	atm	[4]	1.29E+04	mg/L	[8]
75-05-8	Acetonitrile	41.05256	g/mol	[1]	1.20E-01	atm	[8]	7.40E+04	mg/L	[4]
75-07-0	Acetaldehyde	44.05316	g/mol	[1]	1.19E+00	atm	[8]	1.00E+06	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
75-09-2	Dichloromethane (Methylene Chloride)	84.93228	g/mol	[1]	5.66E-01	atm	[8]	1.30E+04	mg/L	[4]
75-15-0	Carbon disulfide	76.143	g/mol	[1]	4.74E-01	atm	[8]	1.20E+03	mg/L	[4]
75-21-8	Ethylene oxide (Oxirane)	44.05316	g/mol	[1]	1.73E+00	atm	[8]	1.00E+06	mg/L	[4]
75-25-2	Bromoform	252.73094	g/mol	[1]	7.25E-03	atm	[8]	3.10E+03	mg/L	[4]
75-27-4	Bromodichloro-methane	163.82834	g/mol	[1]	6.58E-02	atm	[8]	6.70E+03	mg/L	[4]
75-29-6	2-Chloropropane	78.54128	g/mol	[1]	6.78E-01	atm	[10]	3.10E+03	mg/L	[6]
75-34-3	1,1-Dichloroethane	98.95916	g/mol	[1]	3.03E-01	atm	[8]	5.10E+03	mg/L	[4]
75-35-4	1,1-Dichloroethene	96.94328	g/mol	[1]	7.89E-01	atm	[8]	2.30E+03	mg/L	[4]
75-44-5	Phosgene (hydrogen phosphide)	98.9158	g/mol	[1]	1.87E+00	atm	[8]	5.94E+03	mg/L	[9]
75-45-6	Chlorodifluoro-methane	86.4684464	g/mol	[1]	9.54E+00	atm	[10]	2.77E+03	mg/L	[4]
75-50-3	Trimethylamine	59.1112	g/mol	[1]	2.12E+00	atm	[8]	8.90E+05	mg/L	[2]
75-69-4	Trichlorofluoro-methane	137.367503	g/mol	[1]	1.05E+00	atm	[14]	1.10E+03	mg/L	[4]
75-71-8	Dichlorodifluoro-methane	120.913206	g/mol	[1]	6.38E+00	atm	[8]	2.80E+02	mg/L	[4]
76-01-7	Pentachloroethane	202.29344	g/mol	[1]	4.61E-03	atm	[8]	4.80E+02	mg/L	[2]
76-13-1	1,2,2-Trichlorotrifluoro-ethane	187.37531	g/mol	[1]	4.78E-01	atm	[8]	1.70E+02	mg/L	[6]
76-44-8	Heptachlor	373.3186	g/mol	[1]	5.26E-07	atm	[8]	1.80E-01	mg/L	[4]
764-41-0	1,4-Dichloro-2-butene	124.99704	g/mol	[1]	3.95E-03	atm	[10]	5.80E+02	mg/L	[6]
7647-01-0	Hydrogen chloride	36.46064	g/mol	[1]	4.60E+01	atm	[8]	7.20E+05	mg/L	[4]
765-34-4	Glycidylaldehyde	72.06356	g/mol	[1]	5.96E-02	atm	[8]	1.00E+06	mg/L	[6]
7664-39-3	Hydrogen Fluoride	20.0063432	g/mol	[1]	1.21E+00	atm	[8]	9.22E+02	mg/L	[9]
7664-41-7	Ammonia/ Ammonium	17.03056	g/mol	[1]	9.88E+00	atm	[8]	4.82E+05	mg/L	[6]
77-47-4	Hexachlorocyclo-pentadiene	272.7712	g/mol	[1]	7.89E-05	atm	[8]	1.80E+00	mg/L	[4]
77-78-1	Dimethyl sulfate	126.13324	g/mol	[1]	8.91E-04	atm	[8]	2.80E+04	mg/L	[6]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
7704-34-9	Total Sulfur (thermodynamically stable)	32.066	g/mol	[1]						
7723-14-0	Phosphorus	30.973762	g/mol	[1]	3.95E-05	atm	[7]	0.00E+00	mg/L	[6]
7782-41-4	Fluorine gas (F_2)	37.9968064	g/mol	[1]	1.00E+00	atm	[7]	0.00E+00	mg/L	[6]
7782-49-2	Selenium	78.96	g/mol	[1]	1.87E-13	atm	[3]	2.06E+03	mg/L	[4]
7782-50-5	Chlorine	70.9054	g/mol	[1]	8.91E-04	atm	[8]	6.30E+03	mg/L	[4]
78-83-1	2-Methylpropyl alcohol	74.1228	g/mol	[1]	8.91E-04	atm	[8]	8.50E+04	mg/L	[6]
78-87-5	1,2-Dichloropropane	112.98604	g/mol	[1]	6.84E-02	atm	[8]	2.80E+03	mg/L	[4]
78-93-3	2-Butanone	72.10692	g/mol	[1]	1.25E-01	atm	[8]	2.20E+05	mg/L	[4]
79-00-5	1,1,2-Trichloroethane	133.40392	g/mol	[1]	3.03E-02	atm	[8]	4.40E+03	mg/L	[4]
79-01-6	1,1,2-Trichloroethylene	131.38804	g/mol	[1]	9.61E-02	atm	[8]	1.50E+03	mg/L	[4]
79-10-7	2-Propenoic acid	72.06356	g/mol	[1]	5.22E-03	atm	[8]	1.00E+06	mg/L	[6]
79-34-5	1,1,2,2-Tetrachloroethane	167.84868	g/mol	[1]	6.05E-03	atm	[8]	3.00E+03	mg/L	[4]
79-46-9	2-Nitropropane	89.09412	g/mol	[1]	2.26E-02	atm	[7]	1.70E+04	mg/L	[6]
80-62-6	Methyl methacrylate	100.11732	g/mol	[1]	5.07E-02	atm	[8]	1.50E+04	mg/L	[6]
82-68-8	Pentachloronitrobenzene (PCNB)	295.33504	g/mol	[1]	1.49E-07	atm	[8]	5.50E-01	mg/L	[4]
822-06-0	Hexamethylene-1,5-diisocyanate	168.19556	g/mol	[1]	3.95E-05	atm	[8]	1.17E+02	mg/L	[6]
823-40-5	Toluene-2,6-diamine	122.16988	g/mol	[1]	3.24E-06	atm	[8]	7.25E+04	mg/L	[6]
83-32-9	Acenaphthene	154.2114	g/mol	[1]	3.29E-06	atm	[8]	3.60E+00	mg/L	[4]
832-69-9	1-Methylphenanthrene	192.26028	g/mol	[1]	1.97E-08	atm	[9]	2.69E-01	mg/L	[7]
84-66-2	Diethyl phthalate	222.24076	g/mol	[1]	2.11E-06	atm	[8]	1.10E+03	mg/L	[4]
84-74-2	Di-n-butylphthalate	278.34828	g/mol	[1]	9.61E-08	atm	[8]	1.10E+01	mg/L	[4]
85-01-8	Phenanthrene	178.2334	g/mol	[1]	1.45E-07	atm	[8]	1.10E+00	mg/L	[4]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	148.11796	g/mol	[1]	6.80E-07	atm	[8]	6.20E+03	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
85-68-7	Butylbenzylphthalate	312.3654	g/mol	[1]	1.09E-08	atm	[8]	2.70E+00	mg/L	[4]
86-73-7	Fluorene	166.2224	g/mol	[1]	8.29E-07	atm	[8]	2.00E+00	mg/L	[4]
87-61-6	1,2,3-Trichlorobenzene	181.44792	g/mol	[1]	2.76E-04	atm	[8]	1.80E+01	mg/L	[4]
87-68-3	Hexachlorobutadiene	260.7602	g/mol	[1]	2.89E-04	atm	[8]	3.20E+00	mg/L	[4]
87-86-5	Pentachlorophenol	266.33684	g/mol	[1]	4.21E-08	atm	[8]	2.00E+03	mg/L	[4]
88-06-2	2,4,6-Trichlorophenol	197.44732	g/mol	[1]	3.16E-05	atm	[8]	8.00E+02	mg/L	[4]
88-74-4	o-Nitroaniline (2-nitroaniline)	138.12592	g/mol	[1]	1.16E-06	atm	[8]	1.47E+03	mg/L	[4]
88-75-5	2-Nitrophenol	139.11064	g/mol	[1]	1.49E-04	atm	[8]	2.19E+03	mg/L	[4]
90-04-0	o-Anisidine	123.1546	g/mol	[1]	1.05E-04	atm	[8]	1.40E+04	mg/L	[9]
90-12-0	1-Methylnaphthalene	142.2004	g/mol	[1]	8.82E-05	atm	[7]	2.50E+01	mg/L	[6]
91-20-3	Naphthalene	128.17352	g/mol	[1]	1.12E-04	atm	[8]	3.10E+01	mg/L	[4]
91-22-5	Quinoline	129.16132	g/mol	[1]	7.89E-05	atm	[8]	6.11E+03	mg/L	[6]
91-57-6	2-Methylnaphthalene	142.2004	g/mol	[1]	7.24E-05	atm	[8]	2.46E+01	mg/L	[6]
91-58-7	2-Chloronaphthalene	162.61828	g/mol	[1]	1.05E-05	atm	[8]	1.17E+01	mg/L	[4]
91-94-1	3,3'-Dichlorobenzidine	253.13028	g/mol	[1]	4.88E-11	atm	[8]	3.10E+00	mg/L	[4]
92-52-4	1,1`-Biphenyl	154.2114	g/mol	[1]	1.18E-05	atm	[8]	6.94E+00	mg/L	[6]
924-16-3	N-Nitroso-di-n-Buetylamine	158.2438	g/mol	[1]	3.95E-05	atm	[8]	1.27E+03	mg/L	[4]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	162.1882	g/mol	[1]	9.29E-05	atm	[8]	8.11E+02	mg/L	[4]
94-75-7	2,4-D	221.03924	g/mol	[1]	1.09E-07	atm	[8]	6.77E+02	mg/L	[6]
95-48-7	o-Cresol	108.13992	g/mol	[1]	3.93E-04	atm	[8]	2.60E+04	mg/L	[4]
95-49-8	o-Chlorotoluene	126.58528	g/mol	[1]	4.51E-03	atm	[8]	3.74E+02	mg/L	[6]
95-50-1	1,2-Dichlorobenzene	147.00316	g/mol	[1]	1.79E-03	atm	[8]	1.56E+02	mg/L	[4]
95-53-4	o-Toluidine	107.1552	g/mol	[1]	4.21E-04	atm	[8]	1.66E+04	mg/L	[4]
95-57-8	2-Chlorophenol	128.5578	g/mol	[1]	3.08E-03	atm	[8]	2.20E+04	mg/L	[4]

Table 2-1 Molar Weight, Vapor Pressure and Solubility

CAS Registry Number	Analyte Name	Molecular Weight	Units for Molecular Weight	Reference	Vapor Pressure	Units for Vapor Pressure	Reference	Solubility	Units for Solubility	Reference
95-63-6	1,2,4-Trimethyl benzene	120.19428	g/mol	[1]	2.76E-03	atm	[8]	5.70E+01	mg/L	[6]
95-94-3	1,2,4,5-Tetrachlorobenzene	215.89268	g/mol	[1]	7.11E-06	atm	[8]	5.90E-01	mg/L	[4]
95-95-4	2,4,5-Trichlorophenol	197.44732	g/mol	[1]	2.63E-05	atm	[8]	1.20E+03	mg/L	[4]
96-12-8	1,2-Dibromo-3-chloropropane	236.3334	g/mol	[1]	7.63E-04	atm	[8]	1.20E+03	mg/L	[4]
96-18-4	1,2,3-Trichloropropane	147.4308	g/mol	[1]	4.87E-03	atm	[8]	1.80E+03	mg/L	[4]
96-45-7	Ethylene thiourea	102.16012	g/mol	[1]	2.66E-09	atm	[8]	2.00E+04	mg/L	[6]
97-63-2	Ethyl methacrylate	114.1442	g/mol	[1]	2.71E-02	atm	[8]	3.67E+03	mg/L	[4]
98-01-1	Furfural	96.08556	g/mol	[1]	2.91E-03	atm	[8]	7.70E+04	mg/L	[6]
98-06-6	tert-Butyl benzene	134.22116	g/mol	[1]	2.89E-03	atm	[10]	2.95E+01	mg/L	[2]
98-07-7	Benzotrichloride	195.4748	g/mol	[1]	5.45E-04	atm	[8]	2.17E+01	mg/L	[6]
98-82-8	Cumene	120.19428	g/mol	[1]	5.92E-03	atm	[8]	6.10E+01	mg/L	[4]
98-83-9	Methyl styrene (mixed isomers)	118.1784	g/mol	[1]	2.50E-03	atm	[8]	8.90E+01	mg/L	[6]
98-86-2	Acetophenone	120.15092	g/mol	[1]	5.22E-04	atm	[8]	6.13E+03	mg/L	[4]
98-95-3	Nitrobenzene	123.11124	g/mol	[1]	3.22E-04	atm	[8]	2.09E+03	mg/L	[4]
99-35-4	1,3,5-Trinitrobenzene	213.10644	g/mol	[1]	8.42E-09	atm	[8]	2.80E+02	mg/L	[4]
99-65-0	1,3-Dinitrobenzene	168.10884	g/mol	[1]	1.18E-06	atm	[8]	8.60E+02	mg/L	[4]
99-87-6	p-Cymene	134.22116	g/mol	[1]	1.92E-03	atm	[8]	2.34E+01	mg/L	[2]

Reference	Reference (source) for Molecular Weight
[1]	ChemicaLogic, Molecular Weight Calculator, Copyright © 1996 ChemicaLogic Corporation
[2]	ChemicaLogic, Molecular Weight Calculator, Copyright © 1996 ChemicaLogic Corporation (based on $C_{12}H_4Cl_6$)
[3]	ChemicaLogic, Molecular Weight Calculator, Copyright © 1996 ChemicaLogic Corporation (based on H_2O)
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	LANL. 2002. Map of the Nuclides, Los Alamos National Laboratory, University of California, Los Alamos, NM (http://t2.lanl.gov/data/map.html). Accessed April 2007.

Reference	Reference (source) for Molecular Weight
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	U.S. Department of Energy, Subcommittee on Consequence Assessment and Protective Actions (SCAPA) Temporary Emergency Exposure Limits, Table 1: Physical Constants for AEGL, ERPG and TEEL Chemicals, Revision 21 (http://www.eh.doe.gov/chem_safety//teel.html) Accessed July 2006.

Reference	Reference (source) for Vapor Pressure
[1]	EPA. 2001. *Water Quality Criterion for the Protection of Human Health: Methylmercury [Final]*, EPA-823-R-01-001, Office of Science and Technology, Office of Water, U.S. Environmental Protection Agency Washington, DC, January 2001. (units converted from mm-Hg to atm)
[2]	EPA. 2007. *Toxicological Review of Tetrahydrofuran,* External Peer Review Draft, NCEA-S-1620. US Environmental Protection Agency, Washington, DC.
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	EPA. 2000. EPI Suite v.3.12, MPBPWIN: Appendix D Vapor Pressure Test Datasets 1 & 2 , Office of Polution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm). (converted from mm-Hg to atm)
[5]	ESFA. 2008. Opinion of the Scientific Panel on Contaminants in the Food chain on a Request from the European Commission on Mercury as Undesirable Substance in Feed, *The EFSA Journal* (2008) 654, 1-74., European Food Safety Authority, February 2008. (va (units converted from mm-Hg to atm)
[6]	NEELY,WB & BLAU,GE (1985)
[7]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[8]	Syracuse Research Corporation (SRC). CHEMFATE Database. Syracuse, NY (http://www.syrres.com/esc/chemfate.htm). Accessed December 2005 (refer to CCN 129507).
[9]	Syracuse Research Corporation (SRC). Interactive PhysProp Database Demo. SRC. Syracuse, NY. (http://www.syrres.com/what-we-do/databaseforms.aspx?id=386). Accessed February 2011. (units converted from mm-Hg to atm)
[10]	Syracuse Research Corporation (SRC). PHYSPROP Database. Syracuse, NY (http://www.syrres.com/esc/physdemo.htm). Accessed December 2005 (refer to CCN 129507).
[11]	Syracuse Research Corporation (SRC). PHYSPROP Database. Syracuse, NY (http://www.syrres.com/esc/physdemo.htm). Accessed September 2006.
[12]	U. S. EPA. 2003. *Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds*. NAS Review Draft. Office of Research and Development. Washington, D.C. EPA/600/P-00/001 Cb. December 2003 (refer to CCN 129507).
[13]	U. S. EPA. 2003. *Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds.* NAS Review Draft. Office of Research and Development. Washington, D.C. EPA/600/P-00/001 Cb. December 2003. (refer to CCN 129507)
[14]	U. S. EPA. 2004. *Superfund Chemical Data Matrix (SCDM)*. OERR. Washington, D.C. January 2004 (refer to CCN 129507).

Reference	Reference (source) for Vapor Pressure
[15]	US EPA. 2006. *Estimation Programs Interface Suite for Microsoft Windows, v3.20 (MPBPWIN v1.42).* United States Environmental Protection Agency, Washington, DC, USA. (available at http://www.epa.gov/oppt/exposure/pubs/episuite.htm) (units converted from mm-Hg to atm)
[16]	Yaws, C.L. 1999. *Chemical Properties Handbook,* Chapter 7 Table: "Vapor Pressure: Organic Compounds," McGraw-Hill (http://www.knovel.com/knovel2) (refer to CCN 129507).

Reference	Reference (source) for Solubility
[1]	Committee on the Toxicological Effects of Methylmercury, Board on Environmental Studies and Toxicology, Commission on Life Sciences, and National Research Council. 2000. Toxicological Effects of Methylmercury, National Academy Press, Washington, DC
[2]	EPA. 2000. *Estimation Programs Interface (EPI) Suite v3.12, WATERNT: Experimental Water Solubility Values in Database [EXPWSOL.DB],* Office of Polution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm).
[3]	EPA. 2001. *Water Quality Criterion for the Protection of Human Health: Methylmercury [Final*], EPA-823-R-01-001, Office of Science and Technology, Office of Water, U.S. Environmental Protection Agency Washington, DC, January 2001.
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Syracuse Research Corporation (SRC). Interactive PhysProp Database Demo. SRC. Syracuse, NY. (http://www.syrres.com/what-we-do/databaseforms.aspx?id=386). Accessed May 2011.
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	Syracuse Research Corporation (SRC). Interactive PhysProp Database Demo. SRC. Syracuse, NY. (http://www.syrres.com/what-we-do/databaseforms.aspx?id=386). Accessed February 2011.
[8]	Syracuse Research Corporation (SRC). PHYSPROP Database. SRC. Syracuse, NY. (http://www.syrres.com/esc/physdemo.htm). Accessed July 2008.
[9]	Syracuse Research Corporation (SRC). PHYSPROP Database. Syracuse, NY (http://www.syrres.com/esc/physdemo.htm). Accessed September 2006.
[10]	US EPA. 2006. *Estimation Programs Interface Suite for Microsoft Windows, v3.20 (WSKOW v1.41).* United States Environmental Protection Agency, Washington, DC, USA. (available at http://www.epa.gov/oppt/exposure/pubs/episuite.htm)

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
100-02-7	p-Nitrophenol	0.999	unitless	[2]	4.15E-10	atm·m^3/mol	[3]
100-21-0	Phthalic acid	1	unitless	[2]	1.59E-11	atm·m^3/mol	[7]
100-25-4	1,4-Dinitrobenzene	0.999	unitless	[2]	1.51E-05	atm·m^3/mol	[7]
100-40-3	4-Ethenylcyclohexene	1	unitless	[2]	4.48E-02	atm·m^3/mol	[4]
100-41-4	Ethyl benzene	1	unitless	[2]	7.90E-03	atm·m^3/mol	[3]
100-42-5	Styrene	1	unitless	[2]	2.70E-03	atm·m^3/mol	[3]
100-44-7	Benzyl chloride	1	unitless	[2]	4.15E-04	atm·m^3/mol	[3]
100-47-0	Benzonitrile	1	unitless	[6]	5.21E-05	atm·m^3/mol	[3]
100-51-6	Benzyl alcohol	1	unitless	[2]	3.37E-07	atm·m^3/mol	[3]
100-52-7	Benzaldehyde	1	unitless	[2]	2.67E-05	atm·m^3/mol	[3]
10028-15-6	Ozone	0.05	unitless	[4]	2.03E-15	atm·m^3/mol	[1]
10028-17-8	Tritium	1	unitless	[2]			
10045-97-3	Cesium-137	0	unitless	[2]			
10061-01-5	cis-1,3-Dichloropropene	1	unitless	[2]	2.71E-03	atm·m^3/mol	[4]
10061-02-6	trans-1,3-Dichloropropene	1	unitless	[2]	8.71E-04	atm·m^3/mol	[4]
10098-91-6	Yttrium-90	0	unitless	[2]			
10098-97-2	Strontium-90	0	unitless	[2]			
101-55-3	4-Bromophenylphenyl ether	1	unitless	[2]	1.17E-04	atm·m^3/mol	[3]
101-77-9	4,4-Methylenedianiline	1	unitless	[2]	6.46E-10	atm·m^3/mol	[7]
10102-44-0	Nitrogen dioxide	1	unitless	[2]			
10198-40-0	Cobalt-60	0	unitless	[2]			
103-33-3	Azobenzene	1	unitless	[2]	5.52E-04	atm·m^3/mol	[7]
103-65-1	n-Propyl benzene (Isocumene)	1	unitless	[2]	1.05E-02	atm·m^3/mol	[4]
104-51-8	n-Butylbenzene	1	unitless	[2]	1.59E-02	atm·m^3/mol	[4]
104-76-7	2-Ethyl-1-hexanol	1	unitless	[2]	2.65E-05	atm·m^3/mol	[4]
105-67-9	2,4-Dimethylphenol	1	unitless	[2]	2.00E-06	atm·m^3/mol	[3]
10595-95-6	n-Nitrosomethylethylamine	1	unitless	[2]	1.74E-05	atm·m^3/mol	[7]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	1	unitless	[2]	4.38E-03	atm·m^3/mol	[4]
106-44-5	p-Cresol (4-methyl phenol)	1	unitless	[2]	7.90E-07	atm·m^3/mol	[3]
106-46-7	1,4-Dichlorobenzene	1	unitless	[2]	2.40E-03	atm·m^3/mol	[3]
106-47-8	p-Chloroaniline	1	unitless	[2]	1.16E-06	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
106-49-0	p-Toluidine	1	unitless	[2]	8.26E-05	atm·m^3/mol	[7]
106-51-4	Quinone	1	unitless	[2]	4.79E-04	atm·m^3/mol	[4]
106-88-7	1,2-Epoxybutane	1	unitless	[2]	7.36E-03	atm·m^3/mol	[7]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1	unitless	[2]	3.04E-05	atm·m^3/mol	[3]
106-93-4	Ethylene dibromide	1	unitless	[2]	7.40E-04	atm·m^3/mol	[3]
106-99-0	1,3-Butadiene	1	unitless	[2]	3.01E+00	atm·m^3/mol	[7]
107-02-8	Acrolein	1	unitless	[2]	1.20E-04	atm·m^3/mol	[3]
107-05-1	3-Chloropropene	1	unitless	[2]	4.50E-01	atm·m^3/mol	[7]
107-06-2	1,2-Dichloroethane	1	unitless	[2]	9.80E-04	atm·m^3/mol	[3]
107-12-0	Propionitrile	1	unitless	[2]	3.70E-05	atm·m^3/mol	[4]
107-13-1	Acrylonitrile	1	unitless	[2]	1.03E-04	atm·m^3/mol	[3]
107-19-7	Propargyl alcohol	1	unitless	[2]	4.70E-05	atm·m^3/mol	[7]
107-21-1	Ethylene glycol (1,2-ethanediol)	1	unitless	[2]	2.45E-06	atm·m^3/mol	[7]
107-98-2	Propylene glycol monomethyl ether	1	unitless	[2]	3.76E-05	atm·m^3/mol	[7]
108-05-4	Acetic acid vinyl ester	1	unitless	[2]	5.10E-04	atm·m^3/mol	[3]
108-10-1	4-Methyl-2-pentanone	1	unitless	[2]	1.40E-04	atm·m^3/mol	[3]
108-39-4	m-Cresol	1	unitless	[2]	8.65E-07	atm·m^3/mol	[3]
108-60-1	Bis(2-chloroisopropyl)ether	1	unitless	[2]	4.62E-03	atm·m^3/mol	[7]
108-67-8	1,3,5-Trimethylbenzene	1	unitless	[2]	8.77E-03	atm·m^3/mol	[3]
108-86-1	Bromobenzene (Phenyl bromide)	1	unitless	[2]	1.10E-01	atm·m^3/mol	[7]
108-87-2	Methylcyclohexane	1	unitless	[2]	1.76E+01	atm·m^3/mol	[7]
108-88-3	Toluene	1	unitless	[2]	6.60E-03	atm·m^3/mol	[3]
108-90-7	Chlorobenzene	1	unitless	[2]	3.70E-03	atm·m^3/mol	[3]
108-94-1	Cyclohexanone	1	unitless	[2]	3.68E-04	atm·m^3/mol	[7]
108-95-2	Phenol	1	unitless	[2]	4.00E-07	atm·m^3/mol	[3]
109-74-0	n-Butanenitrile	1	unitless	[2]	5.23E-05	atm·m^3/mol	[4]
109-75-1	3-Butenenitrile	1	unitless	[3]	4.01E-05	atm·m^3/mol	[8]
109-77-3	Malononitrile	1	unitless	[2]	5.19E-07	atm·m^3/mol	[7]
109-86-4	2-Methoxyethanol	1	unitless	[2]	1.35E-05	atm·m^3/mol	[7]
109-99-9	Tetrahydrofuran	1	unitless	[2]	7.05E-05	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
110-00-9	Furan	1	unitless	[3]	2.21E-01	atm·m^3/mol	[7]
110-54-3	n-Hexane	1	unitless	[2]	7.36E+01	atm·m^3/mol	[7]
110-59-8	Pentanenitrile	1	unitless	[2]	7.15E-05	atm·m^3/mol	[10]
110-80-5	2-Ethoxyethanol	1	unitless	[2]	1.92E-05	atm·m^3/mol	[7]
110-82-7	Cyclohexane	1	unitless	[2]	1.50E-01	atm·m^3/mol	[4]
110-83-8	Cyclohexene	1	unitless	[2]	4.55E-02	atm·m^3/mol	[4]
110-86-1	Pyridine	1	unitless	[2]	8.88E-06	atm·m^3/mol	[3]
111-15-9	Ethylene glycol monoethyl ether acetate	1	unitless	[2]	1.31E-04	atm·m^3/mol	[7]
111-44-4	Bis(2-chloroethyl)ether	1	unitless	[2]	1.80E-05	atm·m^3/mol	[3]
111-65-9	n-Octane	1	unitless	[2]	3.21E+00	atm·m^3/mol	[4]
111-76-2	2-Butoxyethanol	1	unitless	[2]	6.54E-05	atm·m^3/mol	[7]
111-84-2	n-Nonane	1	unitless	[2]	3.40E+00	atm·m^3/mol	[4]
111-91-1	Bis(2-chloroethoxy)methane	0.997	unitless	[2]	6.91E-06	atm·m^3/mol	[7]
112-30-1	1-Decanol	1	unitless	[3]	3.20E-05	atm·m^3/mol	[8]
112-31-2	Decanal	1	unitless	[3]	1.80E-03	atm·m^3/mol	[8]
112-40-3	Dodecane	1	unitless	[3]	8.18E+00	atm·m^3/mol	[9]
1120-21-4	Undecane	1	unitless	[3]	1.93E+00	atm·m^3/mol	[9]
1120-71-4	1,3-Propane sultone	1	unitless	[2]	2.36E-06	atm·m^3/mol	[11]
117-81-7	Bis(2-ethylhexyl)phthalate	0.13	unitless	[2]	1.00E-07	atm·m^3/mol	[3]
117-84-0	Di-n-octylphthalate	0.852	unitless	[2]	6.70E-05	atm·m^3/mol	[3]
118-74-1	Hexachlorobenzene	1	unitless	[2]	1.30E-03	atm·m^3/mol	[3]
119-90-4	3,3'-Dimethoxybenzidine	0.86	unitless	[2]	1.81E-13	atm·m^3/mol	[3]
120-12-7	Anthracene	0.998	unitless	[2]	6.50E-05	atm·m^3/mol	[3]
120-82-1	1,2,4-Trichlorobenzene	1	unitless	[2]	1.40E-03	atm·m^3/mol	[3]
120-83-2	2,4-Dichlorophenol	1	unitless	[2]	3.20E-06	atm·m^3/mol	[3]
121-14-2	2,4-Dinitrotoluene	0.999	unitless	[2]	9.26E-08	atm·m^3/mol	[3]
122-39-4	N,N-Diphenylamine	1	unitless	[2]	1.39E-04	atm·m^3/mol	[7]
122-66-7	1,2-Diphenylhydrazine	1	unitless	[2]	1.50E-06	atm·m^3/mol	[3]
123-33-1	Maleic hydrazide	1	unitless	[2]	1.08E-09	atm·m^3/mol	[7]
123-38-6	Propionaldehyde	1	unitless	[2]	7.34E-05	atm·m^3/mol	[4]
123-72-8	Butanal	1	unitless	[2]	1.15E-04	atm·m^3/mol	[4]
123-91-1	1,4-Dioxan	1	unitless	[2]	4.80E-06	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
124-18-5	Decane	1	unitless	[3]	5.15E+00	atm·m^3/mol	[9]
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	1	unitless	[2]	7.83E-04	atm·m^3/mol	[3]
126-73-8	Tributyl phosphate	0.996	unitless	[2]	6.13E-06	atm·m^3/mol	[7]
126-98-7	2-Methyl-2-propenenitrile	1	unitless	[2]	2.47E-04	atm·m^3/mol	[3]
127-18-4	1,1,2,2-Tetrachloroethene	1	unitless	[2]	1.80E-02	atm·m^3/mol	[3]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1	unitless	[2]	4.12E-06	atm·m^3/mol	[10]
129-00-0	Pyrene	0.994	unitless	[2]	1.10E-05	atm·m^3/mol	[3]
131-11-3	Dimethyl Phthalate	1	unitless	[2]	1.05E-07	atm·m^3/mol	[3]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	0.375	unitless	[2]	1.38E-09	atm·m^3/mol	[7]
132-64-9	Dibenzofuran	0.999	unitless	[2]	8.71E-03	atm·m^3/mol	[7]
133-06-2	Captan	1	unitless	[2]	2.86E-07	atm·m^3/mol	[7]
1330-20-7	Xylenes (mixed isomers)	1	unitless	[3]	2.71E-01	atm·m^3/mol	[7]
1336-36-3	Polychlorinated biphenyls	1	unitless	[2]	1.40E-02	atm·m^3/mol	[7]
134-32-7	alpha-Naphthylamine	1	unitless	[2]	1.11E-07	atm·m^3/mol	[4]
135-98-8	sec-Butylbenzene	1	unitless	[2]	1.76E-02	atm·m^3/mol	[4]
13966-29-5	Uranium-234	0	unitless	[2]			
13967-48-1	Ruthenium-106	0	unitless	[2]			
13967-70-9	Cesium-134	0	unitless	[2]			
13968-55-3	Uranium-233	0	unitless	[2]			
13981-15-2	Curium-244	0	unitless	[2]			
13981-16-3	Plutonium-238	0	unitless	[2]			
13981-37-8	Nickel-63	0	unitless	[2]			
13982-10-0	Plutonium-242	0	unitless	[2]			
13982-63-3	Radium-226	0	unitless	[2]			
13982-70-2	Uranium-236	0	unitless	[2]			
13994-20-2	Neptunium-237	0	unitless	[2]			
141-78-6	Acetic acid ethyl ester	1	unitless	[2]	5.48E-03	atm·m^3/mol	[7]
14119-32-5	Plutonium-241	0	unitless	[2]			
14119-33-6	Plutonium-240	0	unitless	[2]			
14133-76-7	Technetium-99	0	unitless	[2]			
14158-29-3	Uranium-232	0	unitless	[2]			

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
14234-35-6	Antimony-125	0	unitless	[2]			
14265-44-2	Phosphate	0	unitless	[2]			
14331-85-2	Protactinium-231	0	unitless	[2]			
14336-70-0	Nickel-59	0	unitless	[2]			
14391-16-3	Europium-155	0	unitless	[2]			
145-73-3	Endothall	0	unitless	[1]	1.57E-14	atm·m^3/mol	[7]
14596-10-2	Americium-241	0	unitless	[2]			
14683-23-9	Europium-152	0	unitless	[2]			
14762-75-5	Carbon-14	1	unitless	[2]			
14797-55-8	Nitrate	0	unitless	[2]			
14797-65-0	Nitrite	0	unitless	[2]			
14808-79-8	Sulfate	0	unitless	[2]	5.00E-12	atm·m^3/mol	[1]
14952-40-0	Actinium-227	0	unitless	[2]			
14993-75-0	Americium-243	0	unitless	[2]			
15046-84-1	Iodine-129	1	unitless	[2]			
15117-48-3	Plutonium-239	0	unitless	[2]			
15117-96-1	Uranium-235	0	unitless	[2]			
15262-20-1	Radium-228	0	unitless	[2]			
15510-73-3	Curium-242	0	unitless	[2]			
15585-10-1	Europium-154	0	unitless	[2]			
15594-54-4	Thorium-229	0	unitless	[2]			
156-59-2	cis-1,2-Dichloroethene	1	unitless	[2]	4.10E-03	atm·m^3/mol	[3]
156-60-5	1,2-trans-Dichloroethene	1	unitless	[2]	9.40E-03	atm·m^3/mol	[3]
15715-94-3	Samarium-151	0	unitless	[2]			
15751-77-6	Zirconium-93	0	unitless	[2]			
15757-87-6	Curium-243	0	unitless	[2]			
15758-45-9	Selenium-79	0	unitless	[2]			
15832-50-5	Tin-126	0	unitless	[2]			
1634-04-4	Methyl tert-butyl ether	1	unitless	[2]	2.40E-02	atm·m^3/mol	[7]
16887-00-6	Chloride	0	unitless	[2]	7.73E-03	atm·m^3/mol	[11]
16984-48-8	Fluoride	0	unitless	[2]			
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	0.667	unitless	[2]	3.29E-05	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
189-55-9	Dibenzo[a,i]pyrene	0	unitless	[1]	1.41E-08	atm·m^3/mol	[10]
189-64-0	Dibenzo[a,h]pyrene	0	unitless	[1]	1.41E-08	atm·m^3/mol	[10]
191-24-2	Benzo(g,h,i)perylene	0.065	unitless	[2]	1.35E-05	atm·m^3/mol	[7]
191-30-0	Dibenzo(a,l)pyrene	0	unitless	[1]	1.41E-08	atm·m^3/mol	[10]
192-65-4	Dibenzo[a,e]pyrene	0	unitless	[1]	1.41E-08	atm·m^3/mol	[10]
192-97-2	Benzo(e)pyrene	0.893	unitless	[2]	3.00E-07	atm·m^3/mol	[4]
193-39-5	Indeno(1,2,3-cd)pyrene	0	unitless	[1]	1.60E-06	atm·m^3/mol	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	0	unitless	[1]	1.10E-05	atm·m^3/mol	[3]
205-82-3	Benzo[j]fluoranthene	0.59	unitless	[2]	2.03E-07	atm·m^3/mol	[10]
205-99-2	Benzo(b)fluoranthene	0.966	unitless	[2]	1.11E-04	atm·m^3/mol	[3]
206-44-0	Fluoranthene	0.992	unitless	[2]	1.60E-05	atm·m^3/mol	[3]
207-08-9	Benzo(k)fluoranthene	0.26	unitless	[2]	8.30E-07	atm·m^3/mol	[3]
208-96-8	Acenaphthylene	1	unitless	[2]	5.11E-03	atm·m^3/mol	[7]
218-01-9	Chrysene	0.722	unitless	[2]	9.50E-05	atm·m^3/mol	[3]
224-42-0	Dibenz[a,j]acridine	0.241	unitless	[2]	1.90E-09	atm·m^3/mol	[10]
2245-38-7	2,3,5-Trimethylnaphthalene	1	unitless	[3]	7.07E-04	atm·m^3/mol	[8]
226-36-8	Dibenz[a,h]acridine	0.285	unitless	[2]	1.90E-09	atm·m^3/mol	[10]
22967-92-6	Methyl mercury	0	unitless	[2]	4.70E-07	atm·m^3/mol	[3]
23950-58-5	Pronamide	0.949	unitless	[2]	9.77E-09	atm·m^3/mol	[3]
24959-67-9	Bromide	0.017	unitless	[2]	2.45E-02	atm·m^3/mol	[11]
27154-33-2	Trichlorofluoroethane	1	unitless	[2]	8.50E-03	atm·m^3/mol	[12]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	0.838	unitless	[2]	2.88E-04	atm·m^3/mol	[4]
319-84-6	alpha-BHC	1	unitless	[2]	1.10E-05	atm·m^3/mol	[3]
319-85-7	beta-BHC	0.999	unitless	[2]	7.40E-07	atm·m^3/mol	[3]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	0.972	unitless	[2]	9.40E-06	atm·m^3/mol	[4]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	0.938	unitless	[2]	8.25E-04	atm·m^3/mol	[4]
3268-87-9	Octachlorodibenzo(p)dioxin	0	unitless	[1]	6.75E-06	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	0.964	unitless	[2]	6.85E-05	atm·m^3/mol	[11]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	0	unitless	[1]	1.20E-05	atm·m^3/mol	[3]
3697-24-3	5-Methylchrysene	0.823	unitless	[2]	5.53E-06	atm·m^3/mol	[10]
378253-40-8	Barium-137m	0	unitless	[2]			
378253-44-2	Cadmium-113m	0	unitless	[2]			
378782-82-2	Niobium-93m	0	unitless	[2]			
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	0.784	unitless	[2]	1.43E-04	atm·m^3/mol	[4]
39001-02-0	Octachlorodibenzofuran	0	unitless	[1]	1.88E-06	atm·m^3/mol	[3]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	0	unitless	[1]	1.07E-05	atm·m^3/mol	[3]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	0.402	unitless	[2]	5.07E-05	atm·m^3/mol	[10]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	0.118	unitless	[2]	2.60E-06	atm·m^3/mol	[3]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	1	unitless	[2]	9.68E-06	atm·m^3/mol	[4]
41851-50-7	Chlorocyclopentadiene	1	unitless	[2]	9.16E-01	atm·m^3/mol	[7]
460-19-5	Cyanogen (oxalonitrile)	1	unitless	[2]	2.16E-01	atm·m^3/mol	[7]
4786-20-3	2-Butenenitrile	1	unitless	[3]	1.12E-04	atm·m^3/mol	[8]
50-00-0	Formaldehyde	1	unitless	[2]	3.36E-07	atm·m^3/mol	[3]
50-32-8	Benzo(a)pyrene	0.29	unitless	[2]	1.10E-06	atm·m^3/mol	[3]
506-68-3	Cyanogen bromide (Bromocyanide)	1	unitless	[2]			
506-77-4	Cyanogen chloride	1	unitless	[2]	7.94E-02	atm·m^3/mol	[7]
51-28-5	2,4-Dinitrophenol	1	unitless	[2]	4.43E-07	atm·m^3/mol	[3]
51-79-6	Ethyl carbamate (urethane)	1	unitless	[2]	6.43E-08	atm·m^3/mol	[4]
510-15-6	Chlorobenzilate	0.865	unitless	[2]	7.24E-08	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.772	unitless	[2]	1.44E-05	atm·m^3/mol	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	0.815	unitless	[2]	6.85E-05	atm·m^3/mol	[10]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	0.999	unitless	[2]	1.51E-05	atm·m^3/mol	[7]
53-70-3	Dibenz[a,h]anthracene	0.054	unitless	[2]	1.50E-08	atm·m^3/mol	[3]
532-27-4	2-Chloroacetophenone	1	unitless	[2]	1.41E-04	atm·m^3/mol	[7]
534-52-1	4,6-Dinitro-o-cresol	1	unitless	[2]	5.72E-05	atm·m^3/mol	[7]
5385-75-1	Dibenzo(a,e)fluoranthene	0	unitless	[1]	7.91E-08	atm·m^3/mol	[11]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	1	unitless	[2]	1.67E-01	atm·m^3/mol	[7]
540-73-8	1,2-Dimethylhydrazine	1	unitless	[2]	2.84E-06	atm·m^3/mol	[7]
540-84-1	2,2,4-Trimethylpentane	1	unitless	[2]	3.04E+00	atm·m^3/mol	[4]
541-73-1	1,3-Dichlorobenzene	1	unitless	[2]	3.10E-03	atm·m^3/mol	[3]
542-75-6	1,3-Dichloropropene	1	unitless	[2]	1.80E-02	atm·m^3/mol	[3]
542-88-1	Bis(chloromethyl)ether	1	unitless	[2]	8.42E-03	atm·m^3/mol	[7]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0	unitless	[1]	1.40E-05	atm·m^3/mol	[3]
56-23-5	Carbon tetrachloride	1	unitless	[2]	3.00E-02	atm·m^3/mol	[3]
56-49-5	3-Methylcholanthrene	0.364	unitless	[2]	5.24E-06	atm·m^3/mol	[10]
56-55-3	Benzo(a)anthracene	0.471	unitless	[2]	3.40E-06	atm·m^3/mol	[3]
57-12-5	Cyanide	1	unitless	[2]	2.40E-02	atm·m^3/mol	[3]
57-24-9	Strychnine	0	unitless	[1]	7.56E-14	atm·m^3/mol	[3]
57-74-9	Chlordane	0.993	unitless	[2]	4.90E-05	atm·m^3/mol	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	0.223	unitless	[2]	4.98E-06	atm·m^3/mol	[3]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.273	unitless	[2]	5.00E-06	atm·m^3/mol	[3]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	0.054	unitless	[2]	7.31E-06	atm·m^3/mol	[3]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	0.936	unitless	[2]	9.24E-05	atm·m^3/mol	[12]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	0	unitless	[1]	1.10E-05	atm·m^3/mol	[3]
58-89-9	gamma-BHC (Lindane)	1	unitless	[2]	2.10E-04	atm·m^3/mol	[7]
58-90-2	2,3,4,6-Tetrachlorophenol	1	unitless	[2]	4.39E-06	atm·m^3/mol	[3]
581-42-0	2,6-Dimethylnaphthalene	1	unitless	[3]	6.41E-04	atm·m^3/mol	[8]
584-84-9	2,4-Toluene diisocyanate	1	unitless	[2]	1.11E-05	atm·m^3/mol	[11]
589-38-8	3-Hexanone	1	unitless	[2]	1.25E-04	atm·m^3/mol	[4]
59-50-7	4-Chloro-3-methylphenol	1	unitless	[2]	2.45E-06	atm·m^3/mol	[3]
59-89-2	N-Nitrosomorpholine	1	unitless	[2]	2.45E-08	atm·m^3/mol	[4]
591-50-4	Benzene, iodo-	1	unitless	[3]	8.37E-04	atm·m^3/mol	[8]
591-78-6	2-Hexanone	1	unitless	[2]	3.81E-03	atm·m^3/mol	[7]
593-60-2	Bromoethene (Vinyl bromide)	1	unitless	[2]	5.03E-01	atm·m^3/mol	[7]
593-74-8	Dimethyl Mercury	1	unitless	[3]	6.38E-03	atm·m^3/mol	[5]
60-11-7	Dimethyl aminoazobenzene	0.54	unitless	[2]	4.00E-10	atm·m^3/mol	[11]
60-29-7	Ethyl ether	1	unitless	[2]	5.03E-02	atm·m^3/mol	[7]
60-35-5	Acetamide	1	unitless	[2]	4.41E-09	atm·m^3/mol	[4]
602-87-9	5-Nitroacenaphthene	0.997	unitless	[2]	1.11E-06	atm·m^3/mol	[10]
606-20-2	2,6-Dinitrotoluene	1	unitless	[2]	7.47E-07	atm·m^3/mol	[3]
608-93-5	Pentachlorobenzene	1	unitless	[2]	7.10E-04	atm·m^3/mol	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	0.056	unitless	[2]	1.10E-05	atm·m^3/mol	[3]
61626-71-9	Dichloropentadiene	1	unitless	[2]	3.09E-02	atm·m^3/mol	[12]
62-50-0	Ethyl methanesulfonate	1	unitless	[2]	5.35E-06	atm·m^3/mol	[3]
62-53-3	Aniline	1	unitless	[2]	1.90E-06	atm·m^3/mol	[3]
62-75-9	N-Nitroso-N,N-dimethylamine	1	unitless	[2]	7.44E-05	atm·m^3/mol	[7]
621-64-7	N-Nitroso-di-n-propylamine	1	unitless	[2]	2.25E-06	atm·m^3/mol	[3]
624-83-9	Methyl isocyanate	1	unitless	[3]	9.26E-04	atm·m^3/mol	[8]
628-73-9	Hexanenitrile	1	unitless	[2]	9.49E-05	atm·m^3/mol	[10]
630-08-0	Carbon monoxide	1	unitless	[2]	2.49E+04	atm·m^3/mol	[1]
630-20-6	1,1,1,2-Tetrachloroethane	1	unitless	[2]	2.42E-03	atm·m^3/mol	[3]
64-18-6	Formic acid (methanoic acid)	1	unitless	[2]	1.67E-07	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
65-85-0	Benzoic acid	1	unitless	[2]	2.87E-06	atm·m^3/mol	[3]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	0.96	unitless	[2]	9.24E-05	atm·m^3/mol	[12]
67-56-1	Methyl alcohol	1	unitless	[2]	4.55E-06	atm·m^3/mol	[3]
67-63-0	2-Propyl alcohol	1	unitless	[2]	3.31E-04	atm·m^3/mol	[7]
67-64-1	2-Propanone (Acetone)	1	unitless	[2]	3.90E-05	atm·m^3/mol	[3]
67-66-3	Chloroform	1	unitless	[2]	3.70E-03	atm·m^3/mol	[3]
67-72-1	Hexachloroethane	1	unitless	[2]	3.89E-03	atm·m^3/mol	[3]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0	unitless	[1]	1.41E-05	atm·m^3/mol	[3]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	0.733	unitless	[2]	6.85E-05	atm·m^3/mol	[12]
70-30-4	Hexachlorophene	0	unitless	[1]	5.48E-13	atm·m^3/mol	[3]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	0.976	unitless	[2]	1.25E-04	atm·m^3/mol	[12]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	0.05	unitless	[2]	1.43E-05	atm·m^3/mol	[3]
71-36-3	n-Butyl alcohol	1	unitless	[2]	3.60E-04	atm·m^3/mol	[7]
71-43-2	Benzene	1	unitless	[2]	5.60E-03	atm·m^3/mol	[3]
71-55-6	1,1,1-Trichloroethane	1	unitless	[2]	1.70E-02	atm·m^3/mol	[3]
72-43-5	Methoxychlor	0.851	unitless	[2]	1.60E-05	atm·m^3/mol	[3]
72-55-9	4,4-DDE	0.983	unitless	[2]	2.10E-05	atm·m^3/mol	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	0.062	unitless	[2]	1.10E-05	atm·m^3/mol	[3]
74-83-9	Bromomethane	1	unitless	[2]	6.24E-03	atm·m^3/mol	[3]
74-87-3	Chloromethane	1	unitless	[2]	8.82E-03	atm·m^3/mol	[3]
74-88-4	Iodomethane	1	unitless	[2]	5.26E-03	atm·m^3/mol	[4]
74-95-3	Methylene bromide	1	unitless	[2]	8.61E-04	atm·m^3/mol	[3]
74-97-5	Bromochloromethane	1	unitless	[2]	5.97E-02	atm·m^3/mol	[7]
7429-90-5	Aluminum	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7439-89-6	Iron	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7439-92-1	Lead	0	unitless	[2]	2.50E-02	atm·m^3/mol	[3]
7439-93-2	Lithium	0	unitless	[2]			

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
7439-95-4	Magnesium	0	unitless	[2]			
7439-96-5	Manganese	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7439-97-6	Mercury	1	unitless	[2]	7.10E-03	atm·m^3/mol	[3]
7439-98-7	Molybdenum	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7440-02-0	Nickel	0	unitless	[2]	2.50E-02	atm·m^3/mol	[3]
7440-16-6	Rhodium	0	unitless	[2]			
7440-22-4	Silver	0	unitless	[2]	0.00E+00	atm·m^3/mol	[3]
7440-23-5	Sodium	0	unitless	[2]			
7440-24-6	Strontium (total)	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7440-25-7	Tantalum	0	unitless	[2]			
7440-28-0	Thallium	0	unitless	[2]	0.00E+00	atm·m^3/mol	[3]
7440-29-1	Thorium-232	0	unitless	[2]			
7440-31-5	Tin	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7440-33-7	Tungsten	0	unitless	[2]			
7440-36-0	Antimony	0	unitless	[2]	2.50E-02	atm·m^3/mol	[3]
7440-38-2	Arsenic	0	unitless	[2]	7.70E-01	atm·m^3/mol	[3]
7440-39-3	Barium	0	unitless	[2]	0.00E+00	atm·m^3/mol	[3]
7440-41-7	Beryllium	0	unitless	[2]	1.50E-02	atm·m^3/mol	[3]
7440-43-9	Cadmium	0	unitless	[2]	3.10E-02	atm·m^3/mol	[3]
7440-47-3	Chromium	0.009	unitless	[6]	0.00E+00	atm·m^3/mol	[3]
7440-48-4	Cobalt	0	unitless	[2]			
7440-50-8	Copper	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7440-61-1	Uranium	0	unitless	[2]			
7440-61-1R	Uranium-238	0	unitless	[2]			
7440-62-2	Vanadium	0	unitless	[2]	0.00E+00	atm·m^3/mol	[6]
7440-65-5	Yttrium	0	unitless	[2]			
7440-66-6	Zinc	0	unitless	[2]	2.50E-02	atm·m^3/mol	[3]
7440-67-7	Zirconium	0	unitless	[2]			
7446-09-5	Sulfur dioxide	1	unitless	[2]	8.10E-04	atm·m^3/mol	[11]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	0.833	unitless	[2]	9.24E-05	atm·m^3/mol	[10]
7487-94-7	Mercury (Hg^{+2})	0.85	unitless	[2]	7.10E-10	atm·m^3/mol	[3]
75-00-3	Chloroethane	1	unitless	[2]	8.80E-03	atm·m^3/mol	[3]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
75-01-4	1-Chloroethene	1	unitless	[2]	2.70E-02	atm·m^3/mol	[3]
75-02-5	Fluoroethene (Vinyl fluoride)	1	unitless	[2]	1.18E-01	atm·m^3/mol	[10]
75-05-8	Acetonitrile	1	unitless	[2]	3.46E-05	atm·m^3/mol	[3]
75-07-0	Acetaldehyde	1	unitless	[2]	7.89E-05	atm·m^3/mol	[3]
75-09-2	Dichloromethane (Methylene Chloride)	1	unitless	[2]	2.20E-03	atm·m^3/mol	[3]
75-15-0	Carbon disulfide	1	unitless	[2]	3.00E-02	atm·m^3/mol	[3]
75-21-8	Ethylene oxide (Oxirane)	1	unitless	[2]	1.48E-04	atm·m^3/mol	[3]
75-25-2	Bromoform	1	unitless	[2]	6.50E+00	atm·m^3/mol	[3]
75-27-4	Bromodichloromethane	1	unitless	[2]	1.60E-03	atm·m^3/mol	[3]
75-29-6	2-Chloropropane	1	unitless	[2]	7.15E-01	atm·m^3/mol	[7]
75-34-3	1,1-Dichloroethane	1	unitless	[2]	5.60E-03	atm·m^3/mol	[3]
75-35-4	1,1-Dichloroethene	1	unitless	[2]	2.60E-02	atm·m^3/mol	[3]
75-44-5	Phosgene (Hydrogen phosphide)	1	unitless	[2]	1.67E-02	atm·m^3/mol	[2]
75-45-6	Chlorodifluoromethane	1	unitless	[2]	4.06E-02	atm·m^3/mol	[3]
75-50-3	Trimethylamine	1	unitless	[2]	1.04E-04	atm·m^3/mol	[4]
75-69-4	Trichlorofluoromethane	1	unitless	[2]	9.70E-02	atm·m^3/mol	[3]
75-71-8	Dichlorodifluoromethane	1	unitless	[2]	3.43E-01	atm·m^3/mol	[3]
76-01-7	Pentachloroethane	1	unitless	[2]	1.94E-03	atm·m^3/mol	[4]
76-13-1	1,2,2-Trichlorotrifluoroethane	1	unitless	[2]	2.15E+01	atm·m^3/mol	[7]
76-44-8	Heptachlor	1	unitless	[2]	1.50E+00	atm·m^3/mol	[3]
764-41-0	1,4-Dichloro-2-butene	1	unitless	[2]	3.48E-01	atm·m^3/mol	[7]
7647-01-0	Hydrogen chloride	1	unitless	[2]	2.36E-03	atm·m^3/mol	[3]
765-34-4	Glycidylaldehyde	1	unitless	[2]	3.21E-05	atm·m^3/mol	[7]
7664-39-3	Hydrogen Fluoride	1	unitless	[2]	2.63E-02	atm·m^3/mol	[1]
7664-41-7	Ammonia/Ammonium	1	unitless	[2]	6.58E-04	atm·m^3/mol	[7]
77-47-4	Hexachlorocyclopentadiene	1	unitless	[2]	2.70E-02	atm·m^3/mol	[3]
77-78-1	Dimethyl sulfate	1	unitless	[2]	1.64E-04	atm·m^3/mol	[7]
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus	0	unitless	[2]	2.44E-02	atm·m^3/mol	[11]
7782-41-4	Fluorine gas (F_2)	1	unitless	[5]			

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
7782-49-2	Selenium	0	unitless	[2]	9.70E-03	atm·m^3/mol	[3]
7782-50-5	Chlorine	1	unitless	[2]	1.17E-02	atm·m^3/mol	[3]
78-83-1	2-Methylpropyl alcohol	1	unitless	[2]	4.00E-04	atm·m^3/mol	[7]
78-87-5	1,2-Dichloropropane	1	unitless	[2]	2.80E-03	atm·m^3/mol	[3]
78-93-3	2-Butanone	1	unitless	[2]	5.60E-05	atm·m^3/mol	[3]
79-00-5	1,1,2-Trichloroethane	1	unitless	[2]	9.10E-04	atm·m^3/mol	[3]
79-01-6	1,1,2-Trichloroethylene	1	unitless	[2]	1.00E-02	atm·m^3/mol	[3]
79-10-7	2-Propenoic acid	1	unitless	[2]	1.51E-05	atm·m^3/mol	[7]
79-34-5	1,1,2,2-Tetrachloroethane	1	unitless	[2]	3.40E-04	atm·m^3/mol	[3]
79-46-9	2-Nitropropane	1	unitless	[2]	4.87E-03	atm·m^3/mol	[7]
80-62-6	Methyl methacrylate	1	unitless	[2]	1.38E-02	atm·m^3/mol	[7]
82-68-8	Pentachloronitrobenzene (PCNB)	1	unitless	[2]	3.80E-04	atm·m^3/mol	[3]
822-06-0	Hexamethylene-1,5-diisocyanate	1	unitless	[2]	1.96E-03	atm·m^3/mol	[7]
823-40-5	Toluene-2,6-diamine	1	unitless	[2]	3.89E-08	atm·m^3/mol	[7]
83-32-9	Acenaphthene	1	unitless	[2]	1.60E-04	atm·m^3/mol	[3]
832-69-9	1-Methylphenanthrene	0.971	unitless	[3]	4.93E-05	atm·m^3/mol	[8]
84-66-2	Diethyl phthalate	1	unitless	[2]	4.50E-07	atm·m^3/mol	[3]
84-74-2	Di-n-butylphthalate	0.994	unitless	[2]	1.80E-06	atm·m^3/mol	[3]
85-01-8	Phenanthrene	0.999	unitless	[2]	2.30E-05	atm·m^3/mol	[3]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	1	unitless	[2]	1.63E-08	atm·m^3/mol	[3]
85-68-7	Butylbenzylphthalate	0.948	unitless	[2]	1.30E-06	atm·m^3/mol	[3]
86-73-7	Fluorene	1	unitless	[2]	6.40E-05	atm·m^3/mol	[3]
87-61-6	1,2,3-Trichlorobenzene	1	unitless	[2]	1.25E-03	atm·m^3/mol	[3]
87-68-3	Hexachlorobutadiene	1	unitless	[2]	8.10E-03	atm·m^3/mol	[3]
87-86-5	Pentachlorophenol	0.999	unitless	[2]	2.40E-08	atm·m^3/mol	[3]
88-06-2	2,4,6-Trichlorophenol	1	unitless	[2]	7.80E-06	atm·m^3/mol	[3]
88-74-4	o-Nitroaniline (2-nitroaniline)	1	unitless	[2]	1.09E-07	atm·m^3/mol	[3]
88-75-5	2-Nitrophenol	1	unitless	[2]	9.47E-06	atm·m^3/mol	[3]
90-04-0	o-Anisidine	1	unitless	[2]	9.26E-07	atm·m^3/mol	[10]
90-12-0	1-Methylnaphthalene	1	unitless	[3]	2.10E-02	atm·m^3/mol	[7]

Table 2-2 Vapor Partitioning Coefficient, Henry's Law Constant

CAS Registry Number	Analyte Name	Vapor Partitioning Coefficient (*Fv*)	Units for Vapor Partitioning Coefficient	Reference	Henry's Law Constant	Units for Henry's Law Constant	Reference
91-20-3	Naphthalene	1	unitless	[2]	4.80E-04	atm·m^3/mol	[3]
91-22-5	Quinoline	1	unitless	[2]	6.83E-05	atm·m^3/mol	[7]
91-57-6	2-Methylnaphthalene	1	unitless	[2]	2.12E-02	atm·m^3/mol	[7]
91-58-7	2-Chloronaphthalene	1	unitless	[2]	3.14E-04	atm·m^3/mol	[3]
91-94-1	3,3'-Dichlorobenzidine	0.484	unitless	[2]	4.00E-09	atm·m^3/mol	[3]
92-52-4	1,1`-Biphenyl	1	unitless	[2]	1.26E-02	atm·m^3/mol	[7]
924-16-3	N-Nitroso-di-n-Buetylamine	1	unitless	[2]	3.16E-04	atm·m^3/mol	[3]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1	unitless	[2]	1.86E-05	atm·m^3/mol	[3]
94-75-7	2,4-D	0.949	unitless	[2]	1.45E-06	atm·m^3/mol	[7]
95-48-7	o-Cresol	1	unitless	[2]	1.20E-06	atm·m^3/mol	[3]
95-49-8	o-Chlorotoluene	1	unitless	[2]	1.46E-01	atm·m^3/mol	[7]
95-50-1	1,2-Dichlorobenzene	1	unitless	[2]	1.90E-03	atm·m^3/mol	[3]
95-53-4	o-Toluidine	1	unitless	[2]	2.72E-06	atm·m^3/mol	[3]
95-57-8	2-Chlorophenol	1	unitless	[2]	3.91E-04	atm·m^3/mol	[3]
95-63-6	1,2,4-Trimethyl benzene	1	unitless	[2]	2.52E-01	atm·m^3/mol	[7]
95-94-3	1,2,4,5-Tetrachlorobenzene	1	unitless	[2]	2.60E-03	atm·m^3/mol	[3]
95-95-4	2,4,5-Trichlorophenol	1	unitless	[2]	4.33E-06	atm·m^3/mol	[3]
96-12-8	1,2-Dibromo-3-chloropropane	1	unitless	[2]	1.50E-04	atm·m^3/mol	[3]
96-18-4	1,2,3-Trichloropropane	1	unitless	[2]	4.10E-04	atm·m^3/mol	[3]
96-45-7	Ethylene thiourea	1	unitless	[2]	1.37E-05	atm·m^3/mol	[7]
97-63-2	Ethyl methacrylate	1	unitless	[2]	8.42E-04	atm·m^3/mol	[3]
98-01-1	Furfural	1	unitless	[2]	1.38E-04	atm·m^3/mol	[7]
98-06-6	tert-Butyl benzene	1	unitless	[2]	1.32E-02	atm·m^3/mol	[4]
98-07-7	Benzotrichloride	1	unitless	[2]	1.06E-02	atm·m^3/mol	[7]
98-82-8	Cumene	1	unitless	[2]	1.20E+00	atm·m^3/mol	[3]
98-83-9	Methyl styrene (mixed isomers)	1	unitless	[2]	1.04E-01	atm·m^3/mol	[7]
98-86-2	Acetophenone	1	unitless	[2]	1.07E-05	atm·m^3/mol	[3]
98-95-3	Nitrobenzene	1	unitless	[2]	2.40E-05	atm·m^3/mol	[3]
99-35-4	1,3,5-Trinitrobenzene	0.992	unitless	[2]	3.30E-10	atm·m^3/mol	[3]
99-65-0	1,3-Dinitrobenzene	1	unitless	[2]	2.30E-07	atm·m^3/mol	[3]
99-87-6	p-Cymene	1	unitless	[2]	1.10E-02	atm·m^3/mol	[4]

Reference	Reference (source) for Vapor Partitioning Coefficient
[1]	CCN 097844, "Meeting Minutes: Discuss and Resolve the Outstanding Risk Assessment Issues," dated Sept. 3, 2004
[2]	CCN 129507, Memo, from L.Bostic, to E.Berrios, "Update2: to Vapor Phase Partitioning Coefficients," dated January 6, 2006.
[3]	Calculated value per EPA 2005, *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities,* US Environmental Protection Agency, Final, EPA530-R-05-006, Office of Solid Waste and Emergency Response, September 2005. (Equation A-2-1).
[4]	Calculated value per Eq. A-2-1 and A-2-2 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[5]	Calculated value per Eq. A-2-1 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[6]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.

Reference	Reference (source) for Henry's Law Constant
[1]	Calculated value per Eq. A-2-3 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
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[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	EPA. 2000. EPI Suite v.3.12, HENRYWIN: Experimental Henry Values in Database, Office of Pollution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm).
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[6]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006. (units converted to atm-m3/mol)
[7]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[8]	Syracuse Research Corporation (SRC). Interactive PhysProp Database Demo. SRC. Syracuse, NY. (http://www.syrres.com/what-we-do/databaseforms.aspx?id=386). Accessed February 2011.
[9]	Syracuse Research Corporation (SRC). Interactive PhysProp Database Demo. SRC. Syracuse, NY. (http://www.syrres.com/what-we-do/databaseforms.aspx?id=386). Accessed June 2009.
[10]	Syracuse Research Corporation (SRC). PHYSPROP Database. SRC. Syracuse, NY. (http://www.syrres.com/esc/physdemo.htm). Accessed July 2008.

Reference	Reference (source) for Henry's Law Constant
[11]	Syracuse Research Corporation (SRC). PHYSPROP Database. Syracuse, NY (http://www.syrres.com/esc/physdemo.htm). Accessed September 2006.
[12]	US EPA. 2006. *Estimation Programs Interface Suite for Microsoft Windows, v3.20 (HENRYWIN v3.10)*. United States Environmental Protection Agency, Washington, DC, USA. (available at http://www.epa.gov/oppt/exposure/pubs/episuite.htm)

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
100-02-7	p-Nitrophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
100-21-0	Phthalic acid	3.90E-02	cm^2/s	[3]	7.14E-06	cm^2/s	[3]
100-25-4	1,4-Dinitrobenzene	6.24E-02	cm^2/s	[1]	7.22E-06	cm^2/s	[1]
100-40-3	4-Ethenylcyclohexene	8.37E-02	cm^2/s	[1]	9.69E-06	cm^2/s	[1]
100-41-4	Ethyl benzene	7.50E-02	cm^2/s	[2]	7.80E-06	cm^2/s	[2]
100-42-5	Styrene	7.10E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
100-44-7	Benzyl chloride	7.50E-02	cm^2/s	[2]	7.80E-06	cm^2/s	[2]
100-47-0	Benzonitrile	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
100-51-6	Benzyl alcohol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
100-52-7	Benzaldehyde	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
10028-15-6	Ozone	1.44E-01	cm^2/s	[1]	1.67E-05	cm^2/s	[1]
10028-17-8	Tritium	2.76E-01	cm^2/s	[1]	3.20E-05	cm^2/s	[1]
10045-97-3	Cesium-137	7.15E-02	cm^2/s	[1]	8.28E-06	cm^2/s	[1]
10061-01-5	cis-1,3-Dichloropropene	1.00E-03	cm^2/s	[10]	1.00E-05	cm^2/s	[10]
10061-02-6	trans-1,3-Dichloropropene	8.23E-02	cm^2/s	[1]	9.53E-06	cm^2/s	[1]
10098-91-6	Yttrium-90	9.47E-02	cm^2/s	[1]	1.10E-05	cm^2/s	[1]
10098-97-2	Strontium-90	9.47E-02	cm^2/s	[1]	1.10E-05	cm^2/s	[1]
101-55-3	4-Bromophenylphenyl ether	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
101-77-9	4,4-Methylenedianiline	3.56E-02	cm^2/s	[3]	5.39E-06	cm^2/s	[3]
10102-44-0	Nitrogen dioxide	1.48E-01	cm^2/s	[1]	1.71E-05	cm^2/s	[1]
10198-40-0	Cobalt-60	1.24E-01	cm^2/s	[1]	1.44E-05	cm^2/s	[1]
103-33-3	Azobenzene	3.15E-02	cm^2/s	[3]	7.45E-06	cm^2/s	[3]
103-65-1	n-Propyl benzene (Isocumene)	7.80E-02	cm^2/s	[1]	9.03E-06	cm^2/s	[1]
104-51-8	n-Butylbenzene	7.25E-02	cm^2/s	[1]	8.39E-06	cm^2/s	[1]
104-76-7	2-Ethyl-1-hexanol	7.40E-02	cm^2/s	[1]	8.56E-06	cm^2/s	[1]
105-67-9	2,4-Dimethylphenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
10595-95-6	n-Nitrosomethylethylamine	9.60E-02	cm^2/s	[1]	1.11E-05	cm^2/s	[1]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	7.54E-02	cm^2/s	[1]	8.73E-06	cm^2/s	[1]
106-44-5	p-Cresol (4-methyl phenol)	7.40E-02	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
106-46-7	1,4-Dichlorobenzene	6.90E-02	cm^2/s	[2]	7.90E-06	cm^2/s	[2]
106-47-8	p-Chloroaniline	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
106-49-0	p-Toluidine	6.98E-02	cm^2/s	[3]	9.43E-06	cm^2/s	[3]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
106-51-4	Quinone	8.37E-02	cm^2/s	[1]	9.70E-06	cm^2/s	[1]
106-88-7	1,2-Epoxybutane	1.34E-01	cm^2/s	[3]	1.03E-05	cm^2/s	[3]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	8.60E-02	cm^2/s	[2]	9.80E-06	cm^2/s	[2]
106-93-4	Ethylene dibromide	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
106-99-0	1,3-Butadiene	2.49E-01	cm^2/s	[3]	1.08E-05	cm^2/s	[3]
107-02-8	Acrolein	1.05E-01	cm^2/s	[2]	1.22E-05	cm^2/s	[2]
107-05-1	3-Chloropropene	1.17E-01	cm^2/s	[3]	1.08E-05	cm^2/s	[3]
107-06-2	1,2-Dichloroethane	1.04E-01	cm^2/s	[2]	9.90E-06	cm^2/s	[2]
107-12-0	Propionitrile	1.31E-01	cm^2/s	[1]	1.52E-05	cm^2/s	[1]
107-13-1	Acrylonitrile	1.22E-01	cm^2/s	[2]	1.34E-05	cm^2/s	[2]
107-19-7	Propargyl alcohol	1.81E-01	cm^2/s	[3]	1.33E-05	cm^2/s	[3]
107-21-1	Ethylene glycol (1,2-ethanediol)	1.08E-01	cm^2/s	[3]	1.22E-05	cm^2/s	[3]
107-98-2	Propylene glycol monomethyl ether	7.17E-02	cm^2/s	[3]	9.73E-06	cm^2/s	[3]
108-05-4	Acetic acid vinyl ester	8.50E-02	cm^2/s	[2]	9.20E-06	cm^2/s	[2]
108-10-1	4-Methyl-2-pentanone	7.50E-02	cm^2/s	[2]	7.80E-06	cm^2/s	[2]
108-39-4	m-Cresol	7.40E-02	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
108-60-1	Bis(2-chloroisopropyl)ether	3.50E-02	cm^2/s	[3]	7.36E-06	cm^2/s	[3]
108-67-8	1,3,5-Trimethylbenzene	6.02E-02	cm^2/s	[2]	8.67E-06	cm^2/s	[2]
108-86-1	Bromobenzene (Phenyl bromide)	6.53E-02	cm^2/s	[1]	7.56E-06	cm^2/s	[1]
108-87-2	Methylcyclohexane	9.86E-02	cm^2/s	[3]	8.52E-06	cm^2/s	[3]
108-88-3	Toluene	8.70E-02	cm^2/s	[2]	8.60E-06	cm^2/s	[2]
108-90-7	Chlorobenzene	7.30E-02	cm^2/s	[2]	8.70E-06	cm^2/s	[2]
108-94-1	Cyclohexanone	7.84E-02	cm^2/s	[3]	8.62E-06	cm^2/s	[3]
108-95-2	Phenol	8.20E-02	cm^2/s	[2]	9.10E-06	cm^2/s	[2]
109-74-0	n-Butanenitrile	1.13E-01	cm^2/s	[1]	1.31E-05	cm^2/s	[1]
109-75-1	3-Butenenitrile	1.15E-01	cm^2/s	[1]	1.33E-05	cm^2/s	[1]
109-77-3	Malononitrile	1.16E-01	cm^2/s	[1]	1.35E-05	cm^2/s	[1]
109-86-4	2-Methoxyethanol	1.29E-01	cm^2/s	[3]	9.57E-06	cm^2/s	[3]
109-99-9	Tetrahydrofuran	9.80E-02	cm^2/s	[2]	1.05E-05	cm^2/s	[2]
110-00-9	Furan	1.04E-01	cm^2/s	[3]	1.22E-05	cm^2/s	[3]
110-54-3	n-Hexane	2.00E-01	cm^2/s	[3]	7.77E-06	cm^2/s	[3]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
110-59-8	Pentanenitrile	9.97E-02	cm^2/s	[1]	1.15E-05	cm^2/s	[1]
110-80-5	2-Ethoxyethanol	9.32E-02	cm^2/s	[3]	9.76E-06	cm^2/s	[3]
110-82-7	Cyclohexane	9.89E-02	cm^2/s	[1]	1.15E-05	cm^2/s	[1]
110-83-8	Cyclohexene	1.01E-01	cm^2/s	[1]	1.16E-05	cm^2/s	[1]
110-86-1	Pyridine	9.10E-02	cm^2/s	[2]	7.60E-06	cm^2/s	[2]
111-15-9	Ethylene glycol monoethyl ether acetate	4.58E-02	cm^2/s	[3]	7.56E-06	cm^2/s	[3]
111-44-4	Bis(2-chloroethyl)ether	4.13E-02	cm^2/s	[2]	9.49E-06	cm^2/s	[2]
111-65-9	n-Octane	8.07E-02	cm^2/s	[1]	9.34E-06	cm^2/s	[1]
111-76-2	2-Butoxyethanol	6.51E-02	cm^2/s	[3]	8.15E-06	cm^2/s	[3]
111-84-2	n-Nonane	7.47E-02	cm^2/s	[1]	8.65E-06	cm^2/s	[1]
111-91-1	Bis(2-chloroethoxy)methane	6.12E-02	cm^2/s	[1]	7.08E-06	cm^2/s	[1]
112-30-1	1-Decanol	6.49E-02	cm^2/s	[1]	7.52E-06	cm^2/s	[1]
112-31-2	Decanal	6.55E-02	cm^2/s	[1]	7.58E-06	cm^2/s	[1]
112-40-3	Dodecane	6.18E-02	cm^2/s	[1]	7.16E-06	cm^2/s	[1]
1120-21-4	Undecane	6.55E-02	cm^2/s	[1]	7.58E-06	cm^2/s	[1]
1120-71-4	1,3-Propane sultone	7.72E-02	cm^2/s	[1]	8.94E-06	cm^2/s	[1]
117-81-7	Bis(2-ethylhexyl)phthalate	3.51E-02	cm^2/s	[2]	3.66E-06	cm^2/s	[2]
117-84-0	Di-n-octylphthalate	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
118-74-1	Hexachlorobenzene	5.42E-02	cm^2/s	[2]	5.91E-06	cm^2/s	[2]
119-90-4	3,3'-Dimethoxybenzidine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
120-12-7	Anthracene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
120-82-1	1,2,4-Trichlorobenzene	3.00E-02	cm^2/s	[2]	8.23E-06	cm^2/s	[2]
120-83-2	2,4-Dichlorophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
121-14-2	2,4-Dinitrotoluene	2.03E-01	cm^2/s	[2]	7.06E-06	cm^2/s	[2]
122-39-4	N,N-Diphenylamine	6.21E-02	cm^2/s	[1]	7.19E-06	cm^2/s	[1]
122-66-7	1,2-Diphenylhydrazine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
123-33-1	Maleic hydrazide	8.17E-02	cm^2/s	[1]	9.46E-06	cm^2/s	[1]
123-38-6	Propionaldehyde	1.27E-01	cm^2/s	[1]	1.47E-05	cm^2/s	[1]
123-72-8	Butanal	1.10E-01	cm^2/s	[1]	1.27E-05	cm^2/s	[1]
123-91-1	1,4-Dioxan	2.29E-01	cm^2/s	[2]	1.02E-05	cm^2/s	[2]
124-18-5	Decane	6.97E-02	cm^2/s	[1]	8.07E-06	cm^2/s	[1]
124-38-9	Carbon dioxide	1.52E-01	cm^2/s	[1]	1.76E-05	cm^2/s	[1]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
124-48-1	Chlorodibromomethane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
126-73-8	Tributyl phosphate	4.59E-02	cm^2/s	[1]	5.31E-06	cm^2/s	[1]
126-98-7	2-Methyl-2-propenenitrile	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
127-18-4	1,1,2,2-Tetrachloroethene	7.20E-02	cm^2/s	[2]	8.20E-06	cm^2/s	[2]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	5.21E-02	cm^2/s	[1]	6.03E-06	cm^2/s	[1]
129-00-0	Pyrene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
131-11-3	Dimethyl Phthalate	5.68E-02	cm^2/s	[2]	6.29E-06	cm^2/s	[2]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	4.59E-02	cm^2/s	[1]	5.32E-06	cm^2/s	[1]
132-64-9	Dibenzofuran	6.24E-02	cm^2/s	[1]	7.22E-06	cm^2/s	[1]
133-06-2	Captan	1.81E-02	cm^2/s	[3]	5.00E-06	cm^2/s	[3]
1330-20-7	Xylenes (mixed isomers)	7.14E-02	cm^2/s	[3]	9.34E-06	cm^2/s	[3]
1336-36-3	Polychlorinated biphenyls	1.75E-02	cm^2/s	[3]	8.00E-06	cm^2/s	[3]
134-32-7	alpha-Naphthylamine	6.94E-02	cm^2/s	[1]	8.04E-06	cm^2/s	[1]
135-98-8	sec-Butylbenzene	7.25E-02	cm^2/s	[1]	8.39E-06	cm^2/s	[1]
13966-29-5	Uranium-234	5.00E-02	cm^2/s	[1]	5.79E-06	cm^2/s	[1]
13967-48-1	Ruthenium-106	8.49E-02	cm^2/s	[1]	9.83E-06	cm^2/s	[1]
13967-70-9	Cesium-134	7.26E-02	cm^2/s	[1]	8.41E-06	cm^2/s	[1]
13968-55-3	Uranium-233	5.02E-02	cm^2/s	[1]	5.81E-06	cm^2/s	[1]
13981-15-2	Curium-244	4.87E-02	cm^2/s	[1]	5.63E-06	cm^2/s	[1]
13981-16-3	Plutonium-238	4.95E-02	cm^2/s	[1]	5.73E-06	cm^2/s	[1]
13981-37-8	Nickel-63	1.20E-01	cm^2/s	[1]	1.39E-05	cm^2/s	[1]
13982-10-0	Plutonium-242	4.89E-02	cm^2/s	[1]	5.66E-06	cm^2/s	[1]
13982-63-3	Radium-226	5.12E-02	cm^2/s	[1]	5.93E-06	cm^2/s	[1]
13982-70-2	Uranium-236	4.97E-02	cm^2/s	[1]	5.76E-06	cm^2/s	[1]
13994-20-2	Neptunium-237	4.96E-02	cm^2/s	[1]	5.74E-06	cm^2/s	[1]
141-78-6	Acetic acid ethyl ester	7.32E-02	cm^2/s	[3]	9.66E-06	cm^2/s	[3]
14119-32-5	Plutonium-241	4.91E-02	cm^2/s	[1]	5.68E-06	cm^2/s	[1]
14119-33-6	Plutonium-240	4.92E-02	cm^2/s	[1]	5.70E-06	cm^2/s	[1]
14133-76-7	Technetium-99	8.88E-02	cm^2/s	[1]	1.03E-05	cm^2/s	[1]
14158-29-3	Uranium-232	5.03E-02	cm^2/s	[1]	5.83E-06	cm^2/s	[1]
14234-35-6	Antimony-125	7.60E-02	cm^2/s	[1]	8.80E-06	cm^2/s	[1]
14265-44-2	Phosphate	9.13E-02	cm^2/s	[1]	1.06E-05	cm^2/s	[1]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
14331-85-2	Protactinium-231	5.05E-02	cm^2/s	[1]	5.84E-06	cm^2/s	[1]
14336-70-0	Nickel-59	1.25E-01	cm^2/s	[1]	1.45E-05	cm^2/s	[1]
14391-16-3	Europium-155	6.59E-02	cm^2/s	[1]	7.63E-06	cm^2/s	[1]
145-73-3	Endothall	5.83E-02	cm^2/s	[1]	6.75E-06	cm^2/s	[1]
14596-10-2	Americium-241	4.91E-02	cm^2/s	[1]	5.68E-06	cm^2/s	[1]
14683-23-9	Europium-152	6.67E-02	cm^2/s	[1]	7.73E-06	cm^2/s	[1]
14762-75-5	Carbon-14	3.29E-01	cm^2/s	[1]	3.81E-05	cm^2/s	[1]
14797-55-8	Nitrate	1.21E-01	cm^2/s	[1]	1.40E-05	cm^2/s	[1]
14797-65-0	Nitrite	1.48E-01	cm^2/s	[1]	1.71E-05	cm^2/s	[1]
14808-79-8	Sulfate	1.19E-01	cm^2/s	[1]	1.37E-05	cm^2/s	[1]
14952-40-0	Actinium-227	5.11E-02	cm^2/s	[1]	5.91E-06	cm^2/s	[1]
14993-75-0	Americium-243	4.88E-02	cm^2/s	[1]	5.65E-06	cm^2/s	[1]
15046-84-1	Iodine-129	7.45E-02	cm^2/s	[1]	8.62E-06	cm^2/s	[1]
15117-48-3	Plutonium-239	4.93E-02	cm^2/s	[1]	5.71E-06	cm^2/s	[1]
15117-96-1	Uranium-235	4.99E-02	cm^2/s	[1]	5.78E-06	cm^2/s	[1]
15262-20-1	Radium-228	5.09E-02	cm^2/s	[1]	5.89E-06	cm^2/s	[1]
15510-73-3	Curium-242	4.89E-02	cm^2/s	[1]	5.66E-06	cm^2/s	[1]
15585-10-1	Europium-154	6.62E-02	cm^2/s	[1]	7.66E-06	cm^2/s	[1]
15594-54-4	Thorium-229	5.08E-02	cm^2/s	[1]	5.88E-06	cm^2/s	[1]
156-59-2	cis-1,2-Dichloroethene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
156-60-5	1,2-trans-Dichloroethene	7.03E-02	cm^2/s	[2]	1.19E-05	cm^2/s	[2]
15715-94-3	Samarium-151	6.70E-02	cm^2/s	[1]	7.76E-06	cm^2/s	[1]
15751-77-6	Zirconium-93	9.26E-02	cm^2/s	[1]	1.07E-05	cm^2/s	[1]
15757-87-6	Curium-243	4.88E-02	cm^2/s	[1]	5.65E-06	cm^2/s	[1]
15758-45-9	Selenium-79	1.03E-01	cm^2/s	[1]	1.20E-05	cm^2/s	[1]
15832-50-5	Tin-126	7.56E-02	cm^2/s	[1]	8.76E-06	cm^2/s	[1]
1634-04-4	Methyl tert-butyl ether	1.02E-01	cm^2/s	[3]	1.05E-05	cm^2/s	[3]
16887-00-6	Chloride	1.76E-01	cm^2/s	[1]	2.04E-05	cm^2/s	[1]
16984-48-8	Fluoride	2.67E-01	cm^2/s	[1]	3.09E-05	cm^2/s	[1]
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	1.04E-01	cm^2/s	[2]	5.60E-06	cm^2/s	[2]
189-55-9	Dibenzo[a,i]pyrene	4.22E-02	cm^2/s	[1]	4.88E-06	cm^2/s	[1]
189-64-0	Dibenzo[a,h]pyrene	4.22E-02	cm^2/s	[1]	4.88E-06	cm^2/s	[1]
191-24-2	Benzo(g,h,i)perylene	4.48E-02	cm^2/s	[1]	5.19E-06	cm^2/s	[1]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
191-30-0	Dibenzo(a,l)pyrene	4.22E-02	cm^2/s	[1]	4.88E-06	cm^2/s	[1]
192-65-4	Dibenzo[a,e]pyrene	4.22E-02	cm^2/s	[1]	4.88E-06	cm^2/s	[1]
192-97-2	Benzo(e)pyrene	4.76E-02	cm^2/s	[1]	5.51E-06	cm^2/s	[1]
193-39-5	Indeno(1,2,3-cd)pyrene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	9.44E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
205-82-3	Benzo[j]fluoranthene	4.76E-02	cm^2/s	[1]	5.51E-06	cm^2/s	[1]
205-99-2	Benzo(b)fluoranthene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
206-44-0	Fluoranthene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
207-08-9	Benzo(k)fluoranthene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
208-96-8	Acenaphthylene	4.39E-02	cm^2/s	[3]	7.53E-06	cm^2/s	[3]
218-01-9	Chrysene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
224-42-0	Dibenz[a,j]acridine	1.00E-03	cm^2/s	[8]	1.00E-05	cm^2/s	[8]
2245-38-7	2,3,5-Trimethylnaphthalene	6.19E-02	cm^2/s	[1]	7.16E-06	cm^2/s	[1]
226-36-8	Dibenz[a,h]acridine	1.00E-03	cm^2/s	[8]	1.00E-05	cm^2/s	[8]
22967-92-6	Methyl mercury	5.28E-02	cm^2/s	[2]	6.11E-06	cm^2/s	[2]
23950-58-5	Pronamide	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
24959-67-9	Bromide	1.02E-01	cm^2/s	[1]	1.19E-05	cm^2/s	[1]
27154-33-2	Trichlorofluoroethane	8.70E-02	cm^2/s	[9]	9.70E-06	cm^2/s	[9]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	4.01E-02	cm^2/s	[1]	4.64E-06	cm^2/s	[1]
319-84-6	alpha-BHC	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
319-85-7	beta-BHC	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	4.32E-02	cm^2/s	[1]	5.00E-06	cm^2/s	[1]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	4.01E-02	cm^2/s	[1]	4.64E-06	cm^2/s	[1]
3268-87-9	Octachlorodibenzo(p)dioxin	8.69E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	3.75E-02	cm^2/s	[1]	4.34E-06	cm^2/s	[1]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	9.05E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
3697-24-3	5-Methylchrysene	1.00E-03	cm^2/s	[7]	1.00E-05	cm^2/s	[7]
378253-40-8	Barium-137m	7.15E-02	cm^2/s	[1]	8.28E-06	cm^2/s	[1]
378253-44-2	Cadmium-113m	8.13E-02	cm^2/s	[1]	9.42E-06	cm^2/s	[1]
378782-82-2	Niobium-93m	9.26E-02	cm^2/s	[1]	1.07E-05	cm^2/s	[1]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	3.75E-02	cm^2/s	[1]	4.34E-06	cm^2/s	[1]
39001-02-0	Octachlorodibenzofuran	1.95E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	9.44E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	3.53E-02	cm^2/s	[1]	4.08E-06	cm^2/s	[1]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	9.88E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	1.12E-01	cm^2/s	[1]	1.29E-05	cm^2/s	[1]
41851-50-7	Chlorocyclopentadiene	8.79E-02	cm^2/s	[1]	1.02E-05	cm^2/s	[1]
460-19-5	Cyanogen (oxalonitrile)	2.04E-01	cm^2/s	[3]	1.37E-05	cm^2/s	[3]
4786-20-3	2-Butenenitrile	1.15E-01	cm^2/s	[1]	1.33E-05	cm^2/s	[1]
50-00-0	Formaldehyde	1.78E-01	cm^2/s	[2]	1.98E-05	cm^2/s	[2]
50-32-8	Benzo(a)pyrene	4.30E-02	cm^2/s	[2]	9.00E-06	cm^2/s	[2]
506-68-3	Cyanogen bromide (Bromocyanide)	8.49E-02	cm^2/s	[1]	9.83E-06	cm^2/s	[1]
506-77-4	Cyanogen chloride	1.22E-01	cm^2/s	[1]	1.41E-05	cm^2/s	[1]
51-28-5	2,4-Dinitrophenol	2.73E-02	cm^2/s	[2]	9.06E-06	cm^2/s	[2]
51-79-6	Ethyl carbamate (urethane)	9.52E-02	cm^2/s	[1]	1.10E-05	cm^2/s	[1]
510-15-6	Chlorobenzilate	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	2.35E-02	cm^2/s	[2]	6.01E-06	cm^2/s	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	3.75E-02	cm^2/s	[1]	4.34E-06	cm^2/s	[1]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	6.24E-02	cm^2/s	[1]	7.22E-06	cm^2/s	[1]
53-70-3	Dibenz[a,h]anthracene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
532-27-4	2-Chloroacetophenone	3.83E-02	cm^2/s	[3]	8.71E-06	cm^2/s	[3]
534-52-1	4,6-Dinitro-o-cresol	2.93E-02	cm^2/s	[3]	6.91E-06	cm^2/s	[3]
5385-75-1	Dibenzo(a,e)fluoranthene	4.22E-02	cm^2/s	[1]	4.88E-06	cm^2/s	[1]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	9.00E-02	cm^2/s	[1]	1.04E-05	cm^2/s	[1]
540-73-8	1,2-Dimethylhydrazine	1.24E-01	cm^2/s	[1]	1.43E-05	cm^2/s	[1]
540-84-1	2,2,4-Trimethylpentane	8.07E-02	cm^2/s	[1]	9.34E-06	cm^2/s	[1]
541-73-1	1,3-Dichlorobenzene	6.92E-02	cm^2/s	[2]	7.86E-06	cm^2/s	[2]
542-75-6	1,3-Dichloropropene	6.26E-02	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
542-88-1	Bis(chloromethyl)ether	5.73E-02	cm^2/s	[3]	9.38E-06	cm^2/s	[3]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.03E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
56-23-5	Carbon tetrachloride	7.80E-02	cm^2/s	[2]	8.80E-06	cm^2/s	[2]
56-49-5	3-Methylcholanthrene	4.57E-02	cm^2/s	[1]	5.29E-06	cm^2/s	[1]
56-55-3	Benzo(a)anthracene	5.10E-02	cm^2/s	[2]	9.00E-06	cm^2/s	[2]
57-12-5	Cyanide	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
57-24-9	Strychnine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
57-74-9	Chlordane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2.23E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	2.23E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	2.12E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	4.01E-02	cm^2/s	[1]	4.64E-06	cm^2/s	[1]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	9.44E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
58-89-9	gamma-BHC (Lindane)	1.42E-02	cm^2/s	[3]	7.34E-06	cm^2/s	[3]
58-90-2	2,3,4,6-Tetrachlorophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
581-42-0	2,6-Dimethylnaphthalene	6.55E-02	cm^2/s	[1]	7.58E-06	cm^2/s	[1]
584-84-9	2,4-Toluene diisocyanate	2.03E-01	cm^2/s	[4]	7.06E-06	cm^2/s	[4]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
589-38-8	3-Hexanone	8.81E-02	cm^2/s	[1]	1.02E-05	cm^2/s	[1]
59-50-7	4-Chloro-3-methylphenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
59-89-2	N-Nitrosomorpholine	7.98E-02	cm^2/s	[1]	9.24E-06	cm^2/s	[1]
591-50-4	Benzene, iodo-	5.48E-02	cm^2/s	[1]	6.35E-06	cm^2/s	[1]
591-78-6	2-Hexanone	8.81E-02	cm^2/s	[1]	1.02E-05	cm^2/s	[1]
593-60-2	Bromoethene (Vinyl bromide)	5.98E-02	cm^2/s	[3]	1.18E-05	cm^2/s	[3]
593-74-8	Dimethyl Mercury	5.05E-02	cm^2/s	[1]	5.85E-06	cm^2/s	[1]
60-11-7	Dimethyl aminoazobenzene	5.13E-02	cm^2/s	[1]	5.94E-06	cm^2/s	[1]
60-29-7	Ethyl ether	7.40E-02	cm^2/s	[3]	9.30E-06	cm^2/s	[3]
60-35-5	Acetamide	1.25E-01	cm^2/s	[1]	1.45E-05	cm^2/s	[1]
602-87-9	5-Nitroacenaphthene	1.00E-03	cm^2/s	[5]	1.00E-05	cm^2/s	[5]
606-20-2	2,6-Dinitrotoluene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
608-93-5	Pentachlorobenzene	5.70E-02	cm^2/s	[2]	6.30E-06	cm^2/s	[2]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2.12E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
61626-71-9	Dichloropentadiene	6.95E-02	cm^2/s	[1]	8.04E-06	cm^2/s	[1]
62-50-0	Ethyl methanesulfonate	7.63E-02	cm^2/s	[2]	8.84E-06	cm^2/s	[2]
62-53-3	Aniline	7.00E-02	cm^2/s	[2]	8.30E-06	cm^2/s	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	1.13E-01	cm^2/s	[3]	1.24E-05	cm^2/s	[3]
621-64-7	N-Nitroso-di-n-propylamine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
624-83-9	Methyl isocyanate	1.22E-01	cm^2/s	[6]	1.34E-05	cm^2/s	[6]
628-73-9	Hexanenitrile	8.99E-02	cm^2/s	[1]	1.04E-05	cm^2/s	[1]
630-08-0	Carbon monoxide	2.06E-01	cm^2/s	[1]	2.39E-05	cm^2/s	[1]
630-20-6	1,1,1,2-Tetrachloroethane	7.10E-02	cm^2/s	[2]	7.90E-06	cm^2/s	[2]
64-18-6	Formic acid (Methanoic acid)	7.90E-02	cm^2/s	[2]	1.37E-06	cm^2/s	[2]
65-85-0	Benzoic acid	1.00E-03	cm^2/s	[2]	7.97E-06	cm^2/s	[2]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	4.01E-02	cm^2/s	[1]	4.64E-06	cm^2/s	[1]
67-56-1	Methyl alcohol	1.50E-01	cm^2/s	[2]	1.64E-05	cm^2/s	[2]
67-63-0	2-Propyl alcohol	9.80E-02	cm^2/s	[3]	1.04E-05	cm^2/s	[3]
67-64-1	2-Propanone (Acetone)	1.24E-01	cm^2/s	[2]	1.14E-05	cm^2/s	[2]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
67-66-3	Chloroform	1.04E-01	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
67-72-1	Hexachloroethane	2.50E-03	cm^2/s	[2]	6.80E-06	cm^2/s	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.03E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	3.75E-02	cm^2/s	[1]	4.34E-06	cm^2/s	[1]
70-30-4	Hexachlorophene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	4.32E-02	cm^2/s	[1]	5.00E-06	cm^2/s	[1]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	2.12E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
71-36-3	n-Butyl alcohol	8.00E-02	cm^2/s	[3]	9.30E-06	cm^2/s	[3]
71-43-2	Benzene	8.80E-02	cm^2/s	[2]	1.02E-05	cm^2/s	[2]
71-55-6	1,1,1-Trichloroethane	7.80E-02	cm^2/s	[2]	8.80E-06	cm^2/s	[2]
72-43-5	Methoxychlor	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
72-55-9	4,4-DDE	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	2.12E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
74-83-9	Bromomethane	7.28E-02	cm^2/s	[2]	1.21E-05	cm^2/s	[2]
74-87-3	Chloromethane	1.26E-01	cm^2/s	[2]	6.50E-06	cm^2/s	[2]
74-88-4	Iodomethane	6.98E-02	cm^2/s	[1]	8.09E-06	cm^2/s	[1]
74-95-3	Methylene bromide	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
74-97-5	Bromochloromethane	4.74E-02	cm^2/s	[3]	1.00E-05	cm^2/s	[3]
7429-90-5	Aluminum	2.11E-01	cm^2/s	[1]	2.45E-05	cm^2/s	[1]
7439-89-6	Iron	1.30E-01	cm^2/s	[1]	1.51E-05	cm^2/s	[1]
7439-92-1	Lead	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7439-93-2	Lithium	5.22E-01	cm^2/s	[1]	6.05E-05	cm^2/s	[1]
7439-95-4	Magnesium	2.26E-01	cm^2/s	[1]	2.62E-05	cm^2/s	[1]
7439-96-5	Manganese	1.31E-01	cm^2/s	[1]	1.52E-05	cm^2/s	[1]
7439-97-6	Mercury	1.09E-02	cm^2/s	[2]	3.01E-05	cm^2/s	[2]
7439-98-7	Molybdenum	9.07E-02	cm^2/s	[1]	1.05E-05	cm^2/s	[1]
7440-02-0	Nickel	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-16-6	Rhodium	8.65E-02	cm^2/s	[1]	1.00E-05	cm^2/s	[1]
7440-22-4	Silver	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
7440-23-5	Sodium	2.35E-01	cm^2/s	[1]	2.72E-05	cm^2/s	[1]
7440-24-6	Strontium (total)	9.63E-02	cm^2/s	[1]	1.12E-05	cm^2/s	[1]
7440-25-7	Tantalum	5.94E-02	cm^2/s	[1]	6.88E-06	cm^2/s	[1]
7440-28-0	Thallium	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-29-1	Thorium-232	5.03E-02	cm^2/s	[1]	5.83E-06	cm^2/s	[1]
7440-31-5	Tin	7.87E-02	cm^2/s	[1]	9.11E-06	cm^2/s	[1]
7440-33-7	Tungsten	5.88E-02	cm^2/s	[1]	6.80E-06	cm^2/s	[1]
7440-36-0	Antimony	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-38-2	Arsenic	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-39-3	Barium	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-41-7	Beryllium	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-43-9	Cadmium	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-47-3	Chromium	1.27E-01	cm^2/s	[2]	1.41E-05	cm^2/s	[2]
7440-48-4	Cobalt	1.25E-01	cm^2/s	[1]	1.45E-05	cm^2/s	[1]
7440-50-8	Copper	1.19E-01	cm^2/s	[1]	1.38E-05	cm^2/s	[1]
7440-61-1	Uranium	4.95E-02	cm^2/s	[1]	5.73E-06	cm^2/s	[1]
7440-61-1R	Uranium-238	4.95E-02	cm^2/s	[1]	5.73E-06	cm^2/s	[1]
7440-62-2	Vanadium	1.38E-01	cm^2/s	[1]	1.60E-05	cm^2/s	[1]
7440-65-5	Yttrium	9.54E-02	cm^2/s	[1]	1.10E-05	cm^2/s	[1]
7440-66-6	Zinc	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7440-67-7	Zirconium	9.38E-02	cm^2/s	[1]	1.09E-05	cm^2/s	[1]
7446-09-5	Sulfur dioxide	1.19E-01	cm^2/s	[1]	1.37E-05	cm^2/s	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	4.01E-02	cm^2/s	[1]	4.64E-06	cm^2/s	[1]
7487-94-7	Mercury (Hg^{+2})	4.53E-02	cm^2/s	[2]	5.25E-06	cm^2/s	[2]
75-00-3	Chloroethane	2.71E-01	cm^2/s	[2]	1.15E-05	cm^2/s	[2]
75-01-4	1-Chloroethene	1.06E-01	cm^2/s	[2]	1.23E-05	cm^2/s	[2]
75-02-5	Fluoroethene (Vinyl fluoride)	1.48E-01	cm^2/s	[1]	1.71E-05	cm^2/s	[1]
75-05-8	Acetonitrile	1.28E-01	cm^2/s	[2]	1.66E-05	cm^2/s	[2]
75-07-0	Acetaldehyde	1.24E-01	cm^2/s	[2]	1.41E-05	cm^2/s	[2]
75-09-2	Dichloromethane (Methylene chloride)	1.01E-01	cm^2/s	[2]	1.17E-05	cm^2/s	[2]
75-15-0	Carbon disulfide	1.04E-01	cm^2/s	[2]	1.00E-05	cm^2/s	[2]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
75-21-8	Ethylene oxide (Oxirane)	1.04E-01	cm^2/s	[2]	1.45E-05	cm^2/s	[2]
75-25-2	Bromoform	1.49E-02	cm^2/s	[2]	1.03E-05	cm^2/s	[2]
75-27-4	Bromodichloromethane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
75-29-6	2-Chloropropane	1.16E-01	cm^2/s	[3]	1.01E-05	cm^2/s	[3]
75-34-3	1,1-Dichloroethane	7.42E-02	cm^2/s	[2]	1.05E-05	cm^2/s	[2]
75-35-4	1,1-Dichloroethene	9.00E-02	cm^2/s	[2]	1.04E-05	cm^2/s	[2]
75-44-5	Phosgene (Hydrogen phosphide)	8.88E-02	cm^2/s	[1]	1.03E-05	cm^2/s	[1]
75-45-6	Chlorodifluoromethane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
75-50-3	Trimethylamine	1.25E-01	cm^2/s	[1]	1.45E-05	cm^2/s	[1]
75-69-4	Trichlorofluoromethane	8.70E-02	cm^2/s	[2]	9.70E-06	cm^2/s	[2]
75-71-8	Dichlorodifluoromethane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
76-01-7	Pentachloroethane	5.51E-02	cm^2/s	[1]	6.38E-06	cm^2/s	[1]
76-13-1	1,2,2-Trichlorotrifluoroethane	2.88E-02	cm^2/s	[3]	8.07E-06	cm^2/s	[3]
76-44-8	Heptachlor	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
764-41-0	1,4-Dichloro-2-butene	7.25E-02	cm^2/s	[3]	8.12E-06	cm^2/s	[3]
7647-01-0	Hydrogen chloride	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
765-34-4	Glycidylaldehyde	1.10E-01	cm^2/s	[1]	1.27E-05	cm^2/s	[1]
7664-39-3	Hydrogen Fluoride	2.58E-01	cm^2/s	[1]	2.99E-05	cm^2/s	[1]
7664-41-7	Ammonia/Ammonium	2.87E-01	cm^2/s	[1]	3.32E-05	cm^2/s	[1]
77-47-4	Hexachlorocyclopentadiene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
77-78-1	Dimethyl sulfate	5.14E-02	cm^2/s	[3]	9.57E-06	cm^2/s	[3]
7704-34-9	Total Sulfur (thermodynamically stable)	1.88E-01	cm^2/s	[1]	2.18E-05	cm^2/s	[1]
7723-14-0	Phosphorus	1.93E-01	cm^2/s	[1]	2.23E-05	cm^2/s	[1]
7782-41-4	Fluorine gas (F_2)	1.68E-01	cm^2/s	[1]	1.95E-05	cm^2/s	[1]
7782-49-2	Selenium	7.72E-02	cm^2/s	[2]	9.57E-06	cm^2/s	[2]
7782-50-5	Chlorine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
78-83-1	2-Methylpropyl alcohol	8.60E-02	cm^2/s	[3]	9.30E-06	cm^2/s	[3]
78-87-5	1,2-Dichloropropane	7.82E-02	cm^2/s	[2]	8.73E-06	cm^2/s	[2]
78-93-3	2-Butanone	8.08E-02	cm^2/s	[2]	9.80E-06	cm^2/s	[2]
79-00-5	1,1,2-Trichloroethane	7.80E-02	cm^2/s	[2]	8.80E-06	cm^2/s	[2]
79-01-6	1,1,2-Trichloroethylene	7.90E-02	cm^2/s	[2]	9.10E-06	cm^2/s	[2]
79-10-7	2-Propenoic acid	9.80E-02	cm^2/s	[3]	1.06E-05	cm^2/s	[3]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
79-34-5	1,1,2,2-Tetrachloroethane	7.10E-02	cm^2/s	[2]	7.90E-06	cm^2/s	[2]
79-46-9	2-Nitropropane	9.23E-02	cm^2/s	[3]	1.01E-05	cm^2/s	[3]
80-62-6	Methyl methacrylate	7.70E-02	cm^2/s	[3]	8.60E-06	cm^2/s	[3]
82-68-8	Pentachloronitrobenzene (PCNB)	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
822-06-0	Hexamethylene-1,5-diisocyanate	3.80E-02	cm^2/s	[3]	7.17E-06	cm^2/s	[3]
823-40-5	Toluene-2,6-diamine	5.59E-02	cm^2/s	[3]	9.23E-06	cm^2/s	[3]
83-32-9	Acenaphthene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
832-69-9	1-Methylphenanthrene	5.70E-02	cm^2/s	[1]	6.60E-06	cm^2/s	[1]
84-66-2	Diethyl phthalate	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
84-74-2	Di-n-butylphthalate	4.38E-02	cm^2/s	[2]	7.86E-06	cm^2/s	[2]
85-01-8	Phenanthrene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	7.10E-02	cm^2/s	[2]	8.60E-06	cm^2/s	[2]
85-68-7	Butylbenzylphthalate	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
86-73-7	Fluorene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
87-61-6	1,2,3-Trichlorobenzene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
87-68-3	Hexachlorobutadiene	5.61E-02	cm^2/s	[2]	6.16E-06	cm^2/s	[2]
87-86-5	Pentachlorophenol	5.60E-02	cm^2/s	[2]	6.10E-06	cm^2/s	[2]
88-06-2	2,4,6-Trichlorophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
88-74-4	o-Nitroaniline (2-nitroaniline)	7.30E-02	cm^2/s	[2]	8.00E-06	cm^2/s	[2]
88-75-5	2-Nitrophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
90-04-0	o-Anisidine	7.68E-02	cm^2/s	[1]	8.89E-06	cm^2/s	[1]
90-12-0	1-Methylnaphthalene	4.80E-02	cm^2/s	[3]	7.84E-06	cm^2/s	[3]
91-20-3	Naphthalene	5.90E-02	cm^2/s	[2]	7.50E-06	cm^2/s	[2]
91-22-5	Quinoline	5.46E-02	cm^2/s	[3]	8.31E-06	cm^2/s	[3]
91-57-6	2-Methylnaphthalene	4.80E-02	cm^2/s	[3]	7.84E-06	cm^2/s	[3]
91-58-7	2-Chloronaphthalene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
91-94-1	3,3'-Dichlorobenzidine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
92-52-4	1,1`-Biphenyl	4.04E-02	cm^2/s	[3]	8.15E-06	cm^2/s	[3]
924-16-3	N-Nitroso-di-n-Buetylamine	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]

Table 2-3 Air and Water Diffusivity

CAS Registry Number	Analyte Name	Air Diffusivity (D_a)	Units for Air Diffusivity	Reference	Water Diffusivity (D_w)	Units for Water Diffusivity	Reference
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
94-75-7	2,4-D	2.31E-02	cm^2/s	[3]	7.31E-06	cm^2/s	[3]
95-48-7	o-Cresol	7.40E-02	cm^2/s	[2]	8.30E-06	cm^2/s	[2]
95-49-8	o-Chlorotoluene	5.50E-02	cm^2/s	[3]	8.65E-06	cm^2/s	[3]
95-50-1	1,2-Dichlorobenzene	6.90E-02	cm^2/s	[2]	7.90E-06	cm^2/s	[2]
95-53-4	o-Toluidine	7.14E-02	cm^2/s	[2]	9.12E-06	cm^2/s	[2]
95-57-8	2-Chlorophenol	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
95-63-6	1,2,4-Trimethyl benzene	6.44E-02	cm^2/s	[3]	7.92E-06	cm^2/s	[3]
95-94-3	1,2,4,5-Tetrachlorobenzene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
95-95-4	2,4,5-Trichlorophenol	2.91E-02	cm^2/s	[2]	7.03E-06	cm^2/s	[2]
96-12-8	1,2-Dibromo-3-chloropropane	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
96-18-4	1,2,3-Trichloropropane	7.10E-02	cm^2/s	[2]	7.90E-06	cm^2/s	[2]
96-45-7	Ethylene thiourea	7.15E-02	cm^2/s	[3]	1.02E-05	cm^2/s	[3]
97-63-2	Ethyl methacrylate	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
98-01-1	Furfural	8.72E-02	cm^2/s	[3]	1.04E-05	cm^2/s	[3]
98-06-6	tert-Butyl benzene	7.25E-02	cm^2/s	[1]	8.39E-06	cm^2/s	[1]
98-07-7	Benzotrichloride	2.75E-02	cm^2/s	[3]	7.77E-06	cm^2/s	[3]
98-82-8	Cumene	6.50E-02	cm^2/s	[2]	7.10E-06	cm^2/s	[2]
98-83-9	Methyl styrene (mixed isomers)	2.64E-01	cm^2/s	[3]	1.14E-05	cm^2/s	[3]
98-86-2	Acetophenone	6.00E-02	cm^2/s	[2]	8.73E-06	cm^2/s	[2]
98-95-3	Nitrobenzene	7.60E-02	cm^2/s	[2]	8.60E-06	cm^2/s	[2]
99-35-4	1,3,5-Trinitrobenzene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
99-65-0	1,3-Dinitrobenzene	1.00E-03	cm^2/s	[2]	1.00E-05	cm^2/s	[2]
99-87-6	p-Cymene	7.25E-02	cm^2/s	[1]	8.39E-06	cm^2/s	[1]

Reference **Reference (source) for Air Diffusivity**

[1] Calculated value per Eq. A-2-4 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

[2] EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.

Reference	Reference (source) for Air Diffusivity
[3]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Water Diffusivity
[1]	Calculated value per Eq. A-2-5 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities,* EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
100-02-7	p-Nitrophenol	6.13E-03	cm/hr	[4]	8.13E+01	unitless	[3]	7.55E+01	mL/g	[3]
100-21-0	Phthalic acid	4.86E-03	cm/hr	[4]	1.00E+02	unitless	[5]	7.16E+01	mL/g	[5]
100-25-4	1,4-Dinitrobenzene	1.95E-03	cm/hr	[4]	2.88E+01	unitless	[5]	2.20E+02	mL/g	[5]
100-40-3	4-Ethenylcyclo-hexene				8.51E+03	unitless	[1]	1.55E+03	mL/g	[2]
100-41-4	Ethyl benzene	7.39E-02	cm/hr	[4]	1.26E+03	unitless	[3]	2.04E+02	mL/g	[15]
100-42-5	Styrene	5.48E-02	cm/hr	[4]	1.00E+03	unitless	[3]	9.12E+02	mL/g	[15]
100-44-7	Benzyl chloride	1.38E-02	cm/hr	[4]	2.00E+02	unitless	[3]	1.82E+02	mL/g	[3]
100-47-0	Benzonitrile				3.63E+01	unitless	[3]	3.42E+01	mL/g	[3]
100-51-6	Benzyl alcohol	2.52E-03	cm/hr	[4]	1.26E+01	unitless	[3]	1.21E+01	mL/g	[3]
100-52-7	Benzaldehyde	4.82E-03	cm/hr	[4]	3.02E+01	unitless	[3]	2.85E+01	mL/g	[3]
10028-15-6	Ozone				1.35E-01	unitless	[4]			
10028-17-8	Tritium									
10045-97-3	Cesium-137									
10061-01-5	cis-1,3-Dichloropropene	1.49E-02	cm/hr	[12]	1.15E+02	unitless	[1]	3.83E+01	mL/g	[13]
10061-02-6	trans-1,3-Dichloropropene				1.07E+02	unitless	[1]	9.90E+01	mL/g	[1]
10098-91-6	Yttrium-90									
10098-97-2	Strontium-90									
101-55-3	4-Bromophenyl-phenyl ether	1.85E-01	cm/hr	[4]	1.75E+05	unitless	[3]	1.43E+05	mL/g	[3]
101-77-9	4,4-Methylene-dianiline	1.58E-03	cm/hr	[4]	3.89E+01	unitless	[5]	4.95E+03	mL/g	[5]
10102-44-0	Nitrogen dioxide	1.00E-03	cm/hr	[4]						
10198-40-0	Cobalt-60									
103-33-3	Azobenzene	7.60E-02	cm/hr	[4]	6.61E+03	unitless	[5]	1.95E+03	mL/g	[5]
103-65-1	n-Propyl benzene (Isocumene)				4.90E+03	unitless	[1]	1.00E+03	mL/g	[2]
104-51-8	n-Butylbenzene				2.40E+04	unitless	[1]	2.45E+03	mL/g	[4]
104-76-7	2-Ethyl-1-hexanol				5.37E+02	unitless	[6]	4.83E+02	mL/g	[1]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
105-67-9	2,4-Dimethylphenol	1.47E-02	cm/hr	[4]	2.00E+02	unitless	[3]	1.82E+02	mL/g	[3]
10595-95-6	n-Nitrosomethyl-ethylamine	5.90E-04	cm/hr	[4]	1.10E+00	unitless	[5]	7.38E+01	mL/g	[5]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)				2.14E+03	unitless	[1]	1.88E+03	mL/g	[1]
106-44-5	p-Cresol (4-methyl phenol)	9.95E-03	cm/hr	[4]	7.94E+01	unitless	[3]	7.38E+01	mL/g	[3]
106-46-7	1,4-Dichlorobenzene	6.69E-02	cm/hr	[4]	3.16E+03	unitless	[3]	6.16E+02	mL/g	[15]
106-47-8	p-Chloroaniline	6.33E-03	cm/hr	[4]	6.76E+01	unitless	[3]	6.30E+01	mL/g	[3]
106-49-0	p-Toluidine	4.10E-03	cm/hr	[4]	2.45E+01	unitless	[5]	7.25E+01	mL/g	[5]
106-51-4	Quinone				1.58E+00	unitless	[1]	1.57E+00	mL/g	[1]
106-88-7	1,2-Epoxybutane	2.84E-03	cm/hr	[4]	7.24E+00	unitless	[5]	4.49E+00	mL/g	[5]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1.08E-03	cm/hr	[4]	6.17E-01	unitless	[3]	6.20E-01	mL/g	[3]
106-93-4	Ethylene dibromide	3.35E-03	cm/hr	[4]	1.00E+02	unitless	[3]	6.60E+01	mL/g	[15]
106-99-0	1,3-Butadiene	2.31E-02	cm/hr	[4]	9.77E+01	unitless	[5]	4.38E+01	mL/g	[5]
107-02-8	Acrolein	8.53E-04	cm/hr	[4]	9.77E-01	unitless	[3]	9.80E-01	mL/g	[3]
107-05-1	3-Chloropropene	1.53E-02	cm/hr	[4]	8.51E+01	unitless	[5]	4.38E+01	mL/g	[5]
107-06-2	1,2-Dichloroethane	5.34E-03	cm/hr	[4]	3.16E+01	unitless	[3]	3.80E+01	mL/g	[15]
107-12-0	Propionitrile				1.45E+00	unitless	[1]	1.44E+00	mL/g	[1]
107-13-1	Acrylonitrile	1.36E-03	cm/hr	[4]	1.78E+00	unitless	[3]	1.76E+00	mL/g	[3]
107-19-7	Propargyl alcohol	4.66E-04	cm/hr	[4]	4.17E-01	unitless	[5]	1.33E+00	mL/g	[5]
107-21-1	Ethylene glycol (1,2-ethanediol)	8.63E-05	cm/hr	[4]	4.37E-02	unitless	[5]	1.00E+00	mL/g	[5]
107-98-2	Propylene glycol monomethyl ether	2.42E-04	cm/hr	[4]	3.24E-01	unitless	[5]	1.00E+00	mL/g	[5]
108-05-4	Acetic acid vinyl ester	1.88E-03	cm/hr	[4]	5.37E+00	unitless	[3]	5.22E+00	mL/g	[3]
108-10-1	4-Methyl-2-pentanone	3.97E-03	cm/hr	[4]	1.58E+01	unitless	[3]	1.51E+01	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
108-39-4	m-Cresol	1.03E-02	cm/hr	[4]	9.12E+01	unitless	[3]	8.45E+01	mL/g	[3]
108-60-1	Bis(2-chloroisopropyl) ether	9.94E-03	cm/hr	[4]	3.02E+02	unitless	[5]	3.92E+01	mL/g	[5]
108-67-8	1,3,5-Trimethylbenzene	9.44E-02	cm/hr	[4]	2.63E+03	unitless	[3]	6.12E+02	mL/g	[3]
108-86-1	Bromobenzene (Phenyl bromide)	2.79E-02	cm/hr	[4]	9.77E+02	unitless	[5]	2.68E+02	mL/g	[5]
108-87-2	Methylcyclo-hexane	1.75E-01	cm/hr	[4]	4.07E+03	unitless	[5]	2.68E+02	mL/g	[5]
108-88-3	Toluene	4.53E-02	cm/hr	[4]	5.01E+02	unitless	[3]	1.40E+02	mL/g	[15]
108-90-7	Chlorobenzene	4.07E-02	cm/hr	[4]	6.31E+02	unitless	[3]	2.24E+02	mL/g	[15]
108-94-1	Cyclohexanone	1.80E-03	cm/hr	[4]	6.46E+00	unitless	[5]	1.52E+01	mL/g	[5]
108-95-2	Phenol	5.53E-03	cm/hr	[4]	3.16E+01	unitless	[3]	2.98E+01	mL/g	[3]
109-74-0	n-Butanenitrile				3.39E+00	unitless	[1]	3.32E+00	mL/g	[1]
109-75-1	3-Butenenitrile									
109-77-3	Malononitrile	2.82E-04	cm/hr	[4]	2.51E-01	unitless	[5]	1.53E+01	mL/g	[5]
109-86-4	2-Methoxyethanol	1.86E-04	cm/hr	[4]	1.70E-01	unitless	[5]	1.00E+00	mL/g	[5]
109-99-9	Tetrahydrofuran	1.20E-03	cm/hr	[3]	2.88E+00	unitless	[3]	2.83E+00	mL/g	[3]
110-00-9	Furan	6.55E-03	cm/hr	[4]	2.19E+01	unitless	[5]	8.97E+01	mL/g	[5]
110-54-3	n-Hexane	3.34E-01	cm/hr	[4]	7.94E+03	unitless	[5]	1.49E+02	mL/g	[5]
110-59-8	Pentanenitrile				1.32E+01	unitless	[1]	1.26E+01	mL/g	[1]
110-80-5	2-Ethoxyethanol	3.18E-04	cm/hr	[4]	4.79E-01	unitless	[5]	1.00E+00	mL/g	[5]
110-82-7	Cyclohexane				2.75E+03	unitless	[1]	6.35E+02	mL/g	[2]
110-83-8	Cyclohexene				7.24E+02	unitless	[1]	2.20E+02	mL/g	[2]
110-86-1	Pyridine	1.82E-03	cm/hr	[4]	4.47E+00	unitless	[3]	4.36E+00	mL/g	[3]
111-15-9	Ethylene glycol monoethyl ether acetate	7.81E-04	cm/hr	[4]	3.89E+00	unitless	[5]	2.09E+00	mL/g	[5]
111-44-4	Bis(2-chloroethyl)ether	2.11E-03	cm/hr	[4]	1.95E+01	unitless	[3]	7.60E+01	mL/g	[15]
111-65-9	n-Octane				1.51E+05	unitless	[1]	1.52E+04	mL/g	[2]
111-76-2	2-Butoxyethanol	1.41E-03	cm/hr	[4]	6.76E+00	unitless	[5]	1.00E+00	mL/g	[5]
111-84-2	n-Nonane				4.47E+05	unitless	[7]	3.57E+04	mL/g	[2]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
111-91-1	Bis(2-chloroethoxy) methane	1.39E-03	cm/hr	[4]	2.00E+01	unitless	[5]	2.77E+00	mL/g	[5]
112-30-1	1-Decanol	7.90E-02	cm/hr	[1]	3.72E+04	unitless	[2]	3.11E+04	mL/g	[1]
112-31-2	Decanal									
112-40-3	Dodecane									
1120-21-4	Undecane									
1120-71-4	1,3-Propane sultone				5.25E-01	unitless	[7]	5.31E-01	mL/g	[1]
117-81-7	Bis(2-ethylhexyl) phthalate	1.97E+00	cm/hr	[4]	1.26E+05	unitless	[3]	1.11E+05	mL/g	[15]
117-84-0	Di-n-octyl-phthalate	4.45E+00	cm/hr	[4]	1.26E+08	unitless	[3]	9.17E+07	mL/g	[3]
118-74-1	Hexachloro-benzene	4.08E-01	cm/hr	[4]	2.00E+05	unitless	[3]	8.00E+04	mL/g	[15]
119-90-4	3,3'-Dimethoxybenzidine	1.19E-03	cm/hr	[4]	6.46E+01	unitless	[3]	6.02E+01	mL/g	[3]
120-12-7	Anthracene	2.25E-01	cm/hr	[4]	3.16E+04	unitless	[3]	2.35E+04	mL/g	[15]
120-82-1	1,2,4-Trichlorobenzene	1.07E-01	cm/hr	[4]	1.00E+04	unitless	[3]	1.66E+03	mL/g	[15]
120-83-2	2,4-Dichlorophenol	2.87E-02	cm/hr	[4]	7.94E+02	unitless	[3]	1.47E+02	mL/g	[3]
121-14-2	2,4-Dinitrotoluene	3.76E-03	cm/hr	[4]	9.55E+01	unitless	[3]	8.84E+01	mL/g	[3]
122-39-4	N,N-Diphenylamine	5.40E-02	cm/hr	[4]	3.16E+03	unitless	[5]	1.89E+03	mL/g	[5]
122-66-7	1,2-Diphenyl-hydrazine	1.75E-02	cm/hr	[4]	7.94E+02	unitless	[3]	7.10E+02	mL/g	[3]
123-33-1	Maleic hydrazide	1.00E-04	cm/hr	[4]	1.45E-01	unitless	[5]	1.04E+01	mL/g	[5]
123-38-6	Propionaldehyde				3.89E+00	unitless	[1]	3.80E+00	mL/g	[1]
123-72-8	Butanal				7.59E+00	unitless	[1]	7.33E+00	mL/g	[1]
123-91-1	1,4-Dioxan	3.56E-04	cm/hr	[4]	5.37E-01	unitless	[3]	5.40E-01	mL/g	[3]
124-18-5	Decane									
124-38-9	Carbon dioxide									

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
124-48-1	Chlorodibromomethane	3.49E-03	cm/hr	[4]	1.70E+02	unitless	[3]	6.99E+01	mL/g	[3]
126-73-8	Tributyl phosphate	3.13E-02	cm/hr	[4]	1.00E+04	unitless	[5]	1.89E+03	mL/g	[5]
126-98-7	2-Methyl-2-propenenitrile	2.26E-03	cm/hr	[4]	3.47E+00	unitless	[3]	3.40E+00	mL/g	[3]
127-18-4	1,1,2,2-Tetrachloroethene	4.81E-02	cm/hr	[4]	2.51E+03	unitless	[3]	2.65E+02	mL/g	[15]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol				1.26E+05	unitless	[1]	2.30E+04	mg/L	[14]
129-00-0	Pyrene	3.24E-01	cm/hr	[4]	7.94E+04	unitless	[3]	6.80E+04	mL/g	[15]
131-11-3	Dimethyl Phthalate	1.70E-03	cm/hr	[4]	3.63E+01	unitless	[3]	3.42E+01	mL/g	[3]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	3.81E-02	cm/hr	[4]	1.32E+04	unitless	[5]	1.40E+04	mL/g	[5]
132-64-9	Dibenzofuran	1.51E-01	cm/hr	[4]	1.32E+04	unitless	[5]	1.13E+04	mL/g	[5]
133-06-2	Captan	2.72E-03	cm/hr	[4]	6.31E+02	unitless	[5]	8.62E+02	mL/g	[5]
1330-20-7	Xylenes (mixed isomers)	7.04E-02	cm/hr	[4]	1.32E+03	unitless	[5]	4.43E+02	mL/g	[5]
1336-36-3	Polychlorinated biphenyls	9.22E-01	cm/hr	[4]	1.95E+06	unitless	[5]	4.48E+04	mL/g	[5]
134-32-7	alpha-Naphthylamine	7.70E-03	cm/hr	[1]	1.78E+02	unitless	[2]	3.04E+03	mg/L	[14]
135-98-8	sec-Butylbenzene				3.72E+04	unitless	[1]	4.98E+03	mL/g	[2]
13966-29-5	Uranium-234									
13967-48-1	Ruthenium-106									
13967-70-9	Cesium-134									
13968-55-3	Uranium-233									
13981-15-2	Curium-244									
13981-16-3	Plutonium-238									
13981-37-8	Nickel-63									
13982-10-0	Plutonium-242									
13982-63-3	Radium-226									

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
13982-70-2	Uranium-236									
13994-20-2	Neptunium-237									
141-78-6	Acetic acid ethyl ester	1.82E-03	cm/hr	[4]	5.37E+00	unitless	[5]	6.13E+00	mL/g	[5]
14119-32-5	Plutonium-241									
14119-33-6	Plutonium-240									
14133-76-7	Technetium-99									
14158-29-3	Uranium-232									
14234-35-6	Antimony-125									
14265-44-2	Phosphate									
14331-85-2	Protactinium-231									
14336-70-0	Nickel-59									
14391-16-3	Europium-155									
145-73-3	Endothall	3.17E-03	cm/hr	[4]	8.13E+01	unitless	[5]	1.00E+01	mL/g	[5]
14596-10-2	Americium-241									
14683-23-9	Europium-152									
14762-75-5	Carbon-14									
14797-55-8	Nitrate	1.00E-03	cm/hr	[4]						
14797-65-0	Nitrite	1.00E-03	cm/hr	[4]						
14808-79-8	Sulfate	1.00E-03	cm/hr	[4]						
14952-40-0	Actinium-227									
14993-75-0	Americium-243									
15046-84-1	Iodine-129									
15117-48-3	Plutonium-239									
15117-96-1	Uranium-235									
15262-20-1	Radium-228									
15510-73-3	Curium-242									
15585-10-1	Europium-154									
15594-54-4	Thorium-229									
156-59-2	cis-1,2-Dichloroethene	1.49E-02	cm/hr	[4]	7.94E+01	unitless	[3]	3.83E+01	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
156-60-5	1,2-trans-Dichloroethene	1.49E-02	cm/hr	[4]	1.26E+02	unitless	[3]	3.80E+01	mL/g	[3]
15715-94-3	Samarium-151									
15751-77-6	Zirconium-93									
15757-87-6	Curium-243									
15758-45-9	Selenium-79									
15832-50-5	Tin-126									
1634-04-4	Methyl tert-butyl ether	2.57E-03	cm/hr	[4]	8.71E+00	unitless	[5]	1.10E+01	mL/g	[15]
16887-00-6	Chloride	1.00E-03	cm/hr	[4]	3.47E+00	unitless	[7]			
16984-48-8	Fluoride									
1746-01-6	2,3,7,8-Tetrachloro-dibenzo(p)dioxin (TCDD)	1.39E+00	cm/hr	[4]	6.31E+06	unitless	[3]	3.89E+06	mL/g	[3]
189-55-9	Dibenzo[a,i]-pyrene				1.91E+07	unitless	[7]	1.43E+07	mL/g	[1]
189-64-0	Dibenzo[a,h]-pyrene				1.91E+07	unitless	[7]	1.43E+07	mL/g	[1]
191-24-2	Benzo(g,h,i)-perylene	2.00E+00	cm/hr	[4]	4.27E+06	unitless	[5]	2.68E+06	mL/g	[5]
191-30-0	Dibenzo(a,l)-pyrene				5.13E+07	unitless	[1]	3.79E+07	mL/g	[1]
192-65-4	Dibenzo[a,e]-pyrene				1.91E+07	unitless	[7]	1.43E+07	mL/g	[1]
192-97-2	Benzo(e)pyrene				2.75E+06	unitless	[1]	2.14E+06	mL/g	[1]
193-39-5	Indeno(1,2,3-cd)-pyrene	2.23E+00	cm/hr	[4]	3.98E+06	unitless	[3]	3.08E+06	mL/g	[3]
19408-74-3	1,2,3,7,8,9-Hexachloro-dibenzo(p)dioxin	5.29E+00	cm/hr	[4]	2.00E+07	unitless	[3]	1.23E+07	mL/g	[3]
205-82-3	Benzo[j]fluor-anthene				1.29E+06	unitless	[7]	1.01E+06	mL/g	[1]
205-99-2	Benzo(b)fluor-anthene	6.99E-01	cm/hr	[4]	1.33E+06	unitless	[3]	1.05E+06	mL/g	[3]
206-44-0	Fluoranthene	5.13E-01	cm/hr	[4]	1.00E+05	unitless	[3]	4.91E+04	mL/g	[15]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
207-08-9	Benzo(k)fluor-anthene	1.20E+00	cm/hr	[4]	1.26E+06	unitless	[3]	9.92E+05	mL/g	[3]
208-96-8	Acenaphthylene	1.41E-01	cm/hr	[4]	8.71E+03	unitless	[5]	6.12E+03	mL/g	[5]
218-01-9	Chrysene	1.03E+00	cm/hr	[4]	5.01E+05	unitless	[3]	4.01E+05	mL/g	[3]
224-42-0	Dibenz[a,j]-acridine	1.68E+00	cm/hr	[10]	4.27E+05	unitless	[1]	1.79E+06	mL/g	[11]
2245-38-7	2,3,5-Trimethyl-naphthalene									
226-36-8	Dibenz[a,h]-acridine	1.68E+00	cm/hr	[10]	5.37E+05	unitless	[1]	1.79E+06	mL/g	[11]
22967-92-6	Methyl mercury	1.00E-03	cm/hr	[4]						
23950-58-5	Pronamide	1.42E-02	cm/hr	[4]	2.69E+03	unitless	[3]	2.35E+03	mL/g	[3]
24959-67-9	Bromide				4.27E+00	unitless	[7]	.	-	-
27154-33-2	Trichlorofluoro-ethane	1.73E-02	cm/hr	[11]	4.17E+02	unitless	[8]	1.14E+02	mL/g	[12]
31508-00-6	2,3',4,4',5-Pentachloro-biphenyl (PCB 118)				1.32E+07	unitless	[1]	9.98E+06	mL/g	[1]
319-84-6	alpha-BHC	2.79E-02	cm/hr	[4]	6.31E+03	unitless	[3]	1.76E+03	mL/g	[15]
319-85-7	beta-BHC	2.79E-02	cm/hr	[4]	6.31E+03	unitless	[3]	2.14E+03	mL/g	[15]
32598-13-3	3,3',4,4'-Tetrachloro-biphenyl (PCB 77)				4.27E+06	unitless	[1]	3.29E+06	mL/g	[1]
32598-14-4	2,3,3',4,4'-Pentachloro-biphenyl (PCB 105)				6.17E+06	unitless	[1]	4.73E+06	mL/g	[1]
3268-87-9	Octachloro-dibenzo(p)dioxin	1.65E+01	cm/hr	[4]	1.58E+08	unitless	[3]	9.77E+07	mL/g	[3]
32774-16-6	3,3',4,4',5,5'-Hexachloro-biphenyl (PCB 169)				2.57E+07	unitless	[1]	1.92E+07	mL/g	[1]
35822-46-9	1,2,3,4,6,7,8-Heptachloro-dibenzo(p)dioxin				1.00E+08	unitless	[3]	6.17E+07	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
3697-24-3	5-Methylchrysene	1.03E+00	cm/hr	[9]	1.17E+06	unitless	[7]	4.01E+05	mL/g	[10]
378253-40-8	Barium-137m									
378253-44-2	Cadmium-113m									
378782-82-2	Niobium-93m									
38380-08-4	2,3,3',4,4',5-Hexachloro-biphenyl (PCB 156)				3.98E+07	unitless	[1]	2.96E+07	mL/g	[1]
39001-02-0	Octachlorodibenzofuran	4.78E+00	cm/hr	[4]	1.00E+08	unitless	[3]	6.17E+07	mL/g	[3]
39227-28-6	1,2,3,4,7,8-Hexachloro-dibenzo(p)dioxin				6.31E+07	unitless	[3]	3.89E+07	mL/g	[3]
39635-31-9	2,3,3',4,4',5,5'-Heptachloro-biphenyl (PCB 189)				1.86E+08	unitless	[7]	1.35E+08	mL/g	[1]
40321-76-4	1,2,3,7,8-Pentachloro-dibenzo(p)dioxin				4.37E+06	unitless	[3]	2.69E+06	mL/g	[3]
4170-30-3	Crotonaldehyde (Propylene aldehyde)				3.98E+00	unitless	[7]	3.89E+00	mL/g	[1]
41851-50-7	Chlorocyclo-pentadiene	2.49E-02	cm/hr	[4]	2.69E+02	unitless	[5]	1.45E+02	mL/g	[5]
460-19-5	Cyanogen (oxalonitrile)	1.00E-03	cm/hr	[4]	1.17E+00	unitless	[5]	1.36E+00	mL/g	[2]
4786-20-3	2-Butenenitrile									
50-00-0	Formaldehyde	2.21E-03	cm/hr	[4]	2.24E+00	unitless	[3]	2.21E+00	mL/g	[3]
50-32-8	Benzo(a)pyrene	1.24E+00	cm/hr	[4]	1.00E+06	unitless	[3]	9.69E+05	mL/g	[15]
506-68-3	Cyanogen bromide (Bromocyanide)	1.00E-03	cm/hr	[4]	5.13E-01	unitless	[7]	7.06E-01	mL/g	[2]
506-77-4	Cyanogen chloride	1.00E-03	cm/hr	[4]	4.17E-01	unitless	[7]	5.99E-01	mL/g	[2]
51-28-5	2,4-Dinitrophenol	2.20E-03	cm/hr	[4]	3.47E+01	unitless	[3]	1.00E-02	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
51-79-6	Ethyl carbamate (urethane)	3.94E-04	cm/hr	[1]	7.08E-01	unitless	[2]	7.13E-01	mL/g	[1]
510-15-6	Chlorobenzilate	4.59E-02	cm/hr	[4]	2.29E+04	unitless	[3]	1.93E+04	mL/g	[3]
51207-31-9	2,3,7,8-Tetrachloro-dibenzofuran	1.12E+00	cm/hr	[4]	1.26E+06	unitless	[3]	7.76E+05	mL/g	[3]
52663-72-6	2,3',4,4',5,5'-Hexachloro-biphenyl (PCB 167)				3.16E+07	unitless	[1]	2.36E+07	mL/g	[1]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	2.85E-03	cm/hr	[4]	4.90E+01	unitless	[5]	2.25E+02	mL/g	[5]
53-70-3	Dibenz[a,h]-anthracene	1.68E+00	cm/hr	[4]	3.16E+06	unitless	[3]	1.79E+06	mL/g	[15]
532-27-4	2-Chloroaceto-phenone	5.08E-03	cm/hr	[4]	8.51E+01	unitless	[5]	8.93E+01	mL/g	[5]
534-52-1	4,6-Dinitro-o-cresol	3.77E-03	cm/hr	[4]	1.32E+02	unitless	[5]	6.02E+02	mL/g	[5]
5385-75-1	Dibenzo(a,e)-fluoranthene				7.94E+06	unitless	[7]	6.07E+06	mL/g	[1]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	1.49E-02	cm/hr	[4]	1.23E+02	unitless	[5]	3.80E+01	mL/g	[15]
540-73-8	1,2-Dimethyl-hydrazine	3.41E-04	cm/hr	[4]	2.88E-01	unitless	[5]	2.47E+01	mL/g	[5]
540-84-1	2,2,4-Trimethylpentane	-	-	-	1.15E+04	unitless	[7]	1.97E+03	mL/g	[2]
541-73-1	1,3-Dichlorobenzene	7.75E-02	cm/hr	[4]	3.98E+03	unitless	[3]	8.50E+02	mL/g	[3]
542-75-6	1,3-Dichloropropene	1.11E-02	cm/hr	[4]	3.98E+01	unitless	[3]	2.70E+01	mL/g	[15]
542-88-1	Bis(chloromethyl) ether	9.71E-04	cm/hr	[4]	3.80E+00	unitless	[5]	4.40E+00	mL/g	[5]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachloro-dibenzofuran				2.51E+07	unitless	[3]	1.55E+07	mL/g	[3]
56-23-5	Carbon tetrachloride	2.24E-02	cm/hr	[4]	6.31E+02	unitless	[3]	1.52E+02	mL/g	[15]
56-49-5	3-Methylchol-anthrene				2.63E+06	unitless	[1]	1.51E+06	mL/g	[4]
56-55-3	Benzo(a)-anthracene	9.48E-01	cm/hr	[4]	5.01E+05	unitless	[3]	3.58E+05	mL/g	[15]
57-12-5	Cyanide	1.00E-03	cm/hr	[4]	2.04E-01	unitless	[3]	3.40E-01	mL/g	[3]
57-24-9	Strychnine	4.08E-04	cm/hr	[4]	8.51E+01	unitless	[3]	7.90E+01	mL/g	[3]
57-74-9	Chlordane	1.57E-01	cm/hr	[4]	3.16E+05	unitless	[3]	5.13E+04	mL/g	[3]
57117-31-4	2,3,4,7,8-Pentachloro-dibenzofuran	1.06E+00	cm/hr	[4]	3.16E+06	unitless	[3]	1.95E+06	mL/g	[3]
57117-41-6	1,2,3,7,8-Pentachloro-dibenzofuran	1.06E+00	cm/hr	[4]	6.17E+06	unitless	[3]	3.80E+06	mL/g	[3]
57117-44-9	1,2,3,6,7,8-Hexachloro-dibenzofuran				1.00E+07	unitless	[3]	6.17E+06	mL/g	[3]
57465-28-8	3,3',4,4',5-Pentachloro-biphenyl (PCB 126)				9.55E+06	unitless	[8]	7.27E+06	mL/g	[1]
57653-85-7	1,2,3,6,7,8,-Hexachloro-dibenzo(p)dioxin				2.00E+07	unitless	[3]	1.23E+07	mL/g	[3]
58-89-9	gamma-BHC (Lindane)	2.79E-02	cm/hr	[4]	1.38E+04	unitless	[5]	1.35E+03	mL/g	[15]
58-90-2	2,3,4,6-Tetrachlorophenol	1.06E-01	cm/hr	[4]	2.82E+04	unitless	[3]	2.80E+02	mL/g	[3]
581-42-0	2,6-Dimethyl-naphthalene									
584-84-9	2,4-Toluene diisocyanate	3.76E-03	cm/hr	[5]	5.50E+03	unitless	[7]	8.84E+01	mL/g	[6]
589-38-8	3-Hexanone				1.74E+01	unitless	[6]	1.36E+01	mg/L	[14]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
59-50-7	4-Chloro-3-methylphenol	4.09E-02	cm/hr	[4]	1.26E+03	unitless	[3]	1.12E+03	mL/g	[3]
59-89-2	N-Nitroso-morpholine	1.78E-04	cm/hr	[1]	3.63E-01	unitless	[2]	3.70E-01	mL/g	[1]
591-50-4	Benzene, iodo-									
591-78-6	2-Hexanone	4.45E-03	cm/hr	[4]	2.40E+01	unitless	[5]	1.30E+01	mL/g	[5]
593-60-2	Bromoethene (Vinyl bromide)	5.52E-03	cm/hr	[4]	3.72E+01	unitless	[5]	2.37E+01	mL/g	[5]
593-74-8	Dimethyl Mercury									
60-11-7	Dimethyl aminoazobenzene	9.46E-02	cm/hr	[1]	3.80E+04	unitless	[2]	3.18E+04	mL/g	[1]
60-29-7	Ethyl ether	2.88E-03	cm/hr	[4]	7.76E+00	unitless	[5]	4.40E+00	mL/g	[5]
60-35-5	Acetamide	1.06E-04	cm/hr	[1]	5.50E-02	unitless	[2]	5.78E-02	mL/g	[1]
602-87-9	5-Nitroacenaphthene	1.33E-01	cm/hr	[6]	7.08E+03	unitless	[1]	4.90E+03	mL/g	[7]
606-20-2	2,6-Dinitrotoluene	4.57E-03	cm/hr	[4]	5.25E+01	unitless	[3]	4.91E+01	mL/g	[3]
608-93-5	Pentachloro-benzene	2.65E-01	cm/hr	[4]	1.48E+05	unitless	[3]	3.21E+04	mL/g	[15]
60851-34-5	2,3,4,6,7,8-Hexachloro-dibenzofuran				1.00E+07	unitless	[3]	6.17E+06	mL/g	[3]
61626-71-9	Dichloropenta-diene	2.49E-02	cm/hr	[8]	1.55E+03	unitless	[8]	1.45E+02	mL/g	[9]
62-50-0	Ethyl methanesulfonate				1.12E+00	unitless	[3]	1.12E+00	mL/g	[3]
62-53-3	Aniline	2.24E-03	cm/hr	[4]	7.94E+00	unitless	[3]	7.67E+00	mL/g	[3]
62-75-9	N-Nitroso-N,N-dimethylamine	2.65E-04	cm/hr	[4]	2.69E-01	unitless	[5]	3.82E+01	mL/g	[5]
621-64-7	N-Nitroso-di-n-propylamine	2.83E-03	cm/hr	[4]	2.29E+01	unitless	[3]	2.17E+01	mL/g	[3]
624-83-9	Methyl isocyanate	1.36E-03	cm/hr	[7]	6.17E+00	unitless	[7]	1.76E+00	mL/g	[8]
628-73-9	Hexanenitrile				4.57E+01	unitless	[1]	4.29E+01	mL/g	[1]
630-08-0	Carbon monoxide				6.03E+01	unitless	[7]			
630-20-6	1,1,1,2-Tetrachloroethane	2.18E-02	cm/hr	[4]	1.07E+03	unitless	[3]	3.01E+02	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
64-18-6	Formic acid (methanoic acid)	4.13E-04	cm/hr	[4]	2.88E-01	unitless	[3]	2.90E-01	mL/g	[3]
65-85-0	Benzoic acid	7.29E-03	cm/hr	[4]	7.41E+01	unitless	[3]	6.00E-01	mL/g	[3]
65510-44-3	2',3,4,4',5-Pentachloro-biphenyl (PCB 123)				9.55E+06	unitless	[8]	7.27E+06	mL/g	[1]
67-56-1	Methyl alcohol	3.45E-04	cm/hr	[4]	1.70E-01	unitless	[3]	1.80E-01	mL/g	[3]
67-63-0	2-Propyl alcohol	8.89E-04	cm/hr	[4]	1.12E+00	unitless	[5]	1.06E+00	mL/g	[5]
67-64-1	2-Propanone (Acetone)	5.69E-04	cm/hr	[4]	5.75E-01	unitless	[3]	5.80E-01	mL/g	[3]
67-66-3	Chloroform	8.92E-03	cm/hr	[4]	1.00E+02	unitless	[3]	5.30E+01	mL/g	[15]
67-72-1	Hexachloroethane	5.96E-02	cm/hr	[4]	8.51E+03	unitless	[3]	1.55E+03	mL/g	[3]
67562-39-4	1,2,3,4,6,7,8-Heptachloro-dibenzofuran				2.51E+07	unitless	[3]	1.55E+07	mL/g	[3]
69782-90-7	2,3,3',4,4',5'-Hexachloro-biphenyl (PCB 157)				4.17E+07	unitless	[8]	3.10E+07	mL/g	[1]
70-30-4	Hexachlorophene	1.42E+00	cm/hr	[4]	3.47E+07	unitless	[3]	2.58E+07	mL/g	[3]
70362-50-4	3,4,4',5-Tetrachloro-biphenyl (PCB 81)				2.19E+06	unitless	[8]	1.71E+06	mL/g	[1]
70648-26-9	1,2,3,4,7,8-Hexachloro-dibenzofuran				1.00E+07	unitless	[3]	6.17E+06	mL/g	[3]
71-36-3	n-Butyl alcohol	2.84E-03	cm/hr	[4]	7.59E+00	unitless	[5]	2.44E+00	mL/g	[5]
71-43-2	Benzene	2.07E-02	cm/hr	[4]	1.26E+02	unitless	[3]	6.20E+01	mL/g	[15]
71-55-6	1,1,1-Trichloroethane	1.71E-02	cm/hr	[4]	3.16E+02	unitless	[3]	1.35E+02	mL/g	[15]
72-43-5	Methoxychlor	6.00E-02	cm/hr	[4]	6.31E+04	unitless	[3]	8.00E+04	mL/g	[15]
72-55-9	4,4-DDE	9.16E-01	cm/hr	[4]	5.01E+05	unitless	[3]	8.64E+04	mL/g	[3]
72918-21-9	1,2,3,7,8,9-Hexachloro-dibenzofuran				1.00E+07	unitless	[3]	6.17E+06	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
74-83-9	Bromomethane	3.51E-03	cm/hr	[4]	1.55E+01	unitless	[3]	9.00E+00	mL/g	[15]
74-87-3	Chloromethane	4.15E-03	cm/hr	[4]	8.13E+00	unitless	[3]	6.00E+00	mL/g	[15]
74-88-4	Iodomethane	2.52E-03	cm/hr	[1]	3.24E+01	unitless	[2]	3.05E+01	mL/g	[1]
74-95-3	Methylene bromide	2.67E-03	cm/hr	[4]	3.38E+01	unitless	[3]	3.19E+01	mL/g	[3]
74-97-5	Bromochloro-methane	3.10E-03	cm/hr	[4]	2.57E+01	unitless	[5]	2.37E+01	mL/g	[5]
7429-90-5	Aluminum	1.00E-03	cm/hr	[4]						
7439-89-6	Iron	1.00E-03	cm/hr	[4]						
7439-92-1	Lead	1.00E-04	cm/hr	[4]	5.37E+00	unitless	[3]			
7439-93-2	Lithium	1.00E-03	cm/hr	[4]						
7439-95-4	Magnesium	1.00E-03	cm/hr	[4]						
7439-96-5	Manganese	1.00E-03	cm/hr	[4]						
7439-97-6	Mercury	1.00E-03	cm/hr	[4]	4.17E+00	unitless	[3]			
7439-98-7	Molybdenum	1.00E-03	cm/hr	[4]						
7440-02-0	Nickel	2.00E-04	cm/hr	[4]	2.69E-01	unitless	[3]			
7440-16-6	Rhodium									
7440-22-4	Silver	6.00E-04	cm/hr	[4]	1.70E+00	unitless	[3]			
7440-23-5	Sodium	1.00E-03	cm/hr	[4]	.	-	-			
7440-24-6	Strontium (total)	1.00E-03	cm/hr	[4]	1.70E+00	unitless	[7]			
7440-25-7	Tantalum									
7440-28-0	Thallium	1.00E-03	cm/hr	[4]	1.70E+00	unitless	[3]			
7440-29-1	Thorium-232	1.00E-03	cm/hr	[4]						
7440-31-5	Tin	1.00E-03	cm/hr	[4]						
7440-33-7	Tungsten	1.00E-03	cm/hr	[4]						
7440-36-0	Antimony	1.00E-03	cm/hr	[4]	5.37E+00	unitless	[3]			
7440-38-2	Arsenic	1.00E-03	cm/hr	[4]	4.79E+00	unitless	[3]			
7440-39-3	Barium	1.00E-03	cm/hr	[4]	1.70E+00	unitless	[3]			
7440-41-7	Beryllium	1.00E-03	cm/hr	[4]	2.69E-01	unitless	[3]			
7440-43-9	Cadmium	1.00E-03	cm/hr	[4]	8.51E-01	unitless	[3]			
7440-47-3	Chromium	1.00E-03	cm/hr	[2]	1.70E+00	unitless	[3]	1.68E+00	mL/g	[1]
7440-48-4	Cobalt	4.00E-04	cm/hr	[4]						

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
7440-50-8	Copper	1.00E-03	cm/hr	[4]						
7440-61-1	Uranium	1.00E-03	cm/hr	[4]						
7440-61-1R	Uranium-238									
7440-62-2	Vanadium	1.00E-03	cm/hr	[4]						
7440-65-5	Yttrium									
7440-66-6	Zinc	6.00E-04	cm/hr	[4]	3.39E-01	unitless	[3]			
7440-67-7	Zirconium	1.00E-03	cm/hr	[4]						
7446-09-5	Sulfur dioxide				6.31E-03	unitless	[7]			
74472-37-0	2,3,4,4',5-Pentachloro-biphenyl (PCB 114)				9.55E+06	unitless	[6]	7.27E+06	mL/g	[1]
7487-94-7	Mercury (Hg^{+2})	1.00E-03	cm/hr	[4]	6.10E-01	unitless	[3]			
75-00-3	Chloroethane	7.98E-03	cm/hr	[4]	2.51E+01	unitless	[3]	1.54E+01	mL/g	[3]
75-01-4	1-Chloroethene	1.13E-02	cm/hr	[4]	2.51E+01	unitless	[3]	1.54E+01	mL/g	[3]
75-02-5	Fluoroethene (Vinyl fluoride)				1.55E+01	unitless	[6]	2.60E+01	mg/L	[14]
75-05-8	Acetonitrile	6.14E-04	cm/hr	[4]	4.57E-01	unitless	[3]	4.60E-01	mL/g	[3]
75-07-0	Acetaldehyde	5.89E-04	cm/hr	[4]	6.03E-01	unitless	[3]	6.10E-01	mL/g	[3]
75-09-2	Dichloromethane (Methylene chloride)	4.46E-03	cm/hr	[4]	2.00E+01	unitless	[3]	1.00E+01	mL/g	[15]
75-15-0	Carbon disulfide	1.56E-02	cm/hr	[4]	1.58E+02	unitless	[3]	6.62E+01	mL/g	[3]
75-21-8	Ethylene oxide (Oxirane)	6.28E-04	cm/hr	[4]	5.01E-01	unitless	[3]	5.10E-01	mL/g	[3]
75-25-2	Bromoform	2.77E-03	cm/hr	[4]	2.34E+02	unitless	[3]	1.26E+02	mL/g	[15]
75-27-4	Bromodichlorome thane	5.02E-03	cm/hr	[4]	1.26E+02	unitless	[3]	5.51E+01	mL/g	[3]
75-29-6	2-Chloropropane	1.41E-02	cm/hr	[4]	7.94E+01	unitless	[5]	3.50E+01	mL/g	[5]
75-34-3	1,1-Dichloroethane	8.86E-03	cm/hr	[4]	6.31E+01	unitless	[3]	5.30E+01	mL/g	[15]
75-35-4	1,1-Dichloroethene	1.59E-02	cm/hr	[4]	1.26E+02	unitless	[3]	6.50E+01	mL/g	[15]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
75-44-5	Phosgene (Hydrogen phosphide)				1.95E-01	unitless	[7]	3.28E-01	mL/g	[2]
75-45-6	Chlorodifluoro-methane	3.31E-03	cm/hr	[4]	1.20E+01	unitless	[3]	8.58E+00	mL/g	[3]
75-50-3	Trimethylamine				1.45E+00	unitless	[1]	1.49E+01	mg/L	[14]
75-69-4	Trichlorofluoro-methane	1.73E-02	cm/hr	[4]	3.16E+02	unitless	[3]	1.14E+02	mL/g	[3]
75-71-8	Dichlorodifluoro-methane	1.19E-02	cm/hr	[4]	1.45E+02	unitless	[3]	6.15E+01	mL/g	[3]
76-01-7	Pentachloroethane				1.66E+03	unitless	[1]	1.46E+03	mL/g	[1]
76-13-1	1,2,2-Trichlorotrifluoro-ethane	2.40E-02	cm/hr	[4]	1.45E+03	unitless	[5]	2.25E+02	mL/g	[5]
76-44-8	Heptachlor	2.16E-01	cm/hr	[4]	2.00E+04	unitless	[3]	9.53E+03	mL/g	[15]
764-41-0	1,4-Dichloro-2-butene	2.30E-02	cm/hr	[4]	3.98E+02	unitless	[5]	1.49E+02	mL/g	[5]
7647-01-0	Hydrogen chloride	1.00E-03	cm/hr	[4]				1.43E+01	mg/L	[14]
765-34-4	Glycidylaldehyde	5.72E-04	cm/hr	[4]	7.59E-01	unitless	[5]	1.00E+00	mL/g	[5]
7664-39-3	Hydrogen Fluoride				1.70E+00	unitless	[7]	1.43E+01	mg/L	[14]
7664-41-7	Ammonia/ Ammonium	1.00E-03	cm/hr	[4]	1.70E+00	unitless	[7]	1.43E+01	mg/L	[14]
77-47-4	Hexachlorocyclo-pentadiene	1.56E-01	cm/hr	[4]	1.10E+05	unitless	[3]	1.17E+04	mL/g	[3]
77-78-1	Dimethyl sulfate	4.21E-04	cm/hr	[4]	1.45E+00	unitless	[5]	2.42E+01	mL/g	[5]
7704-34-9	Total Sulfur (thermodynamic-ally stable)									
7723-14-0	Phosphorus	1.00E-03	cm/hr	[4]	5.37E-01	unitless	[7]	1.43E+01	mg/L	[14]
7782-41-4	Fluorine gas (F_2)	1.00E-03	cm/hr	[4]						
7782-49-2	Selenium	1.00E-03	cm/hr	[4]	1.74E+00	unitless	[3]			
7782-50-5	Chlorine	1.00E-03	cm/hr	[4]	7.08E+00	unitless	[3]			
78-83-1	2-Methylpropyl alcohol	2.33E-03	cm/hr	[4]	5.75E+00	unitless	[5]	2.05E+00	mL/g	[5]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
78-87-5	1,2-Dichloropropane	9.92E-03	cm/hr	[4]	1.00E+02	unitless	[3]	4.70E+01	mL/g	[15]
78-93-3	2-Butanone	1.11E-03	cm/hr	[4]	1.95E+00	unitless	[3]	1.93E+00	mL/g	[3]
79-00-5	1,1,2-Trichloroethane	6.43E-03	cm/hr	[4]	1.00E+02	unitless	[3]	7.50E+01	mL/g	[15]
79-01-6	1,1,2-Trichloroethylene	1.57E-02	cm/hr	[4]	2.51E+02	unitless	[3]	9.40E+01	mL/g	[15]
79-10-7	2-Propenoic acid	1.23E-03	cm/hr	[4]	2.24E+00	unitless	[5]	1.20E+00	mL/g	[5]
79-34-5	1,1,2,2-Tetrachloroethane	8.97E-03	cm/hr	[4]	2.51E+02	unitless	[3]	7.90E+01	mL/g	[15]
79-46-9	2-Nitropropane	2.49E-03	cm/hr	[4]	8.51E+00	unitless	[5]	2.50E+01	mL/g	[5]
80-62-6	Methyl methacrylate	4.46E-03	cm/hr	[4]	2.40E+01	unitless	[5]	1.01E+01	mL/g	[5]
82-68-8	Pentachloronitro-benzene (PCNB)	5.93E-02	cm/hr	[4]	4.37E+04	unitless	[3]	3.64E+04	mL/g	[3]
822-06-0	Hexamethylene-1,5-diisocyanate	3.33E-02	cm/hr	[4]	1.58E+03	unitless	[5]	5.86E+03	mL/g	[5]
823-40-5	Toluene-2,6-diamine	4.42E-04	cm/hr	[4]	1.45E+00	unitless	[5]	1.22E+02	mL/g	[5]
83-32-9	Acenaphthene	1.33E-01	cm/hr	[4]	7.94E+03	unitless	[3]	4.90E+03	mL/g	[15]
832-69-9	1-Methylphen-anthrene									
84-66-2	Diethyl phthalate	4.39E-03	cm/hr	[4]	3.16E+02	unitless	[3]	8.20E+01	mL/g	[15]
84-74-2	Di-n-butylphthalate	5.98E-02	cm/hr	[4]	5.01E+04	unitless	[3]	1.57E+03	mL/g	[15]
85-01-8	Phenanthrene	2.29E-01	cm/hr	[4]	3.16E+04	unitless	[3]	2.65E+04	mL/g	[3]
85-44-9	Phthalic anhydride (1,2-benzene-dicarboxylic anhydride)	3.25E-03	cm/hr	[4]	2.40E-01	unitless	[3]	2.50E-01	mL/g	[3]
85-68-7	Butylbenzyl-phthalate	5.41E-02	cm/hr	[4]	7.94E+04	unitless	[3]	1.37E+04	mL/g	[15]
86-73-7	Fluorene	1.71E-01	cm/hr	[4]	1.58E+04	unitless	[3]	7.71E+03	mL/g	[15]
87-61-6	1,2,3-Trichlorobenzene				1.12E+04	unitless	[3]	1.93E+03	mL/g	[3]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
87-68-3	Hexachloro-butadiene	1.21E-01	cm/hr	[4]	6.31E+04	unitless	[3]	7.58E+03	mL/g	[3]
87-86-5	Pentachlorophenol	1.95E-01	cm/hr	[4]	1.26E+05	unitless	[3]	5.92E+02	mL/g	[3]
88-06-2	2,4,6-Trichlorophenol	4.96E-02	cm/hr	[4]	5.01E+03	unitless	[3]	3.81E+02	mL/g	[3]
88-74-4	o-Nitroaniline (2-nitroaniline)	5.64E-03	cm/hr	[4]	7.08E+01	unitless	[3]	6.59E+01	mL/g	[3]
88-75-5	2-Nitrophenol	4.02E-03	cm/hr	[1]	6.17E+01	unitless	[3]	5.75E+01	mL/g	[3]
90-04-0	o-Anisidine	1.46E-03	cm/hr	[1]	1.51E+01	unitless	[2]	1.45E+01	mL/g	[1]
90-12-0	1-Methyl-naphthalene	1.45E-01	cm/hr	[4]	7.41E+03	unitless	[5]	3.04E+03	mL/g	[5]
91-20-3	Naphthalene	6.94E-02	cm/hr	[4]	2.00E+03	unitless	[3]	1.19E+03	mL/g	[15]
91-22-5	Quinoline	8.58E-03	cm/hr	[4]	1.07E+02	unitless	[5]	1.84E+03	mL/g	[5]
91-57-6	2-Methyl-naphthalene	1.42E-01	cm/hr	[4]	7.24E+03	unitless	[5]	2.98E+03	mL/g	[5]
91-58-7	2-Chloro-naphthalene	1.30E-01	cm/hr	[4]	2.40E+03	unitless	[3]	2.10E+03	mL/g	[3]
91-94-1	3,3'-Dichlorobenzidine	1.69E-02	cm/hr	[4]	3.24E+03	unitless	[3]	7.21E+02	mL/g	[3]
92-52-4	1,1`-Biphenyl	1.46E-01	cm/hr	[4]	9.55E+03	unitless	[5]	6.25E+03	mL/g	[5]
924-16-3	N-Nitroso-di-n-Buetylamine	1.52E-02	cm/hr	[4]	8.32E+01	unitless	[3]	7.72E+01	mL/g	[3]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1.13E-02	cm/hr	[1]	4.57E+02	unitless	[3]	4.12E+02	mL/g	[3]
94-75-7	2,4-D	8.45E-03	cm/hr	[4]	6.46E+02	unitless	[5]	2.94E+01	mL/g	[5]
95-48-7	o-Cresol	1.01E-02	cm/hr	[4]	8.91E+01	unitless	[3]	8.26E+01	mL/g	[3]
95-49-8	o-Chlorotoluene	8.63E-02	cm/hr	[4]	2.63E+03	unitless	[5]	4.43E+02	mL/g	[5]
95-50-1	1,2-Dichlorobenzene	6.59E-02	cm/hr	[4]	2.40E+03	unitless	[3]	3.79E+02	mL/g	[15]
95-53-4	o-Toluidine	3.66E-03	cm/hr	[4]	2.09E+01	unitless	[3]	1.99E+01	mL/g	[3]
95-57-8	2-Chlorophenol	1.05E-02	cm/hr	[4]	1.41E+02	unitless	[3]	3.88E+02	mL/g	[3]
95-63-6	1,2,4-Trimethyl benzene	1.33E-01	cm/hr	[4]	4.27E+03	unitless	[5]	7.18E+02	mL/g	[5]

Table 2-4 Permeability Constant, Octanol/Water Partitioning Coefficient, and Organic Carbon Partitioning Coefficient

CAS Registry Number	Analyte Name	Permeability Constant (*Kp*)	Units for Permeability Constant	Reference	Octanol-water Partition Coeff. (K_{ow})	Octanol-water Partition	Reference	Organic Carbon Partition Coeff. (K_{oc})	Organic Carbon Partition	Reference
95-94-3	1,2,4,5-Tetrachloro-benzene	1.81E-01	cm/hr	[4]	6.31E+04	unitless	[3]	7.58E+03	mL/g	[3]
95-95-4	2,4,5-Trichlorophenol	5.21E-02	cm/hr	[4]	5.25E+03	unitless	[3]	1.60E+03	mL/g	[3]
96-12-8	1,2-Dibromo-3-chloropropane	8.71E-03	cm/hr	[4]	2.00E+02	unitless	[3]	1.82E+02	mL/g	[3]
96-18-4	1,2,3-Trichloropropane	9.83E-03	cm/hr	[4]	1.00E+02	unitless	[3]	4.59E+01	mL/g	[3]
96-45-7	Ethylene thiourea	1.54E-04	cm/hr	[4]	2.19E-01	unitless	[5]	6.51E+00	mL/g	[5]
97-63-2	Ethyl methacrylate	9.14E-03	cm/hr	[4]	8.71E+01	unitless	[3]	8.08E+01	mL/g	[3]
98-01-1	Furfural	9.66E-04	cm/hr	[4]	2.57E+00	unitless	[5]	1.77E+01	mL/g	[5]
98-06-6	tert-Butyl benzene	-	-	-	1.29E+04	unitless	[1]	2.15E+03	mL/g	[2]
98-07-7	Benzotrichloride	7.14E-02	cm/hr	[4]	7.94E+03	unitless	[5]	1.18E+03	mL/g	[5]
98-82-8	Cumene	1.40E-01	cm/hr	[4]	5.01E+03	unitless	[3]	1.02E+03	mL/g	[3]
98-83-9	Methyl styrene (mixed isomers)	1.07E-01	cm/hr	[4]	3.02E+03	unitless	[5]	8.17E+02	mL/g	[5]
98-86-2	Acetophenone	4.67E-03	cm/hr	[4]	3.80E+01	unitless	[3]	3.58E+01	mL/g	[3]
98-95-3	Nitrobenzene	6.96E-03	cm/hr	[4]	7.08E+01	unitless	[3]	1.19E+02	mL/g	[15]
99-35-4	1,3,5-Trinitrobenzene	6.57E-04	cm/hr	[4]	1.58E+01	unitless	[3]	1.51E+01	mL/g	[3]
99-65-0	1,3-Dinitrobenzene	2.05E-03	cm/hr	[4]	3.16E+01	unitless	[3]	2.98E+01	mL/g	[3]
99-87-6	p-Cymene				1.26E+04	unitless	[1]	2.11E+03	mL/g	[2]

Reference **Reference (source) for Permeability Constant**

[1] EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final,* EPA/540/R/99/005 (Part E Spreadsheet ORG04_01.XLS), July 2004. US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/oswer/riskassessment/ragse/pdf/2004_1101_part_e.pdf).

[2] EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Final*, EPA/540/R/99/005 (Exhibit3-1), July 2004. US Environmental Protection Agency, Washington, DC, USA. Available online at http://www.epa.gov/oswer/riskassessment/ragse/pdf/2004_1101_part_e.pdf.

Reference	Reference (source) for Permeability Constant
[3]	EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Final,* EPA/540/R/99/005 (Part E Spreadsheet ORG04_01.XLS), July 2004. US Environmental Protection Agency, Washington, DC, USA (http://www.epa.gov/oswer/riskassessment/ragse/pdf/org04_01.xls).
[4]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chlorocyclopentadiene.
[9]	Surrogate value from Chrysene.
[10]	Surrogate value from Dibenz[a,h]anthracene.
[11]	Surrogate value from Trichlorofluoromethane.
[12]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Octanol-water Partition Coeff.
[1]	EPA. 2000. *Estimation Programs Interface (EPI) Suite v3.12, KOWWIN: Experimental Kow Values in Database [EXPKOW.DB]*, Office of Polution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm).
[2]	EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final,* EPA/540/R/99/005 (Part E Spreadsheet ORG04_01.XLS), July 2004. US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/oswer/riskassessment/ragse/pdf/2004_1101_part_e.pdf).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Syracuse Research Corporation (SRC). PHYSPROP Database. SRC. Syracuse, NY. (http://www.syrres.com/esc/physdemo.htm). Accessed May 2011.
[5]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[6]	Syracuse Research Corporation (SRC). PHYSPROP Database. SRC. Syracuse, NY. (http://www.syrres.com/esc/physdemo.htm). Accessed July 2008.
[7]	Syracuse Research Corporation (SRC). PHYSPROP Database. Syracuse, NY (http://www.syrres.com/esc/physdemo.htm). Accessed September 2006.
[8]	US EPA. 2006. Estimation Programs Interface Suite for Microsoft Windows, v3.20 (KOWWIN v1.67). United States Environmental Protection Agency, Washington, DC, USA. (available at http://www.epa.gov/oppt/exposure/pubs/episuite.htm)

Reference	Reference (source) for Organic Carbon Partition Coeff.
[1]	Calculated value per Eq. A-2-7 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities,* EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Organic Carbon Partition Coeff.
[2]	Calculated value per Eq. A-2-8 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	EPA. 2000. EPI Suite v.3.12, PCKOCWIN: Experimental log(Koc) Values in Appendices E, F, and G, Office of Polution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm). (converted from log(Koc) to Koc)
[5]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[6]	Surrogate value from 2,4-Dinitrotoluene.
[7]	Surrogate value from Acenaphthene.
[8]	Surrogate value from Acrylonitrile.
[9]	Surrogate value from Chlorocyclopentadiene.
[10]	Surrogate value from Chrysene.
[11]	Surrogate value from Dibenz[a,h]anthracene.
[12]	Surrogate value from Trichlorofluoromethane.
[13]	Surrogate value from cis-1,2-Dichloroethene.
[14]	US EPA. 2006. Estimation Programs Interface Suite for Microsoft Windows, v3.20 (PCKOWWIN v1.66). United States Environmental Protection Agency, Washington, DC, USA. (available at http://www.epa.gov/oppt/exposure/pubs/episuite.htm)
[15]	WAC 173-340-900. Tables, Washington Administrative Code, effective 15 August 2001.

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
100-02-7	p-Nitrophenol	3.35E-01	cm^3/g or L/kg	[2]	5.66E+00	cm^3/g or L/kg	[3]	3.02E+00	cm^3/g or L/kg	[3]
100-21-0	Phthalic acid	3.18E-01	cm^3/g or L/kg	[2]	5.37E+00	cm^3/g or L/kg	[2]	2.86E+00	cm^3/g or L/kg	[2]
100-25-4	1,4-Dinitrobenzene	9.77E-01	cm^3/g or L/kg	[2]	1.65E+01	cm^3/g or L/kg	[2]	8.80E+00	cm^3/g or L/kg	[2]
100-40-3	4-Ethenylcyclohexene	6.89E+00	cm^3/g or L/kg	[2]	1.16E+02	cm^3/g or L/kg	[2]	6.20E+01	cm^3/g or L/kg	[2]
100-41-4	Ethyl benzene	7.30E-01	cm^3/g or L/kg	[3]	1.53E+01	cm^3/g or L/kg	[3]	8.16E+00	cm^3/g or L/kg	[3]
100-42-5	Styrene	1.20E+02	cm^3/g or L/kg	[3]	6.84E+01	cm^3/g or L/kg	[3]	3.65E+01	cm^3/g or L/kg	[3]
100-44-7	Benzyl chloride	8.10E-01	cm^3/g or L/kg	[2]	1.37E+01	cm^3/g or L/kg	[3]	7.30E+00	cm^3/g or L/kg	[3]
100-47-0	Benzonitrile	1.52E-01	cm^3/g or L/kg	[2]	2.56E+00	cm^3/g or L/kg	[3]	1.37E+00	cm^3/g or L/kg	[3]
100-51-6	Benzyl alcohol	5.36E-02	cm^3/g or L/kg	[2]	9.00E-01	cm^3/g or L/kg	[3]	4.80E-01	cm^3/g or L/kg	[3]
100-52-7	Benzaldehyde	1.27E-01	cm^3/g or L/kg	[2]	2.14E+00	cm^3/g or L/kg	[3]	1.14E+00	cm^3/g or L/kg	[3]
10028-15-6	Ozone									
10028-17-8	Tritium									
10045-97-3	Cesium-137	1.00E+03	cm^3/g or L/kg	[1]	1.00E+03	cm^3/g or L/kg	[1]	1.00E+03	cm^3/g or L/kg	[1]
10061-01-5	cis-1,3-Dichloropropene	7.10E-02	cm^3/g or L/kg	[12]	2.87E+00	cm^3/g or L/kg	[11]	1.53E+00	cm^3/g or L/kg	[11]
10061-02-6	trans-1,3-Dichloropropene	4.40E-01	cm^3/g or L/kg	[2]	7.43E+00	cm^3/g or L/kg	[2]	3.96E+00	cm^3/g or L/kg	[2]
10098-91-6	Yttrium-90	5.00E+02	cm^3/g or L/kg	[1]	5.00E+02	cm^3/g or L/kg	[1]	5.00E+02	cm^3/g or L/kg	[1]
10098-97-2	Strontium-90	3.50E+01	cm^3/g or L/kg	[1]	3.50E+01	cm^3/g or L/kg	[1]	3.50E+01	cm^3/g or L/kg	[1]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
101-55-3	4-Bromophenylphenyl ether	6.33E+02	cm^3/g or L/kg	[2]	1.07E+04	cm^3/g or L/kg	[3]	5.70E+03	cm^3/g or L/kg	[3]
101-77-9	4,4-Methylenedianiline	2.20E+01	cm^3/g or L/kg	[2]	3.71E+02	cm^3/g or L/kg	[2]	1.98E+02	cm^3/g or L/kg	[2]
10102-44-0	Nitrogen dioxide									
10198-40-0	Cobalt-60	4.50E+01	cm^3/g or L/kg	[1]	4.50E+01	cm^3/g or L/kg	[1]	4.50E+01	cm^3/g or L/kg	[1]
103-33-3	Azobenzene	8.68E+00	cm^3/g or L/kg	[2]	1.47E+02	cm^3/g or L/kg	[2]	7.82E+01	cm^3/g or L/kg	[2]
103-65-1	n-Propyl benzene (Isocumene)	4.45E+00	cm^3/g or L/kg	[2]	7.51E+01	cm^3/g or L/kg	[2]	4.00E+01	cm^3/g or L/kg	[2]
104-51-8	n-Butylbenzene	1.09E+01	cm^3/g or L/kg	[2]	1.84E+02	cm^3/g or L/kg	[2]	9.82E+01	cm^3/g or L/kg	[2]
104-76-7	2-Ethyl-1-hexanol	2.14E+00	cm^3/g or L/kg	[2]	3.62E+01	cm^3/g or L/kg	[2]	1.93E+01	cm^3/g or L/kg	[2]
105-67-9	2,4-Dimethylphenol	3.20E+01	cm^3/g or L/kg	[3]	1.37E+01	cm^3/g or L/kg	[3]	7.30E+00	cm^3/g or L/kg	[3]
10595-95-6	n-Nitrosomethyl-ethylamine	3.28E-01	cm^3/g or L/kg	[2]	5.54E+00	cm^3/g or L/kg	[2]	2.95E+00	cm^3/g or L/kg	[2]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	8.34E+00	cm^3/g or L/kg	[2]	1.41E+02	cm^3/g or L/kg	[2]	7.51E+01	cm^3/g or L/kg	[2]
106-44-5	p-Cresol (4-methyl phenol)	1.20E+01	cm^3/g or L/kg	[3]	5.53E+00	cm^3/g or L/kg	[3]	2.95E+00	cm^3/g or L/kg	[3]
106-46-7	1,4-Dichlorobenzene	1.20E+00	cm^3/g or L/kg	[3]	4.62E+01	cm^3/g or L/kg	[3]	2.46E+01	cm^3/g or L/kg	[3]
106-47-8	p-Chloroaniline	2.80E-01	cm^3/g or L/kg	[2]	4.72E+00	cm^3/g or L/kg	[3]	2.52E+00	cm^3/g or L/kg	[3]
106-49-0	p-Toluidine	3.22E-01	cm^3/g or L/kg	[2]	5.44E+00	cm^3/g or L/kg	[2]	2.90E+00	cm^3/g or L/kg	[2]
106-51-4	Quinone	6.99E-03	cm^3/g or L/kg	[2]	1.18E-01	cm^3/g or L/kg	[2]	6.29E-02	cm^3/g or L/kg	[2]
106-88-7	1,2-Epoxybutane	1.99E-02	cm^3/g or L/kg	[2]	3.37E-01	cm^3/g or L/kg	[2]	1.80E-01	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	2.75E-03	cm^3/g or L/kg	[2]	5.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
106-93-4	Ethylene dibromide	8.50E-02	cm^3/g or L/kg	[3]	6.94E+00	cm^3/g or L/kg	[3]	3.70E+00	cm^3/g or L/kg	[3]
106-99-0	1,3-Butadiene	1.94E-01	cm^3/g or L/kg	[2]	3.28E+00	cm^3/g or L/kg	[2]	1.75E+00	cm^3/g or L/kg	[2]
107-02-8	Acrolein	1.50E-01	cm^3/g or L/kg	[3]	7.00E-02	cm^3/g or L/kg	[3]	4.00E-02	cm^3/g or L/kg	[3]
107-05-1	3-Chloropropene	1.94E-01	cm^3/g or L/kg	[2]	3.28E+00	cm^3/g or L/kg	[2]	1.75E+00	cm^3/g or L/kg	[2]
107-06-2	1,2-Dichloroethane	3.50E-02	cm^3/g or L/kg	[3]	2.85E+00	cm^3/g or L/kg	[3]	1.52E+00	cm^3/g or L/kg	[3]
107-12-0	Propionitrile	6.38E-03	cm^3/g or L/kg	[2]	1.08E-01	cm^3/g or L/kg	[2]	5.75E-02	cm^3/g or L/kg	[2]
107-13-1	Acrylonitrile	7.81E-03	cm^3/g or L/kg	[2]	1.30E-01	cm^3/g or L/kg	[3]	7.00E-02	cm^3/g or L/kg	[3]
107-19-7	Propargyl alcohol	5.88E-03	cm^3/g or L/kg	[2]	9.94E-02	cm^3/g or L/kg	[2]	5.30E-02	cm^3/g or L/kg	[2]
107-21-1	Ethylene glycol (1,2-ethanediol)	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
107-98-2	Propylene glycol monomethyl ether	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
108-05-4	Acetic acid vinyl ester	7.90E-01	cm^3/g or L/kg	[3]	3.90E-01	cm^3/g or L/kg	[3]	2.10E-01	cm^3/g or L/kg	[3]
108-10-1	4-Methyl-2-pentanone	2.20E+00	cm^3/g or L/kg	[3]	1.13E+00	cm^3/g or L/kg	[3]	6.10E-01	cm^3/g or L/kg	[3]
108-39-4	m-Cresol	3.75E-01	cm^3/g or L/kg	[2]	6.34E+00	cm^3/g or L/kg	[3]	3.38E+00	cm^3/g or L/kg	[3]
108-60-1	Bis(2-chloroisopropyl) ether	1.74E-01	cm^3/g or L/kg	[2]	2.94E+00	cm^3/g or L/kg	[2]	1.57E+00	cm^3/g or L/kg	[2]
108-67-8	1,3,5-Trimethylbenzene	2.72E+00	cm^3/g or L/kg	[2]	4.59E+01	cm^3/g or L/kg	[3]	2.45E+01	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
108-86-1	Bromobenzene (Phenyl bromide)	1.19E+00	cm^3/g or L/kg	[2]	2.01E+01	cm^3/g or L/kg	[2]	1.07E+01	cm^3/g or L/kg	[2]
108-87-2	Methylcyclohexane	1.19E+00	cm^3/g or L/kg	[2]	2.01E+01	cm^3/g or L/kg	[2]	1.07E+01	cm^3/g or L/kg	[2]
108-88-3	Toluene	3.60E-01	cm^3/g or L/kg	[3]	1.05E+01	cm^3/g or L/kg	[3]	5.60E+00	cm^3/g or L/kg	[3]
108-90-7	Chlorobenzene	4.40E-01	cm^3/g or L/kg	[3]	1.68E+01	cm^3/g or L/kg	[3]	8.96E+00	cm^3/g or L/kg	[3]
108-94-1	Cyclohexanone	6.73E-02	cm^3/g or L/kg	[2]	1.14E+00	cm^3/g or L/kg	[2]	6.06E-01	cm^3/g or L/kg	[2]
108-95-2	Phenol	4.40E+00	cm^3/g or L/kg	[3]	2.24E+00	cm^3/g or L/kg	[3]	1.20E+00	cm^3/g or L/kg	[3]
109-74-0	n-Butanenitrile	1.47E-02	cm^3/g or L/kg	[2]	2.49E-01	cm^3/g or L/kg	[2]	1.33E-01	cm^3/g or L/kg	[2]
109-75-1	3-Butenenitrile									
109-77-3	Malononitrile	6.80E-02	cm^3/g or L/kg	[2]	1.15E+00	cm^3/g or L/kg	[2]	6.12E-01	cm^3/g or L/kg	[2]
109-86-4	2-Methoxyethanol	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
109-99-9	Tetrahydrofuran	1.26E-02	cm^3/g or L/kg	[2]	2.10E-01	cm^3/g or L/kg	[3]	1.10E-01	cm^3/g or L/kg	[3]
110-00-9	Furan	3.98E-01	cm^3/g or L/kg	[2]	6.73E+00	cm^3/g or L/kg	[2]	3.59E+00	cm^3/g or L/kg	[2]
110-54-3	n-Hexane	6.62E-01	cm^3/g or L/kg	[2]	1.12E+01	cm^3/g or L/kg	[2]	5.96E+00	cm^3/g or L/kg	[2]
110-59-8	Pentanenitrile	5.61E-02	cm^3/g or L/kg	[2]	9.47E-01	cm^3/g or L/kg	[2]	5.05E-01	cm^3/g or L/kg	[2]
110-80-5	2-Ethoxyethanol	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
110-82-7	Cyclohexane	2.82E+00	cm^3/g or L/kg	[2]	4.76E+01	cm^3/g or L/kg	[2]	2.54E+01	cm^3/g or L/kg	[2]
110-83-8	Cyclohexene	9.79E-01	cm^3/g or L/kg	[2]	1.65E+01	cm^3/g or L/kg	[2]	8.82E+00	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
110-86-1	Pyridine	1.94E-02	cm^3/g or L/kg	[2]	3.30E-01	cm^3/g or L/kg	[3]	1.70E-01	cm^3/g or L/kg	[3]
111-15-9	Ethylene glycol monoethyl ether acetate	9.29E-03	cm^3/g or L/kg	[2]	1.57E-01	cm^3/g or L/kg	[2]	8.37E-02	cm^3/g or L/kg	[2]
111-44-4	Bis(2-chloroethyl)ether	3.37E-01	cm^3/g or L/kg	[2]	5.69E+00	cm^3/g or L/kg	[3]	3.04E+00	cm^3/g or L/kg	[3]
111-65-9	n-Octane	6.73E+01	cm^3/g or L/kg	[2]	1.14E+03	cm^3/g or L/kg	[2]	6.06E+02	cm^3/g or L/kg	[2]
111-76-2	2-Butoxyethanol	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
111-84-2	n-Nonane	1.58E+02	cm^3/g or L/kg	[2]	2.68E+03	cm^3/g or L/kg	[2]	1.43E+03	cm^3/g or L/kg	[2]
111-91-1	Bis(2-chloroethoxy) methane	1.23E-02	cm^3/g or L/kg	[2]	2.08E-01	cm^3/g or L/kg	[2]	1.11E-01	cm^3/g or L/kg	[2]
112-30-1	1-Decanol	1.38E+02	cm^3/g or L/kg	[2]	2.33E+03	cm^3/g or L/kg	[2]	1.24E+03	cm^3/g or L/kg	[2]
112-31-2	Decanal									
112-40-3	Dodecane									
1120-21-4	Undecane									
1120-71-4	1,3-Propane sultone	2.36E-03	cm^3/g or L/kg	[2]	3.98E-02	cm^3/g or L/kg	[2]	2.12E-02	cm^3/g or L/kg	[2]
117-81-7	Bis(2-ethylhexyl) phthalate	2.30E+06	cm^3/g or L/kg	[3]	8.33E+03	cm^3/g or L/kg	[3]	4.44E+03	cm^3/g or L/kg	[3]
117-84-0	Di-n-octylphthalate	1.30E+07	cm^3/g or L/kg	[3]	6.88E+06	cm^3/g or L/kg	[3]	3.67E+06	cm^3/g or L/kg	[3]
118-74-1	Hexachlorobenzene	1.10E+02	cm^3/g or L/kg	[3]	6.00E+03	cm^3/g or L/kg	[3]	3.20E+03	cm^3/g or L/kg	[3]
119-90-4	3,3'-Dimethoxybenzidine	2.67E-01	cm^3/g or L/kg	[2]	4.51E+00	cm^3/g or L/kg	[3]	2.40E+00	cm^3/g or L/kg	[3]
120-12-7	Anthracene	4.50E+03	cm^3/g or L/kg	[3]	1.76E+03	cm^3/g or L/kg	[3]	9.40E+02	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
120-82-1	1,2,4-Trichlorobenzene	3.60E+00	cm^3/g or L/kg	[3]	1.25E+02	cm^3/g or L/kg	[3]	6.64E+01	cm^3/g or L/kg	[3]
120-83-2	2,4-Dichlorophenol	2.90E-01	cm^3/g or L/kg	[3]	1.10E+01	cm^3/g or L/kg	[3]	5.88E+00	cm^3/g or L/kg	[3]
121-14-2	2,4-Dinitrotoluene	3.93E-01	cm^3/g or L/kg	[2]	6.63E+00	cm^3/g or L/kg	[3]	3.54E+00	cm^3/g or L/kg	[3]
122-39-4	N,N-Diphenylamine	8.38E+00	cm^3/g or L/kg	[2]	1.42E+02	cm^3/g or L/kg	[2]	7.55E+01	cm^3/g or L/kg	[2]
122-66-7	1,2-Diphenylhydrazine	1.20E+02	cm^3/g or L/kg	[3]	5.32E+01	cm^3/g or L/kg	[3]	2.84E+01	cm^3/g or L/kg	[3]
123-33-1	Maleic hydrazide	4.60E-02	cm^3/g or L/kg	[2]	7.76E-01	cm^3/g or L/kg	[2]	4.14E-01	cm^3/g or L/kg	[2]
123-38-6	Propionaldehyde	1.69E-02	cm^3/g or L/kg	[2]	2.85E-01	cm^3/g or L/kg	[2]	1.52E-01	cm^3/g or L/kg	[2]
123-72-8	Butanal	3.26E-02	cm^3/g or L/kg	[2]	5.50E-01	cm^3/g or L/kg	[2]	2.93E-01	cm^3/g or L/kg	[2]
123-91-1	1,4-Dioxan	2.40E-03	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
124-18-5	Decane									
124-38-9	Carbon dioxide									
124-48-1	Chlorodibromo-methane	3.10E-01	cm^3/g or L/kg	[2]	5.24E+00	cm^3/g or L/kg	[3]	2.80E+00	cm^3/g or L/kg	[3]
126-73-8	Tributyl phosphate	8.38E+00	cm^3/g or L/kg	[2]	1.42E+02	cm^3/g or L/kg	[2]	7.55E+01	cm^3/g or L/kg	[2]
126-98-7	2-Methyl-2-propenenitrile	1.51E-02	cm^3/g or L/kg	[2]	2.50E-01	cm^3/g or L/kg	[3]	1.40E-01	cm^3/g or L/kg	[3]
127-18-4	1,1,2,2-Tetrachloroethene	3.10E-01	cm^3/g or L/kg	[3]	1.99E+01	cm^3/g or L/kg	[3]	1.06E+01	cm^3/g or L/kg	[3]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1.02E+02	cm^3/g or L/kg	[2]	1.73E+03	cm^3/g or L/kg	[2]	9.20E+02	cm^3/g or L/kg	[2]
129-00-0	Pyrene	9.50E+03	cm^3/g or L/kg	[3]	5.10E+03	cm^3/g or L/kg	[3]	2.72E+03	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
131-11-3	Dimethyl Phthalate	1.52E-01	cm^3/g or L/kg	[2]	2.56E+00	cm^3/g or L/kg	[3]	1.37E+00	cm^3/g or L/kg	[3]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	6.22E+01	cm^3/g or L/kg	[2]	1.05E+03	cm^3/g or L/kg	[2]	5.60E+02	cm^3/g or L/kg	[2]
132-64-9	Dibenzofuran	5.02E+01	cm^3/g or L/kg	[2]	8.48E+02	cm^3/g or L/kg	[2]	4.52E+02	cm^3/g or L/kg	[2]
133-06-2	Captan	3.83E+00	cm^3/g or L/kg	[2]	6.47E+01	cm^3/g or L/kg	[2]	3.45E+01	cm^3/g or L/kg	[2]
1330-20-7	Xylenes (mixed isomers)	1.97E+00	cm^3/g or L/kg	[2]	3.32E+01	cm^3/g or L/kg	[2]	1.77E+01	cm^3/g or L/kg	[2]
1336-36-3	Polychlorinated biphenyls	1.99E+02	cm^3/g or L/kg	[2]	3.36E+03	cm^3/g or L/kg	[2]	1.79E+03	cm^3/g or L/kg	[2]
134-32-7	alpha-Naphthylamine	1.35E+01	cm^3/g or L/kg	[2]	2.28E+02	cm^3/g or L/kg	[2]	1.22E+02	cm^3/g or L/kg	[2]
135-98-8	sec-Butylbenzene	2.21E+01	cm^3/g or L/kg	[2]	3.74E+02	cm^3/g or L/kg	[2]	1.99E+02	cm^3/g or L/kg	[2]
13966-29-5	Uranium-234	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
13967-48-1	Ruthenium-106	3.50E+02	cm^3/g or L/kg	[1]	3.50E+02	cm^3/g or L/kg	[1]	3.50E+02	cm^3/g or L/kg	[1]
13967-70-9	Cesium-134	1.00E+03	cm^3/g or L/kg	[1]	1.00E+03	cm^3/g or L/kg	[1]	1.00E+03	cm^3/g or L/kg	[1]
13968-55-3	Uranium-233	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
13981-15-2	Curium-244	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]
13981-16-3	Plutonium-238	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]
13981-37-8	Nickel-63	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]
13982-10-0	Plutonium-242	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]
13982-63-3	Radium-226	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
13982-70-2	Uranium-236	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
13994-20-2	Neptunium-237	3.00E+01	cm^3/g or L/kg	[1]	3.00E+01	cm^3/g or L/kg	[1]	3.00E+01	cm^3/g or L/kg	[1]
141-78-6	Acetic acid ethyl ester	2.72E-02	cm^3/g or L/kg	[2]	4.60E-01	cm^3/g or L/kg	[2]	2.45E-01	cm^3/g or L/kg	[2]
14119-32-5	Plutonium-241	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]
14119-33-6	Plutonium-240	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]
14133-76-7	Technetium-99	1.50E+00	cm^3/g or L/kg	[1]	1.50E+00	cm^3/g or L/kg	[1]	1.50E+00	cm^3/g or L/kg	[1]
14158-29-3	Uranium-232	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
14234-35-6	Antimony-125	4.50E+01	cm^3/g or L/kg	[1]	4.50E+01	cm^3/g or L/kg	[1]	4.50E+01	cm^3/g or L/kg	[1]
14265-44-2	Phosphate									
14331-85-2	Protactinium-231	2.50E+03	cm^3/g or L/kg	[1]	2.50E+03	cm^3/g or L/kg	[1]	2.50E+03	cm^3/g or L/kg	[1]
14336-70-0	Nickel-59	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]
14391-16-3	Europium-155	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]
145-73-3	Endothall	4.44E-02	cm^3/g or L/kg	[2]	7.50E-01	cm^3/g or L/kg	[2]	4.00E-01	cm^3/g or L/kg	[2]
14596-10-2	Americium-241	7.00E+02	cm^3/g or L/kg	[1]	7.00E+02	cm^3/g or L/kg	[1]	7.00E+02	cm^3/g or L/kg	[1]
14683-23-9	Europium-152	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]
14762-75-5	Carbon-14	6.70E+00	cm^3/g or L/kg	[4]	6.70E+00	cm^3/g or L/kg	[4]	6.70E+00	cm^3/g or L/kg	[4]
14797-55-8	Nitrate									
14797-65-0	Nitrite									

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
14808-79-8	Sulfate									
14952-40-0	Actinium-227	1.50E+03	cm^3/g or L/kg	[1]	1.50E+03	cm^3/g or L/kg	[1]	1.50E+03	cm^3/g or L/kg	[1]
14993-75-0	Americium-243	7.00E+02	cm^3/g or L/kg	[1]	7.00E+02	cm^3/g or L/kg	[1]	7.00E+02	cm^3/g or L/kg	[1]
15046-84-1	Iodine-129	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]
15117-48-3	Plutonium-239	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]	4.50E+03	cm^3/g or L/kg	[1]
15117-96-1	Uranium-235	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
15262-20-1	Radium-228	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
15510-73-3	Curium-242	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]
15585-10-1	Europium-154	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]
15594-54-4	Thorium-229	1.50E+05	cm^3/g or L/kg	[1]	1.50E+05	cm^3/g or L/kg	[1]	1.50E+05	cm^3/g or L/kg	[1]
156-59-2	cis-1,2-Dichloroethene	7.10E-02	cm^3/g or L/kg	[3]	2.87E+00	cm^3/g or L/kg	[3]	1.53E+00	cm^3/g or L/kg	[3]
156-60-5	1,2-trans-Dichloroethene	1.00E-01	cm^3/g or L/kg	[3]	2.85E+00	cm^3/g or L/kg	[3]	1.52E+00	cm^3/g or L/kg	[3]
15715-94-3	Samarium-151	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]
15751-77-6	Zirconium-93	3.00E+03	cm^3/g or L/kg	[1]	3.00E+03	cm^3/g or L/kg	[1]	3.00E+03	cm^3/g or L/kg	[1]
15757-87-6	Curium-243	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]	2.00E+03	cm^3/g or L/kg	[1]
15758-45-9	Selenium-79	3.00E+02	cm^3/g or L/kg	[1]	3.00E+02	cm^3/g or L/kg	[1]	3.00E+02	cm^3/g or L/kg	[1]
15832-50-5	Tin-126	2.50E+02	cm^3/g or L/kg	[1]	2.50E+02	cm^3/g or L/kg	[1]	2.50E+02	cm^3/g or L/kg	[1]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
1634-04-4	Methyl tert-butyl ether	4.88E-02	cm^3/g or L/kg	[2]	8.25E-01	cm^3/g or L/kg	[2]	4.40E-01	cm^3/g or L/kg	[2]
16887-00-6	Chloride									
16984-48-8	Fluoride									
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	1.73E+04	cm^3/g or L/kg	[2]	2.92E+05	cm^3/g or L/kg	[3]	1.56E+05	cm^3/g or L/kg	[3]
189-55-9	Dibenzo[a,i]pyrene	6.37E+04	cm^3/g or L/kg	[2]	1.08E+06	cm^3/g or L/kg	[2]	5.74E+05	cm^3/g or L/kg	[2]
189-64-0	Dibenzo[a,h]pyrene	6.37E+04	cm^3/g or L/kg	[2]	1.08E+06	cm^3/g or L/kg	[2]	5.74E+05	cm^3/g or L/kg	[2]
191-24-2	Benzo(g,h,i)perylene	1.19E+04	cm^3/g or L/kg	[2]	2.01E+05	cm^3/g or L/kg	[2]	1.07E+05	cm^3/g or L/kg	[2]
191-30-0	Dibenzo(a,l)pyrene	1.68E+05	cm^3/g or L/kg	[2]	2.85E+06	cm^3/g or L/kg	[2]	1.52E+06	cm^3/g or L/kg	[2]
192-65-4	Dibenzo[a,e]pyrene	6.37E+04	cm^3/g or L/kg	[2]	1.08E+06	cm^3/g or L/kg	[2]	5.74E+05	cm^3/g or L/kg	[2]
192-97-2	Benzo(e)pyrene	9.51E+03	cm^3/g or L/kg	[2]	1.61E+05	cm^3/g or L/kg	[2]	8.57E+04	cm^3/g or L/kg	[2]
193-39-5	Indeno(1,2,3-cd)pyrene	5.30E+05	cm^3/g or L/kg	[3]	2.31E+05	cm^3/g or L/kg	[3]	1.23E+05	cm^3/g or L/kg	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	5.46E+04	cm^3/g or L/kg	[2]	9.23E+05	cm^3/g or L/kg	[3]	4.92E+05	cm^3/g or L/kg	[3]
205-82-3	Benzo[j]fluoranthene	4.51E+03	cm^3/g or L/kg	[2]	7.61E+04	cm^3/g or L/kg	[2]	4.06E+04	cm^3/g or L/kg	[2]
205-99-2	Benzo(b)fluor-anthene	4.65E+03	cm^3/g or L/kg	[2]	7.86E+04	cm^3/g or L/kg	[3]	4.19E+04	cm^3/g or L/kg	[3]
206-44-0	Fluoranthene	1.10E+04	cm^3/g or L/kg	[3]	3.68E+03	cm^3/g or L/kg	[3]	1.96E+03	cm^3/g or L/kg	[3]
207-08-9	Benzo(k)fluor-anthene	1.90E+05	cm^3/g or L/kg	[3]	7.44E+04	cm^3/g or L/kg	[3]	3.97E+04	cm^3/g or L/kg	[3]
208-96-8	Acenaphthylene	2.72E+01	cm^3/g or L/kg	[2]	4.59E+02	cm^3/g or L/kg	[2]	2.45E+02	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
218-01-9	Chrysene	6.00E+04	cm^3/g or L/kg	[3]	3.01E+04	cm^3/g or L/kg	[3]	1.60E+04	cm^3/g or L/kg	[3]
224-42-0	Dibenz[a,j]acridine	5.80E+05	cm^3/g or L/kg	[10]	1.34E+05	cm^3/g or L/kg	[9]	7.16E+04	cm^3/g or L/kg	[9]
2245-38-7	2,3,5-Trimethyl-naphthalene									
226-36-8	Dibenz[a,h]acridine	5.80E+05	cm^3/g or L/kg	[10]	1.34E+05	cm^3/g or L/kg	[9]	7.16E+04	cm^3/g or L/kg	[9]
22967-92-6	Methyl mercury	7.00E+03	cm^3/g or L/kg	[3]	1.00E+05	cm^3/g or L/kg	[3]	3.00E+03	cm^3/g or L/kg	[3]
23950-58-5	Pronamide	1.05E+01	cm^3/g or L/kg	[2]	1.77E+02	cm^3/g or L/kg	[3]	9.42E+01	cm^3/g or L/kg	[3]
24959-67-9	Bromide									
27154-33-2	Trichlorofluoro-ethane	2.40E-01	cm^3/g or L/kg	[11]	8.57E+00	cm^3/g or L/kg	[10]	4.57E+00	cm^3/g or L/kg	[10]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	4.43E+04	cm^3/g or L/kg	[2]	7.49E+05	cm^3/g or L/kg	[2]	3.99E+05	cm^3/g or L/kg	[2]
319-84-6	alpha-BHC	2.50E+00	cm^3/g or L/kg	[3]	1.32E+02	cm^3/g or L/kg	[3]	7.04E+01	cm^3/g or L/kg	[3]
319-85-7	beta-BHC	2.50E+00	cm^3/g or L/kg	[3]	1.61E+02	cm^3/g or L/kg	[3]	8.56E+01	cm^3/g or L/kg	[3]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1.46E+04	cm^3/g or L/kg	[2]	2.47E+05	cm^3/g or L/kg	[2]	1.32E+05	cm^3/g or L/kg	[2]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	2.10E+04	cm^3/g or L/kg	[2]	3.55E+05	cm^3/g or L/kg	[2]	1.89E+05	cm^3/g or L/kg	[2]
3268-87-9	Octachlorodibenzo (p)dioxin	4.34E+05	cm^3/g or L/kg	[2]	7.33E+06	cm^3/g or L/kg	[3]	3.91E+06	cm^3/g or L/kg	[3]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	8.54E+04	cm^3/g or L/kg	[2]	1.44E+06	cm^3/g or L/kg	[2]	7.70E+05	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	2.74E+05	cm^3/g or L/kg	[2]	4.62E+06	cm^3/g or L/kg	[3]	2.47E+06	cm^3/g or L/kg	[3]
3697-24-3	5-Methylchrysene	6.00E+04	cm^3/g or L/kg	[9]	3.01E+04	cm^3/g or L/kg	[8]	1.60E+04	cm^3/g or L/kg	[8]
378253-40-8	Barium-137m	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]
378253-44-2	Cadmium-113m	6.50E+00	cm^3/g or L/kg	[1]	6.50E+00	cm^3/g or L/kg	[1]	6.50E+00	cm^3/g or L/kg	[1]
378782-82-2	Niobium-93m	3.50E+02	cm^3/g or L/kg	[1]	3.50E+02	cm^3/g or L/kg	[1]	3.50E+02	cm^3/g or L/kg	[1]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.31E+05	cm^3/g or L/kg	[2]	2.22E+06	cm^3/g or L/kg	[2]	1.18E+06	cm^3/g or L/kg	[2]
39001-02-0	Octachlorodibenzo-furan	2.74E+05	cm^3/g or L/kg	[2]	4.62E+06	cm^3/g or L/kg	[3]	2.47E+06	cm^3/g or L/kg	[3]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	1.73E+05	cm^3/g or L/kg	[2]	2.92E+06	cm^3/g or L/kg	[3]	1.56E+06	cm^3/g or L/kg	[3]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	5.99E+05	cm^3/g or L/kg	[2]	1.01E+07	cm^3/g or L/kg	[2]	5.39E+06	cm^3/g or L/kg	[2]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	1.20E+04	cm^3/g or L/kg	[2]	2.02E+05	cm^3/g or L/kg	[3]	1.08E+05	cm^3/g or L/kg	[3]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	1.73E-02	cm^3/g or L/kg	[2]	2.92E-01	cm^3/g or L/kg	[2]	1.56E-01	cm^3/g or L/kg	[2]
41851-50-7	Chlorocyclo-pentadiene	6.45E-01	cm^3/g or L/kg	[2]	1.09E+01	cm^3/g or L/kg	[2]	5.81E+00	cm^3/g or L/kg	[2]
460-19-5	Cyanogen (oxalonitrile)	6.04E-03	cm^3/g or L/kg	[2]	1.02E-01	cm^3/g or L/kg	[2]	5.44E-02	cm^3/g or L/kg	[2]
4786-20-3	2-Butenenitrile									
50-00-0	Formaldehyde	9.81E-03	cm^3/g or L/kg	[2]	1.70E-01	cm^3/g or L/kg	[3]	9.00E-02	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
50-32-8	Benzo(a)pyrene	1.60E+05	cm^3/g or L/kg	[3]	7.27E+04	cm^3/g or L/kg	[3]	3.88E+04	cm^3/g or L/kg	[3]
506-68-3	Cyanogen bromide (bromocyanide)	3.13E-03	cm^3/g or L/kg	[2]	5.29E-02	cm^3/g or L/kg	[2]	2.82E-02	cm^3/g or L/kg	[2]
506-77-4	Cyanogen chloride	2.66E-03	cm^3/g or L/kg	[2]	4.49E-02	cm^3/g or L/kg	[2]	2.40E-02	cm^3/g or L/kg	[2]
51-28-5	2,4-Dinitrophenol	4.44E-05	cm^3/g or L/kg	[2]	8.00E-04	cm^3/g or L/kg	[3]	4.00E-04	cm^3/g or L/kg	[3]
51-79-6	Ethyl carbamate (urethane)	3.16E-03	cm^3/g or L/kg	[2]	5.34E-02	cm^3/g or L/kg	[2]	2.85E-02	cm^3/g or L/kg	[2]
510-15-6	Chlorobenzilate	8.58E+01	cm^3/g or L/kg	[2]	1.45E+03	cm^3/g or L/kg	[3]	7.73E+02	cm^3/g or L/kg	[3]
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	3.45E+03	cm^3/g or L/kg	[2]	5.82E+04	cm^3/g or L/kg	[3]	3.10E+04	cm^3/g or L/kg	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.05E+05	cm^3/g or L/kg	[2]	1.77E+06	cm^3/g or L/kg	[2]	9.44E+05	cm^3/g or L/kg	[2]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	9.97E-01	cm^3/g or L/kg	[2]	1.68E+01	cm^3/g or L/kg	[2]	8.98E+00	cm^3/g or L/kg	[2]
53-70-3	Dibenz[a,h]anthrace ne	5.80E+05	cm^3/g or L/kg	[3]	1.34E+05	cm^3/g or L/kg	[3]	7.16E+04	cm^3/g or L/kg	[3]
532-27-4	2-Chloroacetophenone	3.96E-01	cm^3/g or L/kg	[2]	6.69E+00	cm^3/g or L/kg	[2]	3.57E+00	cm^3/g or L/kg	[2]
534-52-1	4,6-Dinitro-o-cresol	2.67E+00	cm^3/g or L/kg	[2]	4.51E+01	cm^3/g or L/kg	[2]	2.41E+01	cm^3/g or L/kg	[2]
5385-75-1	Dibenzo(a,e)fluorant hene	2.69E+04	cm^3/g or L/kg	[2]	4.55E+05	cm^3/g or L/kg	[2]	2.43E+05	cm^3/g or L/kg	[2]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	1.69E-01	cm^3/g or L/kg	[2]	2.85E+00	cm^3/g or L/kg	[2]	1.52E+00	cm^3/g or L/kg	[2]
540-73-8	1,2-Dimethylhydrazine	1.10E-01	cm^3/g or L/kg	[2]	1.85E+00	cm^3/g or L/kg	[2]	9.89E-01	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
540-84-1	2,2,4-Trimethylpentane	8.73E+00	cm^3/g or L/kg	[2]	1.47E+02	cm^3/g or L/kg	[2]	7.86E+01	cm^3/g or L/kg	[2]
541-73-1	1,3-Dichlorobenzene	3.77E+00	cm^3/g or L/kg	[2]	6.37E+01	cm^3/g or L/kg	[3]	3.40E+01	cm^3/g or L/kg	[3]
542-75-6	1,3-Dichloropropene	9.10E-02	cm^3/g or L/kg	[3]	2.03E+00	cm^3/g or L/kg	[3]	1.08E+00	cm^3/g or L/kg	[3]
542-88-1	Bis(chloromethyl) ether	1.95E-02	cm^3/g or L/kg	[2]	3.30E-01	cm^3/g or L/kg	[2]	1.76E-01	cm^3/g or L/kg	[2]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	6.88E+04	cm^3/g or L/kg	[2]	1.16E+06	cm^3/g or L/kg	[3]	6.20E+05	cm^3/g or L/kg	[3]
56-23-5	Carbon tetrachloride	3.50E-01	cm^3/g or L/kg	[3]	1.14E+01	cm^3/g or L/kg	[3]	6.08E+00	cm^3/g or L/kg	[3]
56-49-5	3-Methylcholanthrene	6.72E+03	cm^3/g or L/kg	[2]	1.14E+05	cm^3/g or L/kg	[2]	6.05E+04	cm^3/g or L/kg	[2]
56-55-3	Benzo(a)anthracene	6.00E+04	cm^3/g or L/kg	[3]	2.69E+04	cm^3/g or L/kg	[3]	1.43E+04	cm^3/g or L/kg	[3]
57-12-5	Cyanide	9.90E+00	cm^3/g or L/kg	[3]	3.00E-02	cm^3/g or L/kg	[3]	1.40E-02	cm^3/g or L/kg	[3]
57-24-9	Strychnine	3.51E-01	cm^3/g or L/kg	[2]	5.92E+00	cm^3/g or L/kg	[3]	3.16E+00	cm^3/g or L/kg	[3]
57-74-9	Chlordane	2.40E+02	cm^3/g or L/kg	[3]	3.85E+03	cm^3/g or L/kg	[3]	2.05E+03	cm^3/g or L/kg	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	8.66E+03	cm^3/g or L/kg	[2]	1.46E+05	cm^3/g or L/kg	[3]	7.80E+04	cm^3/g or L/kg	[3]
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	1.69E+04	cm^3/g or L/kg	[2]	2.85E+05	cm^3/g or L/kg	[3]	1.52E+05	cm^3/g or L/kg	[3]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	2.74E+04	cm^3/g or L/kg	[2]	4.62E+05	cm^3/g or L/kg	[3]	2.47E+05	cm^3/g or L/kg	[3]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	3.23E+04	cm^3/g or L/kg	[2]	5.45E+05	cm^3/g or L/kg	[2]	2.91E+05	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	5.46E+04	cm^3/g or L/kg	[2]	9.23E+05	cm^3/g or L/kg	[3]	4.92E+05	cm^3/g or L/kg	[3]
58-89-9	gamma-BHC (Lindane)	6.00E+00	cm^3/g or L/kg	[2]	1.01E+02	cm^3/g or L/kg	[2]	5.41E+01	cm^3/g or L/kg	[2]
58-90-2	2,3,4,6-Tetrachlorophenol	1.24E+00	cm^3/g or L/kg	[2]	2.10E+01	cm^3/g or L/kg	[3]	1.12E+01	cm^3/g or L/kg	[3]
581-42-0	2,6-Dimethylnaphthalene									
584-84-9	2,4-Toluene diisocyanate	8.80E-01	cm^3/g or L/kg	[6]	6.63E+00	cm^3/g or L/kg	[5]	3.54E+00	cm^3/g or L/kg	[5]
589-38-8	3-Hexanone	6.04E-02	cm^3/g or L/kg	[2]	1.02E+00	cm^3/g or L/kg	[2]	5.44E-01	cm^3/g or L/kg	[2]
59-50-7	4-Chloro-3-methylphenol	4.95E+00	cm^3/g or L/kg	[2]	8.37E+01	cm^3/g or L/kg	[3]	4.46E+01	cm^3/g or L/kg	[3]
59-89-2	N-Nitrosomorpholine	1.64E-03	cm^3/g or L/kg	[2]	2.77E-02	cm^3/g or L/kg	[2]	1.48E-02	cm^3/g or L/kg	[2]
591-50-4	Benzene, iodo-									
591-78-6	2-Hexanone	5.78E-02	cm^3/g or L/kg	[2]	9.77E-01	cm^3/g or L/kg	[2]	5.21E-01	cm^3/g or L/kg	[2]
593-60-2	Bromoethene (Vinyl bromide)	1.05E-01	cm^3/g or L/kg	[2]	1.78E+00	cm^3/g or L/kg	[2]	9.50E-01	cm^3/g or L/kg	[2]
593-74-8	Dimethyl Mercury									
60-11-7	Dimethyl aminoazobenzene	1.41E+02	cm^3/g or L/kg	[2]	2.38E+03	cm^3/g or L/kg	[2]	1.27E+03	cm^3/g or L/kg	[2]
60-29-7	Ethyl ether	1.95E-02	cm^3/g or L/kg	[2]	3.30E-01	cm^3/g or L/kg	[2]	1.76E-01	cm^3/g or L/kg	[2]
60-35-5	Acetamide	2.56E-04	cm^3/g or L/kg	[2]	4.33E-03	cm^3/g or L/kg	[2]	2.31E-03	cm^3/g or L/kg	[2]
602-87-9	5-Nitroacenaphthene	1.10E+03	cm^3/g or L/kg	[7]	3.68E+02	cm^3/g or L/kg	[6]	1.96E+02	cm^3/g or L/kg	[6]
606-20-2	2,6-Dinitrotoluene	2.18E-01	cm^3/g or L/kg	[2]	3.68E+00	cm^3/g or L/kg	[3]	1.96E+00	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
608-93-5	Pentachlorobenzene	1.43E+02	cm^3/g or L/kg	[2]	9.07E+03	cm^3/g or L/kg	[3]	4.84E+03	cm^3/g or L/kg	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	2.74E+04	cm^3/g or L/kg	[2]	4.62E+05	cm^3/g or L/kg	[3]	2.47E+05	cm^3/g or L/kg	[3]
61626-71-9	Dichloropentadiene	6.45E-01	cm^3/g or L/kg	[2]	1.09E+01	cm^3/g or L/kg	[2]	5.81E+00	cm^3/g or L/kg	[2]
62-50-0	Ethyl methanesulfonate	4.97E-03	cm^3/g or L/kg	[2]	8.00E-02	cm^3/g or L/kg	[3]	4.00E-02	cm^3/g or L/kg	[3]
62-53-3	Aniline	1.20E+00	cm^3/g or L/kg	[3]	5.80E-01	cm^3/g or L/kg	[3]	3.10E-01	cm^3/g or L/kg	[3]
62-75-9	N-Nitroso-N,N-dimethylamine	1.70E-01	cm^3/g or L/kg	[2]	2.87E+00	cm^3/g or L/kg	[2]	1.53E+00	cm^3/g or L/kg	[2]
621-64-7	N-Nitroso-di-n-propylamine	9.65E-02	cm^3/g or L/kg	[2]	1.63E+00	cm^3/g or L/kg	[3]	8.70E-01	cm^3/g or L/kg	[3]
624-83-9	Methyl isocyanate	2.00E-02	cm^3/g or L/kg	[8]	1.30E-01	cm^3/g or L/kg	[7]	7.00E-02	cm^3/g or L/kg	[7]
628-73-9	Hexanenitrile	1.90E-01	cm^3/g or L/kg	[2]	3.21E+00	cm^3/g or L/kg	[2]	1.71E+00	cm^3/g or L/kg	[2]
630-08-0	Carbon monoxide									
630-20-6	1,1,1,2-Tetrachloroethane	1.33E+00	cm^3/g or L/kg	[2]	2.25E+01	cm^3/g or L/kg	[3]	1.20E+01	cm^3/g or L/kg	[3]
64-18-6	Formic acid (methanoic acid)	1.29E-03	cm^3/g or L/kg	[2]	2.00E-02	cm^3/g or L/kg	[3]	1.00E-02	cm^3/g or L/kg	[3]
65-85-0	Benzoic acid	2.66E-03	cm^3/g or L/kg	[2]	5.00E-02	cm^3/g or L/kg	[3]	2.40E-02	cm^3/g or L/kg	[3]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	3.23E+04	cm^3/g or L/kg	[2]	5.45E+05	cm^3/g or L/kg	[2]	2.91E+05	cm^3/g or L/kg	[2]
67-56-1	Methyl alcohol	7.99E-04	cm^3/g or L/kg	[2]	1.00E-02	cm^3/g or L/kg	[3]	7.00E-03	cm^3/g or L/kg	[3]
67-63-0	2-Propyl alcohol	4.71E-03	cm^3/g or L/kg	[2]	7.95E-02	cm^3/g or L/kg	[2]	4.24E-02	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
67-64-1	2-Propanone (Acetone)	8.70E-02	cm^3/g or L/kg	[3]	4.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
67-66-3	Chloroform	8.00E-02	cm^3/g or L/kg	[3]	3.94E+00	cm^3/g or L/kg	[3]	2.10E+00	cm^3/g or L/kg	[3]
67-72-1	Hexachloroethane	6.89E+00	cm^3/g or L/kg	[2]	1.16E+02	cm^3/g or L/kg	[3]	6.20E+01	cm^3/g or L/kg	[3]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzo-furan	6.88E+04	cm^3/g or L/kg	[2]	1.16E+06	cm^3/g or L/kg	[3]	6.20E+05	cm^3/g or L/kg	[3]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.37E+05	cm^3/g or L/kg	[2]	2.32E+06	cm^3/g or L/kg	[2]	1.24E+06	cm^3/g or L/kg	[2]
70-30-4	Hexachlorophene	1.15E+05	cm^3/g or L/kg	[2]	1.94E+06	cm^3/g or L/kg	[3]	1.03E+06	cm^3/g or L/kg	[3]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	7.58E+03	cm^3/g or L/kg	[2]	1.28E+05	cm^3/g or L/kg	[2]	6.83E+04	cm^3/g or L/kg	[2]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	2.74E+04	cm^3/g or L/kg	[2]	4.62E+05	cm^3/g or L/kg	[3]	2.47E+05	cm^3/g or L/kg	[3]
71-36-3	n-Butyl alcohol	1.08E-02	cm^3/g or L/kg	[2]	1.83E-01	cm^3/g or L/kg	[2]	9.77E-02	cm^3/g or L/kg	[2]
71-43-2	Benzene	1.20E-01	cm^3/g or L/kg	[3]	4.63E+00	cm^3/g or L/kg	[3]	2.47E+00	cm^3/g or L/kg	[3]
71-55-6	1,1,1-Trichloroethane	2.20E-01	cm^3/g or L/kg	[3]	1.01E+01	cm^3/g or L/kg	[3]	5.40E+00	cm^3/g or L/kg	[3]
72-43-5	Methoxychlor	1.50E+04	cm^3/g or L/kg	[3]	6.00E+03	cm^3/g or L/kg	[3]	3.20E+03	cm^3/g or L/kg	[3]
72-55-9	4,4-DDE	6.80E+05	cm^3/g or L/kg	[3]	6.48E+03	cm^3/g or L/kg	[3]	3.46E+03	cm^3/g or L/kg	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	2.74E+04	cm^3/g or L/kg	[2]	4.62E+05	cm^3/g or L/kg	[3]	2.47E+05	cm^3/g or L/kg	[3]
74-83-9	Bromomethane	4.00E-02	cm^3/g or L/kg	[2]	6.75E-01	cm^3/g or L/kg	[3]	3.60E-01	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
74-87-3	Chloromethane	2.66E-02	cm^3/g or L/kg	[2]	4.70E-01	cm^3/g or L/kg	[3]	2.50E-01	cm^3/g or L/kg	[3]
74-88-4	Iodomethane	1.36E-01	cm^3/g or L/kg	[2]	2.29E+00	cm^3/g or L/kg	[2]	1.22E+00	cm^3/g or L/kg	[2]
74-95-3	Methylene bromide	1.41E-01	cm^3/g or L/kg	[2]	2.39E+00	cm^3/g or L/kg	[3]	1.27E+00	cm^3/g or L/kg	[3]
74-97-5	Bromochloro-methane	1.05E-01	cm^3/g or L/kg	[2]	1.78E+00	cm^3/g or L/kg	[2]	9.50E-01	cm^3/g or L/kg	[2]
7429-90-5	Aluminum	1.50E+03	cm^3/g or L/kg	[5]	1.50E+03	cm^3/g or L/kg	[1]	1.50E+03	cm^3/g or L/kg	[1]
7439-89-6	Iron	2.50E+01	cm^3/g or L/kg	[5]	2.50E+01	cm^3/g or L/kg	[1]	2.50E+01	cm^3/g or L/kg	[1]
7439-92-1	Lead	9.00E+02	cm^3/g or L/kg	[3]	9.00E+02	cm^3/g or L/kg	[3]	9.00E+02	cm^3/g or L/kg	[3]
7439-93-2	Lithium	3.00E+02	cm^3/g or L/kg	[5]	3.00E+02	cm^3/g or L/kg	[1]	3.00E+02	cm^3/g or L/kg	[1]
7439-95-4	Magnesium	4.50E+00	cm^3/g or L/kg	[5]	4.50E+00	cm^3/g or L/kg	[1]	4.50E+00	cm^3/g or L/kg	[1]
7439-96-5	Manganese	6.50E+01	cm^3/g or L/kg	[5]	6.50E+01	cm^3/g or L/kg	[1]	6.50E+01	cm^3/g or L/kg	[1]
7439-97-6	Mercury	1.00E+03	cm^3/g or L/kg	[3]	1.00E+03	cm^3/g or L/kg	[3]	3.00E+03	cm^3/g or L/kg	[3]
7439-98-7	Molybdenum	2.00E+01	cm^3/g or L/kg	[5]	2.00E+01	cm^3/g or L/kg	[1]	2.00E+01	cm^3/g or L/kg	[1]
7440-02-0	Nickel	6.50E+01	cm^3/g or L/kg	[3]	6.50E+01	cm^3/g or L/kg	[3]	6.50E+01	cm^3/g or L/kg	[3]
7440-16-6	Rhodium	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]	6.00E+01	cm^3/g or L/kg	[1]
7440-22-4	Silver	8.30E+00	cm^3/g or L/kg	[3]	8.30E+00	cm^3/g or L/kg	[3]	8.30E+00	cm^3/g or L/kg	[3]
7440-23-5	Sodium	1.00E+02	cm^3/g or L/kg	[5]	1.00E+02	cm^3/g or L/kg	[1]	1.00E+02	cm^3/g or L/kg	[1]
7440-24-6	Strontium (total)	3.50E+01	cm^3/g or L/kg	[5]	3.50E+01	cm^3/g or L/kg	[1]	3.50E+01	cm^3/g or L/kg	[1]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
7440-25-7	Tantalum	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]	6.50E+02	cm^3/g or L/kg	[1]
7440-28-0	Thallium	7.10E+01	cm^3/g or L/kg	[3]	7.10E+01	cm^3/g or L/kg	[3]	7.10E+01	cm^3/g or L/kg	[3]
7440-29-1	Thorium-232	1.50E+05	cm^3/g or L/kg	[5]	1.50E+05	cm^3/g or L/kg	[1]	1.50E+05	cm^3/g or L/kg	[1]
7440-31-5	Tin	2.50E+02	cm^3/g or L/kg	[5]	2.50E+02	cm^3/g or L/kg	[1]	2.50E+02	cm^3/g or L/kg	[1]
7440-33-7	Tungsten	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]	1.50E+02	cm^3/g or L/kg	[1]
7440-36-0	Antimony	4.50E+01	cm^3/g or L/kg	[3]	4.50E+01	cm^3/g or L/kg	[3]	4.50E+01	cm^3/g or L/kg	[3]
7440-38-2	Arsenic	2.90E+01	cm^3/g or L/kg	[3]	2.90E+01	cm^3/g or L/kg	[3]	2.90E+01	cm^3/g or L/kg	[3]
7440-39-3	Barium	4.10E+01	cm^3/g or L/kg	[3]	4.10E+01	cm^3/g or L/kg	[3]	4.10E+01	cm^3/g or L/kg	[3]
7440-41-7	Beryllium	7.90E+02	cm^3/g or L/kg	[3]	7.90E+02	cm^3/g or L/kg	[3]	7.90E+02	cm^3/g or L/kg	[3]
7440-43-9	Cadmium	7.50E+01	cm^3/g or L/kg	[3]	7.50E+01	cm^3/g or L/kg	[3]	7.50E+01	cm^3/g or L/kg	[3]
7440-47-3	Chromium	1.90E+01	cm^3/g or L/kg	[3]	1.90E+01	cm^3/g or L/kg	[3]	1.90E+01	cm^3/g or L/kg	[3]
7440-48-4	Cobalt	4.50E+01	cm^3/g or L/kg	[5]	4.50E+01	cm^3/g or L/kg	[1]	4.50E+01	cm^3/g or L/kg	[1]
7440-50-8	Copper	3.50E+01	cm^3/g or L/kg	[5]	3.50E+01	cm^3/g or L/kg	[1]	3.50E+01	cm^3/g or L/kg	[1]
7440-61-1	Uranium	4.50E+02	cm^3/g or L/kg	[5]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
7440-61-1R	Uranium-238	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]	4.50E+02	cm^3/g or L/kg	[1]
7440-62-2	Vanadium	1.00E+03	cm^3/g or L/kg	[5]	1.00E+03	cm^3/g or L/kg	[1]	1.00E+03	cm^3/g or L/kg	[1]
7440-65-5	Yttrium	5.00E+02	cm^3/g or L/kg	[1]	5.00E+02	cm^3/g or L/kg	[1]	5.00E+02	cm^3/g or L/kg	[1]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
7440-66-6	Zinc	6.20E+01	cm^3/g or L/kg	[3]	6.20E+01	cm^3/g or L/kg	[3]	6.20E+01	cm^3/g or L/kg	[3]
7440-67-7	Zirconium	3.00E+03	cm^3/g or L/kg	[5]	3.00E+03	cm^3/g or L/kg	[1]	3.00E+03	cm^3/g or L/kg	[1]
7446-09-5	Sulfur dioxide									
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	3.23E+04	cm^3/g or L/kg	[2]	5.45E+05	cm^3/g or L/kg	[2]	2.91E+05	cm^3/g or L/kg	[2]
7487-94-7	Mercury (Hg^{+2})	5.80E+04	cm^3/g or L/kg	[3]	1.00E+05	cm^3/g or L/kg	[3]	5.00E+04	cm^3/g or L/kg	[3]
75-00-3	Chloroethane	3.20E-02	cm^3/g or L/kg	[3]	1.15E+00	cm^3/g or L/kg	[3]	6.20E-01	cm^3/g or L/kg	[3]
75-01-4	1-Chloroethene	3.70E-02	cm^3/g or L/kg	[3]	1.15E+00	cm^3/g or L/kg	[3]	6.20E-01	cm^3/g or L/kg	[3]
75-02-5	Fluoroethene (Vinyl fluoride)	1.15E-01	cm^3/g or L/kg	[2]	1.95E+00	cm^3/g or L/kg	[2]	1.04E+00	cm^3/g or L/kg	[2]
75-05-8	Acetonitrile	2.04E-03	cm^3/g or L/kg	[2]	3.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
75-07-0	Acetaldehyde	2.71E-03	cm^3/g or L/kg	[2]	5.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
75-09-2	Dichloromethane (Methylene chloride)	2.40E-02	cm^3/g or L/kg	[3]	7.50E-01	cm^3/g or L/kg	[3]	4.00E-01	cm^3/g or L/kg	[3]
75-15-0	Carbon disulfide	9.10E-02	cm^3/g or L/kg	[3]	4.96E+00	cm^3/g or L/kg	[3]	2.65E+00	cm^3/g or L/kg	[3]
75-21-8	Ethylene oxide (Oxirane)	2.26E-03	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[3]	2.00E-02	cm^3/g or L/kg	[3]
75-25-2	Bromoform	5.59E-01	cm^3/g or L/kg	[2]	9.45E+00	cm^3/g or L/kg	[3]	5.04E+00	cm^3/g or L/kg	[3]
75-27-4	Bromodichloro-methane	1.10E-01	cm^3/g or L/kg	[3]	4.13E+00	cm^3/g or L/kg	[3]	2.21E+00	cm^3/g or L/kg	[3]
75-29-6	2-Chloropropane	1.56E-01	cm^3/g or L/kg	[2]	2.63E+00	cm^3/g or L/kg	[2]	1.40E+00	cm^3/g or L/kg	[2]
75-34-3	1,1-Dichloroethane	6.00E-02	cm^3/g or L/kg	[3]	4.01E+00	cm^3/g or L/kg	[3]	2.14E+00	cm^3/g or L/kg	[3]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
75-35-4	1,1-Dichloroethene	1.20E-01	cm^3/g or L/kg	[3]	4.88E+00	cm^3/g or L/kg	[3]	2.60E+00	cm^3/g or L/kg	[3]
75-44-5	Phosgene (Hhydrogen phosphide)	1.46E-03	cm^3/g or L/kg	[2]	2.46E-02	cm^3/g or L/kg	[2]	1.31E-02	cm^3/g or L/kg	[2]
75-45-6	Chlorodifluoro-methane	3.81E-02	cm^3/g or L/kg	[2]	6.40E-01	cm^3/g or L/kg	[3]	3.40E-01	cm^3/g or L/kg	[3]
75-50-3	Trimethylamine	6.60E-02	cm^3/g or L/kg	[2]	1.11E+00	cm^3/g or L/kg	[2]	5.94E-01	cm^3/g or L/kg	[2]
75-69-4	Trichlorofluoro-methane	2.40E-01	cm^3/g or L/kg	[3]	8.57E+00	cm^3/g or L/kg	[3]	4.57E+00	cm^3/g or L/kg	[3]
75-71-8	Dichlorodifluoromet hane	2.73E-01	cm^3/g or L/kg	[2]	4.61E+00	cm^3/g or L/kg	[3]	2.46E+00	cm^3/g or L/kg	[3]
76-01-7	Pentachloroethane	6.50E+00	cm^3/g or L/kg	[2]	1.10E+02	cm^3/g or L/kg	[2]	5.86E+01	cm^3/g or L/kg	[2]
76-13-1	1,2,2-Trichlorotrifluoro-ethane	9.98E-01	cm^3/g or L/kg	[2]	1.69E+01	cm^3/g or L/kg	[2]	8.99E+00	cm^3/g or L/kg	[2]
76-44-8	Heptachlor	2.10E+05	cm^3/g or L/kg	[3]	7.15E+02	cm^3/g or L/kg	[3]	3.81E+02	cm^3/g or L/kg	[3]
764-41-0	1,4-Dichloro-2-butene	6.62E-01	cm^3/g or L/kg	[2]	1.12E+01	cm^3/g or L/kg	[2]	5.96E+00	cm^3/g or L/kg	[2]
7647-01-0	Hydrogen chloride									
765-34-4	Glycidylaldehyde	4.44E-03	cm^3/g or L/kg	[2]	7.50E-02	cm^3/g or L/kg	[2]	4.00E-02	cm^3/g or L/kg	[2]
7664-39-3	Hydrogen Fluoride									
7664-41-7	Ammonia/ Ammonium									
77-47-4	Hexachlorocyclo-pentadiene	5.21E+01	cm^3/g or L/kg	[2]	8.80E+02	cm^3/g or L/kg	[3]	4.70E+02	cm^3/g or L/kg	[3]
77-78-1	Dimethyl sulfate	1.07E-01	cm^3/g or L/kg	[2]	1.81E+00	cm^3/g or L/kg	[2]	9.67E-01	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
7704-34-9	Total Sulfur (thermodynamically stable)									
7723-14-0	Phosphorus	3.50E+00	cm^3/g or L/kg	[5]	3.50E+00	cm^3/g or L/kg	[1]	3.50E+00	cm^3/g or L/kg	[1]
7782-41-4	Fluorine gas (F_2)	1.50E+02	cm^3/g or L/kg	[5]						
7782-49-2	Selenium	5.00E+00	cm^3/g or L/kg	[3]	5.00E+00	cm^3/g or L/kg	[3]	5.00E+00	cm^3/g or L/kg	[3]
7782-50-5	Chlorine	2.50E-01	cm^3/g or L/kg	[5]						
78-83-1	2-Methylpropyl alcohol	9.09E-03	cm^3/g or L/kg	[2]	1.54E-01	cm^3/g or L/kg	[2]	8.19E-02	cm^3/g or L/kg	[2]
78-87-5	1,2-Dichloropropane	9.00E-02	cm^3/g or L/kg	[3]	3.53E+00	cm^3/g or L/kg	[3]	1.88E+00	cm^3/g or L/kg	[3]
78-93-3	2-Butanone	2.90E-01	cm^3/g or L/kg	[3]	1.40E-01	cm^3/g or L/kg	[3]	8.00E-02	cm^3/g or L/kg	[3]
79-00-5	1,1,2-Trichloroethane	1.00E-01	cm^3/g or L/kg	[3]	5.63E+00	cm^3/g or L/kg	[3]	3.00E+00	cm^3/g or L/kg	[3]
79-01-6	1,1,2-Trichloroethylene	3.30E-01	cm^3/g or L/kg	[3]	7.07E+00	cm^3/g or L/kg	[3]	3.77E+00	cm^3/g or L/kg	[3]
79-10-7	2-Propenoic acid	5.33E-03	cm^3/g or L/kg	[2]	9.01E-02	cm^3/g or L/kg	[2]	4.80E-02	cm^3/g or L/kg	[2]
79-34-5	1,1,2,2-Tetrachloroethane	1.90E-01	cm^3/g or L/kg	[3]	5.93E+00	cm^3/g or L/kg	[3]	3.16E+00	cm^3/g or L/kg	[3]
79-46-9	2-Nitropropane	1.11E-01	cm^3/g or L/kg	[2]	1.87E+00	cm^3/g or L/kg	[2]	9.98E-01	cm^3/g or L/kg	[2]
80-62-6	Methyl methacrylate	4.50E-02	cm^3/g or L/kg	[2]	7.61E-01	cm^3/g or L/kg	[2]	4.06E-01	cm^3/g or L/kg	[2]
82-68-8	Pentachloronitro-benzene (PCNB)	1.62E+02	cm^3/g or L/kg	[2]	2.73E+03	cm^3/g or L/kg	[3]	1.46E+03	cm^3/g or L/kg	[3]
822-06-0	Hexamethylene-1,5-diisocyanate	2.60E+01	cm^3/g or L/kg	[2]	4.40E+02	cm^3/g or L/kg	[2]	2.35E+02	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
823-40-5	Toluene-2,6-diamine	5.43E-01	cm^3/g or L/kg	[2]	9.18E+00	cm^3/g or L/kg	[2]	4.90E+00	cm^3/g or L/kg	[2]
83-32-9	Acenaphthene	1.10E+03	cm^3/g or L/kg	[3]	3.68E+02	cm^3/g or L/kg	[3]	1.96E+02	cm^3/g or L/kg	[3]
832-69-9	1-Methylphenanthrene									
84-66-2	Diethyl phthalate	4.40E+01	cm^3/g or L/kg	[3]	6.17E+00	cm^3/g or L/kg	[3]	3.29E+00	cm^3/g or L/kg	[3]
84-74-2	Di-n-butylphthalate	5.20E+03	cm^3/g or L/kg	[3]	1.18E+02	cm^3/g or L/kg	[3]	6.28E+01	cm^3/g or L/kg	[3]
85-01-8	Phenanthrene	3.70E+03	cm^3/g or L/kg	[3]	1.99E+03	cm^3/g or L/kg	[3]	1.06E+03	cm^3/g or L/kg	[3]
85-44-9	Phthalic anhydride (1,2-benzenedicarb-oxylic anhydride)	1.11E-03	cm^3/g or L/kg	[2]	2.00E-02	cm^3/g or L/kg	[3]	1.00E-02	cm^3/g or L/kg	[3]
85-68-7	Butylbenzylphthalate	8.70E+03	cm^3/g or L/kg	[3]	1.03E+03	cm^3/g or L/kg	[3]	5.48E+02	cm^3/g or L/kg	[3]
86-73-7	Fluorene	2.10E+03	cm^3/g or L/kg	[3]	5.78E+02	cm^3/g or L/kg	[3]	3.08E+02	cm^3/g or L/kg	[3]
87-61-6	1,2,3-Trichlorobenzene	8.57E+00	cm^3/g or L/kg	[2]	1.45E+02	cm^3/g or L/kg	[3]	7.72E+01	cm^3/g or L/kg	[3]
87-68-3	Hexachlorobutadiene	7.60E+03	cm^3/g or L/kg	[3]	5.68E+02	cm^3/g or L/kg	[3]	3.03E+02	cm^3/g or L/kg	[3]
87-86-5	Pentachlorophenol	1.20E+00	cm^3/g or L/kg	[3]	4.44E+01	cm^3/g or L/kg	[3]	2.37E+01	cm^3/g or L/kg	[3]
88-06-2	2,4,6-Trichlorophenol	7.60E-01	cm^3/g or L/kg	[3]	2.86E+01	cm^3/g or L/kg	[3]	1.52E+01	cm^3/g or L/kg	[3]
88-74-4	o-Nitroaniline (2-nitroaniline)	2.93E-01	cm^3/g or L/kg	[2]	4.94E+00	cm^3/g or L/kg	[3]	2.64E+00	cm^3/g or L/kg	[3]
88-75-5	2-Nitrophenol	2.55E-01	cm^3/g or L/kg	[2]	4.31E+00	cm^3/g or L/kg	[3]	2.30E+00	cm^3/g or L/kg	[3]
90-04-0	o-Anisidine	6.42E-02	cm^3/g or L/kg	[2]	1.08E+00	cm^3/g or L/kg	[2]	5.78E-01	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
90-12-0	1-Methylnaphthalene	1.35E+01	cm^3/g or L/kg	[2]	2.28E+02	cm^3/g or L/kg	[2]	1.22E+02	cm^3/g or L/kg	[2]
91-20-3	Naphthalene	3.00E+02	cm^3/g or L/kg	[3]	8.93E+01	cm^3/g or L/kg	[3]	4.76E+01	cm^3/g or L/kg	[3]
91-22-5	Quinoline	8.16E+00	cm^3/g or L/kg	[2]	1.38E+02	cm^3/g or L/kg	[2]	7.35E+01	cm^3/g or L/kg	[2]
91-57-6	2-Methylnaphthalene	1.32E+01	cm^3/g or L/kg	[2]	2.23E+02	cm^3/g or L/kg	[2]	1.19E+02	cm^3/g or L/kg	[2]
91-58-7	2-Chloronaphthalene	9.34E+00	cm^3/g or L/kg	[2]	1.58E+02	cm^3/g or L/kg	[3]	8.41E+01	cm^3/g or L/kg	[3]
91-94-1	3,3'-Dichlorobenzidine	3.20E+00	cm^3/g or L/kg	[2]	5.41E+01	cm^3/g or L/kg	[3]	2.88E+01	cm^3/g or L/kg	[3]
92-52-4	1,1`-Biphenyl	2.78E+01	cm^3/g or L/kg	[2]	4.69E+02	cm^3/g or L/kg	[2]	2.50E+02	cm^3/g or L/kg	[2]
924-16-3	N-Nitroso-di-n-Buetylamine	3.43E-01	cm^3/g or L/kg	[2]	5.79E+00	cm^3/g or L/kg	[3]	3.09E+00	cm^3/g or L/kg	[3]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1.83E+00	cm^3/g or L/kg	[2]	3.09E+01	cm^3/g or L/kg	[3]	1.65E+01	cm^3/g or L/kg	[3]
94-75-7	2,4-D	1.31E-01	cm^3/g or L/kg	[2]	2.21E+00	cm^3/g or L/kg	[2]	1.18E+00	cm^3/g or L/kg	[2]
95-48-7	o-Cresol	3.67E-01	cm^3/g or L/kg	[2]	6.20E+00	cm^3/g or L/kg	[3]	3.31E+00	cm^3/g or L/kg	[3]
95-49-8	o-Chlorotoluene	1.97E+00	cm^3/g or L/kg	[2]	3.32E+01	cm^3/g or L/kg	[2]	1.77E+01	cm^3/g or L/kg	[2]
95-50-1	1,2-Dichlorobenzene	1.68E+00	cm^3/g or L/kg	[2]	2.84E+01	cm^3/g or L/kg	[3]	1.52E+01	cm^3/g or L/kg	[3]
95-53-4	o-Toluidine	8.81E-02	cm^3/g or L/kg	[2]	1.49E+00	cm^3/g or L/kg	[3]	7.90E-01	cm^3/g or L/kg	[3]
95-57-8	2-Chlorophenol	1.72E+00	cm^3/g or L/kg	[2]	2.91E+01	cm^3/g or L/kg	[3]	1.55E+01	cm^3/g or L/kg	[3]
95-63-6	1,2,4-Trimethyl benzene	3.19E+00	cm^3/g or L/kg	[2]	5.38E+01	cm^3/g or L/kg	[2]	2.87E+01	cm^3/g or L/kg	[2]

Table 2-5 Soil/Water Partitioning Constant, Suspended Sediment/Surface Water Partitioning Coefficient, and Bed Sediment/Sediment Pore Water Partitioning Coefficient

CAS Registry Number	Analyte Name	Soil-water Partition Coeff. (Kd_s)	Units for Soil-Water Partition Coeff.	Reference	Suspended Sediment-Surface Water Partition Coeff. (Kd_{sw})	Units for Suspended Sediment-Surface Water Partition Coeff.	Reference	Bed Sediment-Sediment Pore Water Partition Coeff. (Kd_{bs})	Units for Sediment-Sediment Pore Water Partition Coeff.	Reference
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10E+01	cm^3/g or L/kg	[3]	5.68E+02	cm^3/g or L/kg	[3]	3.03E+02	cm^3/g or L/kg	[3]
95-95-4	2,4,5-Trichlorophenol	7.09E+00	cm^3/g or L/kg	[2]	1.20E+02	cm^3/g or L/kg	[3]	6.39E+01	cm^3/g or L/kg	[3]
96-12-8	1,2-Dibromo-3-chloropropane	1.70E-01	cm^3/g or L/kg	[3]	1.37E+01	cm^3/g or L/kg	[3]	7.30E+00	cm^3/g or L/kg	[3]
96-18-4	1,2,3-Trichloropropane	1.40E-01	cm^3/g or L/kg	[3]	3.45E+00	cm^3/g or L/kg	[3]	1.84E+00	cm^3/g or L/kg	[3]
96-45-7	Ethylene thiourea	2.89E-02	cm^3/g or L/kg	[2]	4.88E-01	cm^3/g or L/kg	[2]	2.60E-01	cm^3/g or L/kg	[2]
97-63-2	Ethyl methacrylate	3.59E-01	cm^3/g or L/kg	[2]	6.06E+00	cm^3/g or L/kg	[3]	3.23E+00	cm^3/g or L/kg	[3]
98-01-1	Furfural	7.86E-02	cm^3/g or L/kg	[2]	1.33E+00	cm^3/g or L/kg	[2]	7.08E-01	cm^3/g or L/kg	[2]
98-06-6	tert-Butyl benzene	9.56E+00	cm^3/g or L/kg	[2]	1.61E+02	cm^3/g or L/kg	[2]	8.61E+01	cm^3/g or L/kg	[2]
98-07-7	Benzotrichloride	5.24E+00	cm^3/g or L/kg	[2]	8.86E+01	cm^3/g or L/kg	[2]	4.72E+01	cm^3/g or L/kg	[2]
98-82-8	Cumene	6.00E+02	cm^3/g or L/kg	[3]	7.65E+01	cm^3/g or L/kg	[3]	4.08E+01	cm^3/g or L/kg	[3]
98-83-9	Methyl styrene (mixed isomers)	3.63E+00	cm^3/g or L/kg	[2]	6.13E+01	cm^3/g or L/kg	[2]	3.27E+01	cm^3/g or L/kg	[2]
98-86-2	Acetophenone	1.59E-01	cm^3/g or L/kg	[2]	2.68E+00	cm^3/g or L/kg	[3]	1.43E+00	cm^3/g or L/kg	[3]
98-95-3	Nitrobenzene	5.28E-01	cm^3/g or L/kg	[2]	8.93E+00	cm^3/g or L/kg	[3]	4.76E+00	cm^3/g or L/kg	[3]
99-35-4	1,3,5-Trinitrobenzene	2.20E+00	cm^3/g or L/kg	[3]	1.13E+00	cm^3/g or L/kg	[3]	6.10E-01	cm^3/g or L/kg	[3]
99-65-0	1,3-Dinitrobenzene	4.40E+00	cm^3/g or L/kg	[3]	2.24E+00	cm^3/g or L/kg	[3]	1.19E+00	cm^3/g or L/kg	[3]
99-87-6	p-Cymene	9.39E+00	cm^3/g or L/kg	[2]	1.59E+02	cm^3/g or L/kg	[2]	8.46E+01	cm^3/g or L/kg	[2]

Reference	Reference (source) for Soil-Water Partition Coefficient
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture.* ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-10 in EPA. 2005. Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Kennedy WE, and Strenge DL. 1992. *Residual Radioactive Contamination from Decommissioning, Vol. 1, Final Report*. NUREG/CR-5512. Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington DC. (Table 6.7) (http://www.nrc.gov/what-we-do/regulatory/decommissioning/reg-guides-comm.html).
[5]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[6]	Surrogate value from 2,4-Dinitrotoluene.
[7]	Surrogate value from Acenaphthene.
[8]	Surrogate value from Acrylonitrile.
[9]	Surrogate value from Chrysene.
[10]	Surrogate value from Dibenz[a,h]anthracene.
[11]	Surrogate value from Trichlorofluoromethane.
[12]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Suspended Sediment-Surface Water Partition Coefficient
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-11 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Kennedy WE, and Strenge DL. 1992. *Residual Radioactive Contamination from Decommissioning, Vol. 1, Final Report.* NUREG/CR-5512. Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington DC. (Table 6.7) (http://www.nrc.gov/what-we-do/regulatory/decommissioning/reg-guides-comm.html).
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chrysene.
[9]	Surrogate value from Dibenz[a,h]anthracene.

Reference	Reference (source) for Suspended Sediment-Surface Water Partition Coefficient
[10]	Surrogate value from Trichlorofluoromethane.
[11]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Sediment/Sediment Pore Water Partition Coefficient
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-12 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Kennedy WE, and Strenge DL. 1992. *Residual Radioactive Contamination from Decommissioning, Vol. 1, Final Report*. NUREG/CR-5512. Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington DC. (Table 6.7) (http://www.nrc.gov/what-we-do/regulatory/decommissioning/reg-guides-comm.html).
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chrysene.
[9]	Surrogate value from Dibenz[a,h]anthracene.
[10]	Surrogate value from Trichlorofluoromethane.
[11]	Surrogate value from cis-1,2-Dichloroethene.

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
100-02-7	p-Nitrophenol	1.21E+00	days	[2]	2.09E+02	1/yr	[1]
100-21-0	Phthalic acid	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene	1.00E+01	days	[2]	2.53E+01	1/yr	[1]
100-42-5	Styrene	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
100-44-7	Benzyl chloride	1.21E+01	days	[2]	2.09E+01	1/yr	[1]
100-47-0	Benzonitrile				0.00E+00	1/yr	[2]
100-51-6	Benzyl alcohol				0.00E+00	1/yr	[2]
100-52-7	Benzaldehyde				0.00E+00	1/yr	[2]
10028-15-6	Ozone						
10061-01-5	cis-1,3-Dichloropropene				0.00E+00	1/yr	[3]
10061-02-6	trans-1,3-Dichloropropene						
101-55-3	4-Bromophenylphenyl ether				0.00E+00	1/yr	[2]
101-77-9	4,4-Methylenedianiline	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
10102-44-0	Nitrogen dioxide						
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene (Isocumene)						
104-51-8	n-Butylbenzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene (p-Tolyl chloride)						
106-44-5	p-Cresol (4-methyl phenol)	6.67E-01	days	[2]	3.79E+02	1/yr	[1]
106-46-7	1,4-Dichlorobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
106-47-8	p-Chloroaniline				0.00E+00	1/yr	[2]
106-49-0	p-Toluidine						
106-51-4	Quinone	5.00E+00	days	[2]	5.06E+01	1/yr	[1]
106-88-7	1,2-Epoxybutane	1.29E+01	days	[2]	1.96E+01	1/yr	[1]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	2.80E+01	days	[2]	9.04E+00	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
106-93-4	Ethylene dibromide	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
106-99-0	1,3-Butadiene	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
107-02-8	Acrolein	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
107-05-1	3-Chloropropene	1.40E+01	days	[2]	1.81E+01	1/yr	[1]
107-06-2	1,2-Dichloroethane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	2.30E+01	days	[2]	1.10E+01	1/yr	[1]
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol (1,2-ethanediol)	1.20E+01	days	[2]	2.11E+01	1/yr	[1]
107-98-2	Propylene glycol monomethyl ether	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
108-05-4	Acetic acid vinyl ester				0.00E+00	1/yr	[2]
108-10-1	4-Methyl-2-pentanone	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
108-39-4	m-Cresol	2.90E+01	days	[2]	8.72E+00	1/yr	[1]
108-60-1	bis (2-Chloroisopropyl)ether	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
108-67-8	1,3,5-Trimethylbenzene				0.00E+00	1/yr	[2]
108-86-1	Bromobenzene (Phenyl bromide)						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	2.20E+01	days	[2]	1.15E+01	1/yr	[1]
108-90-7	Chlorobenzene	1.50E+02	days	[2]	1.69E+00	1/yr	[1]
108-94-1	Cyclohexanone						
108-95-2	Phenol	1.00E+01	days	[2]	2.53E+01	1/yr	[1]
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile	2.14E+01	days	[3]	1.18E+01	1/yr	[1]
109-86-4	2-Methoxyethanol	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
109-99-9	Tetrahydrofuran				0.00E+00	1/yr	[2]
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
110-82-7	Cyclohexane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
110-83-8	Cyclohexene						

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
110-86-1	Pyridine	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl)ether	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
111-65-9	n-Octane						
111-76-2	2-Butoxyethanol	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
117-81-7	Bis(2-ethylhexyl) phthalate				1.10E+01	1/yr	[2]
117-84-0	Di-n-octylphthalate	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
118-74-1	Hexachlorobenzene	2.09E+03	days	[2]	1.21E-01	1/yr	[1]
119-90-4	3,3'-Dimethoxybenzidine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
120-12-7	Anthracene	4.60E+02	days	[2]	5.50E-01	1/yr	[1]
120-82-1	1,2,4-Trichlorobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
120-83-2	2,4-Dichlorophenol	7.00E+01	days	[2]	3.61E+00	1/yr	[1]
121-14-2	2,4-Dinitrotoluene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
122-39-4	N,N-Diphenylamine	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
122-66-7	1,2-Diphenylhydrazine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
123-33-1	Maleic hydrazide						
123-38-6	Propionaldehyde	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
123-72-8	Butanal	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
123-91-1	1,4-Dioxan	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile				0.00E+00	1/yr	[2]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
127-18-4	1,1,2,2-Tetrachloroethene	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene	1.90E+03	days	[2]	1.33E-01	1/yr	[1]
131-11-3	Dimethyl Phthalate	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
133-06-2	Captan	6.00E+01	days	[2]	4.22E+00	1/yr	[1]
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls						
134-32-7	alpha-Naphthylamine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
135-98-8	sec-Butylbenzene						
141-78-6	Acetic acid ethyl ester	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
14265-44-2	Phosphate						
145-73-3	Endothall	9.00E+00	days	[5]	2.81E+01	1/yr	[1]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
156-59-2	cis-1,2-Dichloroethene				0.00E+00	1/yr	[2]
156-60-5	1,2-trans-Dichloroethene				0.00E+00	1/yr	[2]
1634-04-4	Methyl tert-butyl ether	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
16887-00-6	Chloride						
16984-48-8	Fluoride						
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	5.90E+02	days	[2]	4.29E-01	1/yr	[1]
189-55-9	Dibenzo[a,i]pyrene	3.61E+02	days	[2]	7.01E-01	1/yr	[1]
189-64-0	Dibenzo[a,h]pyrene	3.61E+02	days	[10]	7.01E-01	1/yr	[1]
191-24-2	Benzo(g,h,i)perylene	6.50E+02	days	[2]	3.89E-01	1/yr	[1]
191-30-0	Dibenzo(a,l)pyrene						
192-65-4	Dibenzo[a,e]pyrene	3.71E+02	days	[1]	6.82E-01	1/yr	[1]
192-97-2	Benzo(e)pyrene						
193-39-5	Indeno(1,2,3-cd)pyrene	7.30E+02	days	[2]	3.47E-01	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
205-82-3	Benzo[j]fluoranthene	3.83E+03	days	[1]	6.60E-02	1/yr	[1]
205-99-2	Benzo(b)fluoranthene	6.10E+02	days	[2]	4.15E-01	1/yr	[1]
206-44-0	Fluoranthene	4.40E+02	days	[2]	5.75E-01	1/yr	[1]
207-08-9	Benzo(k)fluoranthene	2.14E+03	days	[2]	1.18E-01	1/yr	[1]
208-96-8	Acenaphthylene	6.00E+01	days	[2]	4.22E+00	1/yr	[1]
218-01-9	Chrysene	1.00E+03	days	[2]	2.53E-01	1/yr	[1]
224-42-0	Dibenz[a,j]acridine	9.40E+02	days	[9]	2.69E-01	1/yr	[1]
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine	9.40E+02	days	[9]	2.69E-01	1/yr	[1]
22967-92-6	Methyl mercury				0.00E+00	1/yr	[2]
23950-58-5	Pronamide	4.00E+01	days	[5]	6.32E+00	1/yr	[1]
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane	3.65E+02	days	[11]	6.93E-01	1/yr	[1]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	2.65E+03	days	[1]	9.56E-02	1/yr	[1]
319-84-6	alpha-BHC	1.35E+02	days	[2]	1.87E+00	1/yr	[1]
319-85-7	beta-BHC	1.24E+02	days	[2]	2.04E+00	1/yr	[1]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1.76E+03	days	[1]	1.44E-01	1/yr	[1]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	2.65E+03	days	[1]	9.56E-02	1/yr	[1]
3268-87-9	Octachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
3697-24-3	5-Methylchrysene	1.00E+03	days	[8]	2.53E-01	1/yr	[1]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)						
39001-02-0	Octachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
4170-30-3	Crotonaldehyde (Propylene aldehyde)						
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen (oxalonitrile)						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
50-32-8	Benzo(a)pyrene	5.30E+02	days	[2]	4.77E-01	1/yr	[1]
506-68-3	Cyanogen bromide (bromocyanide)						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol	2.63E+02	days	[2]	9.62E-01	1/yr	[1]
51-79-6	Ethyl carbamate (urethane)	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
510-15-6	Chlorobenzilate	3.50E+01	days	[2]	7.23E+00	1/yr	[1]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)						
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)						
53-70-3	Dibenz[a,h]anthracene	9.40E+02	days	[2]	2.69E-01	1/yr	[1]
532-27-4	2-Chloroacetophenone	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
534-52-1	4,6-Dinitro-o-cresol	2.10E+01	days	[2]	1.20E+01	1/yr	[1]
5385-75-1	Dibenzo(a,e)fluoranthene						
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
540-73-8	1,2-Dimethylhydrazine	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
542-75-6	1,3-Dichloropropene	1.13E+01	days	[2]	2.24E+01	1/yr	[1]
542-88-1	Bis(chloromethyl)ether	4.42E-03	days	[2]	5.73E+04	1/yr	[1]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
56-23-5	Carbon tetrachloride	3.60E+02	days	[2]	7.03E-01	1/yr	[1]
56-49-5	3-Methylcholanthrene	1.40E+03	days	[2]	1.81E-01	1/yr	[1]
56-55-3	Benzo(a)anthracene	6.80E+02	days	[2]	3.72E-01	1/yr	[1]
57-12-5	Cyanide				0.00E+00	1/yr	[2]
57-24-9	Strychnine	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
57-74-9	Chlordane	1.39E+03	days	[2]	1.83E-01	1/yr	[1]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	2.65E+03	days	[1]	9.56E-02	1/yr	[1]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
58-89-9	gamma-BHC (Lindane)	2.40E+02	days	[2]	1.05E+00	1/yr	[1]
58-90-2	2,3,4,6-Tetrachlorophenol	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate	1.80E+02	days	[6]	1.41E+00	1/yr	[1]
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol				0.00E+00	1/yr	[2]
59-89-2	N-Nitrosomorpholine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene (Vinyl bromide)	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
60-29-7	Ethyl ether						
60-35-5	Acetamide	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
602-87-9	5-Nitroacenaphthene	1.02E+02	days	[7]	2.48E+00	1/yr	[1]
606-20-2	2,6-Dinitrotoluene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
608-93-5	Pentachlorobenzene	3.45E+02	days	[2]	7.33E-01	1/yr	[1]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
61626-71-9	Dichloropentadiene						

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
62-50-0	Ethyl methanesulfonate	3.21E+00	days	[2]	7.89E+01	1/yr	[1]
62-53-3	Aniline				0.00E+00	1/yr	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
621-64-7	N-Nitroso-di-n-propylamine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
624-83-9	Methyl isocyanate	1.36E-02	days	[2]	1.86E+04	1/yr	[1]
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane	6.68E+01	days	[2]	3.79E+00	1/yr	[1]
64-18-6	Formic acid (methanoic acid)	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
65-85-0	Benzoic acid	7.00E+00	days	[4]	3.61E+01	1/yr	[1]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	2.65E+03	days	[1]	9.56E-02	1/yr	[1]
67-56-1	Methyl alcohol	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
67-63-0	2-Propyl alcohol	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
67-64-1	2-Propanone (Acetone)	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
67-66-3	Chloroform	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
67-72-1	Hexachloroethane				1.41E+00	1/yr	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)						
70-30-4	Hexachlorophene	3.28E+02	days	[2]	7.71E-01	1/yr	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
71-36-3	n-Butyl alcohol	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
71-43-2	Benzene	1.60E+01	days	[2]	1.58E+01	1/yr	[1]
71-55-6	1,1,1-Trichloroethane	2.73E+02	days	[2]	9.27E-01	1/yr	[1]
72-43-5	Methoxychlor	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
72-55-9	4,4-DDE	5.83E+03	days	[2]	4.34E-02	1/yr	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	7.30E+03	days	[1]	3.47E-02	1/yr	[1]
74-83-9	Bromomethane	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
74-87-3	Chloromethane	2.80E+01	days	[2]	9.04E+00	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
74-88-4	Iodomethane	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
74-95-3	Methylene bromide	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
74-97-5	Bromochloromethane						
7429-90-5	Aluminum						
7439-89-6	Iron						
7439-92-1	Lead				0.00E+00	1/yr	[2]
7439-93-2	Lithium						
7439-95-4	Magnesium						
7439-96-5	Manganese						
7439-97-6	Mercury				0.00E+00	1/yr	[2]
7439-98-7	Molybdenum						
7440-02-0	Nickel				0.00E+00	1/yr	[2]
7440-16-6	Rhodium						
7440-22-4	Silver				0.00E+00	1/yr	[2]
7440-23-5	Sodium						
7440-24-6	Strontium (total)						
7440-25-7	Tantalum						
7440-28-0	Thallium				0.00E+00	1/yr	[2]
7440-31-5	Tin						
7440-33-7	Tungsten						
7440-36-0	Antimony				0.00E+00	1/yr	[2]
7440-38-2	Arsenic				0.00E+00	1/yr	[2]
7440-39-3	Barium				0.00E+00	1/yr	[2]
7440-41-7	Beryllium				0.00E+00	1/yr	[2]
7440-43-9	Cadmium				0.00E+00	1/yr	[2]
7440-47-3	Chromium				0.00E+00	1/yr	[2]
7440-48-4	Cobalt						
7440-50-8	Copper						
7440-61-1	Uranium						
7440-62-2	Vanadium						
7440-65-5	Yttrium						
7440-66-6	Zinc				0.00E+00	1/yr	[2]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
7440-67-7	Zirconium						
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	2.65E+03	days	[1]	9.56E-02	1/yr	[1]
7487-94-7	Mercury (Hg^{+2})				0.00E+00	1/yr	[2]
75-00-3	Chloroethane	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
75-01-4	1-Chloroethene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
75-02-5	Fluoroethene (Vinyl fluoride)						
75-05-8	Acetonitrile	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
75-07-0	Acetaldehyde				0.00E+00	1/yr	[2]
75-09-2	Dichloromethane (Methylene chloride)	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
75-15-0	Carbon disulfide				0.00E+00	1/yr	[2]
75-21-8	Ethylene oxide (Oxirane)	1.19E+01	days	[2]	2.13E+01	1/yr	[1]
75-25-2	Bromoform	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
75-27-4	Bromodichloromethane				0.00E+00	1/yr	[2]
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane	1.54E+02	days	[2]	1.64E+00	1/yr	[1]
75-35-4	1,1-Dichloroethene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
75-44-5	Phosgene (Hydrogen phosphide)	4.17E-02	days	[2]	6.07E+03	1/yr	[1]
75-45-6	Chlorodifluoromethane				0.00E+00	1/yr	[2]
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
75-71-8	Dichlorodifluoromethane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichlorotrifluoroethane	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
76-44-8	Heptachlor	5.39E+00	days	[2]	4.69E+01	1/yr	[1]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride				0.00E+00	1/yr	[2]
765-34-4	Glycidylaldehyde	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
7664-39-3	Hydrogen Fluoride						
7664-41-7	Ammonia/Ammonium						

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
77-47-4	Hexachlorocyclopentadiene	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
77-78-1	Dimethyl sulfate	5.00E-01	days	[2]	5.06E+02	1/yr	[1]
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium				0.00E+00	1/yr	[2]
7782-50-5	Chlorine				0.00E+00	1/yr	[2]
78-83-1	2-Methylpropyl alcohol	7.21E+00	days	[2]	3.51E+01	1/yr	[1]
78-87-5	1,2-Dichloropropane	1.29E+03	days	[2]	1.96E-01	1/yr	[1]
78-93-3	2-Butanone	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
79-00-5	1,1,2-Trichloroethane	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
79-01-6	1,1,2-Trichloroethylene	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
79-10-7	2-Propenoic acid	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
79-34-5	1,1,2,2-Tetrachloroethane	4.50E+01	days	[2]	5.62E+00	1/yr	[1]
79-46-9	2-Nitropropane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
80-62-6	Methyl methacrylate	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
82-68-8	Pentachloronitrobenzene (PCNB)	6.99E+02	days	[2]	3.62E-01	1/yr	[1]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	1.02E+02	days	[2]	2.48E+00	1/yr	[1]
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	5.60E+01	days	[2]	4.52E+00	1/yr	[1]
84-74-2	Di-n-butylphthalate	2.30E+01	days	[2]	1.10E+01	1/yr	[1]
85-01-8	Phenanthrene	2.00E+02	days	[2]	1.26E+00	1/yr	[1]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	1.88E-02	days	[2]	1.35E+04	1/yr	[1]
85-68-7	Butylbenzylphthalate	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
86-73-7	Fluorene	6.00E+01	days	[2]	4.22E+00	1/yr	[1]
87-61-6	1,2,3-Trichlorobenzene				0.00E+00	1/yr	[2]
87-68-3	Hexachlorobutadiene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
87-86-5	Pentachlorophenol	1.78E+02	days	[2]	1.42E+00	1/yr	[1]

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
88-06-2	2,4,6-Trichlorophenol	7.00E+01	days	[2]	3.61E+00	1/yr	[1]
88-74-4	o-Nitroaniline (2-nitroaniline)				0.00E+00	1/yr	[2]
88-75-5	2-Nitrophenol	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
90-04-0	o-Anisidine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene	4.80E+01	days	[2]	5.27E+00	1/yr	[1]
91-22-5	Quinoline	1.00E+01	days	[2]	2.53E+01	1/yr	[1]
91-57-6	2-Methylnaphthalene						
91-58-7	2-Chloronaphthalene				0.00E+00	1/yr	[2]
91-94-1	3,3'-Dichlorobenzidine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
92-52-4	1,1`-Biphenyl	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
924-16-3	N-Nitroso-di-n-Buetylamine	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
94-75-7	2,4-D	5.00E+01	days	[2]	5.06E+00	1/yr	[1]
95-48-7	o-Cresol	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
95-49-8	o-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
95-53-4	o-Toluidine	7.00E+00	days	[2]	3.61E+01	1/yr	[1]
95-57-8	2-Chlorophenol				0.00E+00	1/yr	[2]
95-63-6	1,2,4-Trimethyl benzene	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
95-94-3	1,2,4,5-Tetrachlorobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
95-95-4	2,4,5-Trichlorophenol	6.90E+02	days	[2]	3.67E-01	1/yr	[1]
96-12-8	1,2-Dibromo-3-chloropropane	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
96-18-4	1,2,3-Trichloropropane	3.65E+02	days	[2]	6.93E-01	1/yr	[1]
96-45-7	Ethylene thiourea	2.80E+01	days	[2]	9.04E+00	1/yr	[1]
97-63-2	Ethyl methacrylate				0.00E+00	1/yr	[2]
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride	2.08E-03	days	[2]	1.21E+05	1/yr	[1]
98-82-8	Cumene				3.16E+01	1/yr	[2]
98-83-9	Methyl styrene (mixed isomers)						

Table 2-6 Biotic and Abiotic Half-life and Degradation Constant

CAS Registry Number	Analyte Name	Biological Half-life (days) ($t_{½}$)	Units for Biological Half-life	Reference	Loss Constant from Biotic/ Abiotic Degradation (ks_g)	Units for Biotic/ Abiotic Degradation Loss Constant	Reference
98-86-2	Acetophenone				0.00E+00	1/yr	[2]
98-95-3	Nitrobenzene	1.97E+02	days	[2]	1.28E+00	1/yr	[1]
99-35-4	1,3,5-Trinitrobenzene				0.00E+00	1/yr	[2]
99-65-0	1,3-Dinitrobenzene	1.80E+02	days	[2]	1.41E+00	1/yr	[1]
99-87-6	p-Cymene						

Reference **Reference (source) for Biological Half-life**

[1] 64 FR 687. 1999. *40 CFR Part 372: Persistent Bioaccumulative Toxic (PBT) Chemicals; Proposed Rule.* Federal Register, Vol 64, No. 2, January 5, 1999.

[2] Howard PH, Boethling RS, Jarvis WF, and Meylan WM. 1991. H*andbook of Environmental Degradation Rates*. Lewis Publishers, Chelsea, MI.

[3] Howard PH. 1989–1997. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Volume IV: Solvents 2.* Lewis Publishers, Chelsea, MI

[4] Howard PH. 1989–1997. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Volume I: Large Production and Priority Pollutants*. Lewis Publishers, Chelsea, MI

[5] Howard PH. 1989–1997. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Volume III: Pesticides.* Lewis Publishers, Chelsea, MI

[6] Surrogate value from 2,4-Dinitrotoluene.

[7] Surrogate value from Acenaphthene.

[8] Surrogate value from Chrysene.

[9] Surrogate value from Dibenz[a,h]anthracene.

[10] Surrogate value from Dibenzo[a,i]pyrene.

[11] Surrogate value from Trichlorofluoromethane.

Reference **Reference (source) for Biotic/Abiotic Degradation Loss Constant**

[1] Calculated value per Eq. A-2-13 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

[2] EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.

[3] Surrogate value from cis-1,2-Dichloroethene.

Table 2-7 Radiological Half-life and Radiological Degradation Constant

CAS Registry Number	Analyte Name	Radiological Half-life (t_{half})	Units for Radio-logical Half-life	Reference	Soil Loss Constant due to Radiological Decay (k_{decay})	Units for Radiological Decay Loss Constant	Reference
10028-17-8	Tritium	4.53E+03	days	[1]	5.59E-02	1/yr	[1]
10045-97-3	Cesium-137	1.10E+04	days	[1]	2.31E-02	1/yr	[1]
10098-91-6	Yttrium-90	1.07E+00	days	[1]	2.37E+02	1/yr	[1]
10098-97-2	Strontium-90	1.06E+04	days	[1]	2.38E-02	1/yr	[1]
10198-40-0	Cobalt-60	1.92E+03	days	[1]	1.32E-01	1/yr	[1]
13966-29-5	Uranium-234	8.94E+07	days	[1]	2.83E-06	1/yr	[1]
13967-48-1	Ruthenium-106	3.68E+02	days	[1]	6.87E-01	1/yr	[1]
13967-70-9	Cesium-134	7.52E+02	days	[1]	3.36E-01	1/yr	[1]
13968-55-3	Uranium-233	5.80E+07	days	[1]	4.36E-06	1/yr	[1]
13981-15-2	Curium-244	6.61E+03	days	[1]	3.83E-02	1/yr	[1]
13981-16-3	Plutonium-238	3.20E+04	days	[1]	7.90E-03	1/yr	[1]
13981-37-8	Nickel-63	3.50E+04	days	[1]	7.22E-03	1/yr	[1]
13982-10-0	Plutonium-242	1.37E+08	days	[1]	1.84E-06	1/yr	[1]
13982-63-3	Radium-226	5.84E+05	days	[1]	4.33E-04	1/yr	[1]
13982-70-2	Uranium-236	8.54E+09	days	[1]	2.96E-08	1/yr	[1]
13994-20-2	Neptunium-237	7.81E+08	days	[1]	3.24E-07	1/yr	[1]
14119-32-5	Plutonium-241	5.26E+03	days	[1]	4.81E-02	1/yr	[1]
14119-33-6	Plutonium-240	2.39E+06	days	[1]	1.06E-04	1/yr	[1]
14133-76-7	Technetium-99	7.77E+07	days	[1]	3.25E-06	1/yr	[1]
14158-29-3	Uranium-232	2.63E+04	days	[1]	9.63E-03	1/yr	[1]
14234-35-6	Antimony-125	1.01E+03	days	[1]	2.50E-01	1/yr	[1]
14331-85-2	Protactinium-231	1.20E+07	days	[1]	2.11E-05	1/yr	[1]
14336-70-0	Nickel-59	2.74E+07	days	[1]	9.24E-06	1/yr	[1]
14391-16-3	Europium-155	1.81E+03	days	[1]	1.40E-01	1/yr	[1]
14596-10-2	Americium-241	1.58E+05	days	[1]	1.60E-03	1/yr	[1]
14683-23-9	Europium-152	4.85E+03	days	[1]	5.21E-02	1/yr	[1]
14762-75-5	Carbon-14	2.09E+06	days	[1]	1.21E-04	1/yr	[1]
14952-40-0	Actinium-227	7.96E+03	days	[1]	3.18E-02	1/yr	[1]
14993-75-0	Americium-243	2.69E+06	days	[1]	9.39E-05	1/yr	[1]
15046-84-1	Iodine-129	5.73E+09	days	[1]	4.41E-08	1/yr	[1]
15117-48-3	Plutonium-239	8.80E+06	days	[1]	2.88E-05	1/yr	[1]

Table 2-7 Radiological Half-life and Radiological Degradation Constant

CAS Registry Number	Analyte Name	Radiological Half-life (t_{half})	Units for Radio-logical Half-life	Reference	Soil Loss Constant due to Radiological Decay (k_{decay})	Units for Radiological Decay Loss Constant	Reference
15117-96-1	Uranium-235	2.57E+11	days	[1]	9.85E-10	1/yr	[1]
15262-20-1	Radium-228	2.10E+03	days	[1]	1.21E-01	1/yr	[1]
15510-73-3	Curium-242	1.63E+02	days	[1]	1.55E+00	1/yr	[1]
15585-10-1	Europium-154	3.21E+03	days	[1]	7.88E-02	1/yr	[1]
15594-54-4	Thorium-229	2.68E+06	days	[1]	9.44E-05	1/yr	[1]
15715-94-3	Samarium-151	3.29E+04	days	[1]	7.70E-03	1/yr	[1]
15751-77-6	Zirconium-93	5.58E+08	days	[1]	4.53E-07	1/yr	[1]
15757-87-6	Curium-243	1.04E+04	days	[1]	2.43E-02	1/yr	[1]
15758-45-9	Selenium-79	2.37E+07	days	[1]	1.07E-05	1/yr	[1]
15832-50-5	Tin-126	3.65E+07	days	[1]	6.93E-06	1/yr	[1]
378253-40-8	Barium-137m	1.77E-03	days	[1]	1.43E+05	1/yr	[1]
378253-44-2	Cadmium-113m	4.96E+03	days	[1]	5.10E-02	1/yr	[1]
378782-82-2	Niobium-93m	4.96E+03	days	[1]	5.10E-02	1/yr	[1]
7440-29-1	Thorium-232	5.15E+12	days	[1]	4.92E-11	1/yr	[1]
7440-61-1R	Uranium-238	1.63E+12	days	[1]	1.55E-10	1/yr	[1]

Reference **Reference (source) for Radiological Half-life**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST)* - Radionuclides Table (formerly Table 4), Office of Radiation and Indoor Air, Radiation Protection Division, Washington, D.C. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Reference **Reference (source) for Radiological Decay Loss Constant**

[1] Calculated value per Eq. A-2-13 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Contents

3 Vegetation Bioaccumulation Factors 3-1

Tables

Table 3-1 Root Concentration Factors for Produce 3-1
Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables 3-14
Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage 3-42
Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain 3-69
Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce 3-98

3 Vegetation Bioaccumulation Factors

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
100-02-7	p-Nitrophenol	1.32E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
100-21-0	Phthalic acid	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[2]
100-25-4	1,4-Dinitrobenzene	9.40E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
100-40-3	4-Ethenylcyclohexene	2.47E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
100-41-4	Ethyl benzene	5.66E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
100-42-5	Styrene	4.74E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
100-44-7	Benzyl chloride	1.37E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
100-47-0	Benzonitrile	1.00E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
100-51-6	Benzyl alcohol	7.94E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
100-52-7	Benzaldehyde	9.51E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
10028-15-6	Ozone	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
10028-17-8	Tritium			
10045-97-3	Cesium-137			
10061-01-5	cis-1,3-Dichloropropene	1.31E+01	(µg/g DW plant)/(µg/mL soil water)	[12]
10061-02-6	trans-1,3-Dichloropropene	8.49E+00	(µg/g DW plant)/(µg/mL soil water)	[2]
10098-91-6	Yttrium-90			
10098-97-2	Strontium-90			
101-55-3	4-Bromophenylphenyl ether	2.53E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
101-77-9	4,4-Methylenedianiline	1.02E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
10102-44-0	Nitrogen dioxide			
10198-40-0	Cobalt-60			
103-33-3	Azobenzene	2.03E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
103-65-1	n-Propyl benzene (Isocumene)	1.61E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
104-51-8	n-Butylbenzene	5.48E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
104-76-7	2-Ethyl-1-hexanol	2.94E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
105-67-9	2,4-Dimethylphenol	1.37E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
10595-95-6	n-Nitrosomethylethylamine	6.56E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	8.51E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
106-44-5	p-Cresol (4-methyl phenol)	1.31E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
106-46-7	1,4-Dichlorobenzene	1.15E+02	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
106-47-8	p-Chloroaniline	1.23E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
106-49-0	p-Toluidine	9.04E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
106-51-4	Quinone	6.64E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
106-88-7	1,2-Epoxybutane	7.37E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	6.47E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
106-93-4	Ethylene dibromide	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
106-99-0	1,3-Butadiene	1.42E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
107-02-8	Acrolein	6.54E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
107-05-1	3-Chloropropene	1.34E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
107-06-2	1,2-Dichloroethane	9.63E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
107-12-0	Propionitrile	6.62E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
107-13-1	Acrylonitrile	6.67E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
107-19-7	Propargyl alcohol	6.43E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
107-21-1	Ethylene glycol (1,2-ethanediol)	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
107-98-2	Propylene glycol monomethyl ether	6.41E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
108-05-4	Acetic acid vinyl ester	7.16E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
108-10-1	4-Methyl-2-pentanone	8.26E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
108-39-4	m-Cresol	1.38E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
108-60-1	bis (2-Chloroisopropyl)ether	1.89E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
108-67-8	1,3,5-Trimethylbenzene	9.99E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
108-86-1	Bromobenzene (Phenyl bromide)	4.66E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
108-87-2	Methylcyclohexane	1.40E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
108-88-3	Toluene	2.79E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
108-90-7	Chlorobenzene	3.33E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
108-94-1	Cyclohexanone	7.28E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
108-95-2	Phenol	9.63E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
109-74-0	n-Butanenitrile	6.90E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
109-75-1	3-Butenenitrile			
109-77-3	Malononitrile	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
109-86-4	2-Methoxyethanol	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
109-99-9	Tetrahydrofuran	6.83E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
110-00-9	Furan	8.81E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
110-54-3	n-Hexane	2.34E+02	(µg/g DW plant)/(µg/mL soil water)	[2]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
110-59-8	Pentanenitrile	8.00E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
110-80-5	2-Ethoxyethanol	6.44E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
110-82-7	Cyclohexane	1.03E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
110-83-8	Cyclohexene	3.70E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
110-86-1	Pyridine	7.04E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
111-15-9	Ethylene glycol monoethyl ether acetate	6.97E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
111-44-4	Bis(2-chloroethyl)ether	8.60E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
111-65-9	n-Octane	2.26E+03	(µg/g DW plant)/(µg/mL soil water)	[2]
111-76-2	2-Butoxyethanol	7.32E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
111-84-2	n-Nonane	5.21E+03	(µg/g DW plant)/(µg/mL soil water)	[2]
111-91-1	Bis(2-chloroethoxy)methane	8.64E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
112-30-1	1-Decanol	7.67E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
112-31-2	Decanal			
112-40-3	Dodecane			
1120-21-4	Undecane			
1120-71-4	1,3-Propane sultone	6.45E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
117-81-7	Bis(2-ethylhexyl) phthalate	1.96E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
117-84-0	Di-n-octylphthalate	4.01E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
118-74-1	Hexachlorobenzene	2.80E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
119-90-4	3,3'-Dimethoxybenzidine	1.21E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
120-12-7	Anthracene	6.78E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
120-82-1	1,2,4-Trichlorobenzene	2.79E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
120-83-2	2,4-Dichlorophenol	3.97E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
121-14-2	2,4-Dinitrotoluene	1.41E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
122-39-4	N,N-Diphenylamine	1.15E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
122-66-7	1,2-Diphenylhydrazine	3.97E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
123-33-1	Maleic hydrazide	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
123-38-6	Propionaldehyde	6.97E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
123-72-8	Butanal	7.41E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
123-91-1	1,4-Dioxan	6.45E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
124-18-5	Decane			
124-38-9	Carbon dioxide			
124-48-1	Chlorodibromomethane	1.21E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
126-73-8	Tributyl phosphate	2.79E+02	(µg/g DW plant)/(µg/mL soil water)	[2]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
126-98-7	2-Methyl-2-propenenitrile	6.91E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
127-18-4	1,1,2,2-Tetrachloroethene	9.64E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1.96E+03	(µg/g DW plant)/(µg/mL soil water)	[2]
129-00-0	Pyrene	1.38E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
131-11-3	Dimethyl Phthalate	1.00E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	3.46E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
132-64-9	Dibenzofuran	3.46E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
133-06-2	Captan	3.33E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
1330-20-7	Xylenes (mixed isomers)	5.87E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
1336-36-3	Polychlorinated biphenyls	1.62E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
134-32-7	alpha-Naphthylamine	1.25E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
135-98-8	sec-Butylbenzene	7.67E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
13966-29-5	Uranium-234			
13967-48-1	Ruthenium-106			
13967-70-9	Cesium-134			
13968-55-3	Uranium-233			
13981-15-2	Curium-244			
13981-16-3	Plutonium-238			
13981-37-8	Nickel-63			
13982-10-0	Plutonium-242			
13982-63-3	Radium-226			
13982-70-2	Uranium-236			
13994-20-2	Neptunium-237			
141-78-6	Acetic acid ethyl ester	7.16E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
14119-32-5	Plutonium-241			
14119-33-6	Plutonium-240			
14133-76-7	Technetium-99			
14158-29-3	Uranium-232			
14234-35-6	Antimony-125			
14265-44-2	Phosphate			
14331-85-2	Protactinium-231			
14336-70-0	Nickel-59			
14391-16-3	Europium-155			
145-73-3	Endothall	1.32E+01	(µg/g DW plant)/(µg/mL soil water)	[4]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
14596-10-2	Americium-241			
14683-23-9	Europium-152			
14762-75-5	Carbon-14			
14797-55-8	Nitrate			
14797-65-0	Nitrite			
14808-79-8	Sulfate			
14952-40-0	Actinium-227			
14993-75-0	Americium-243			
15046-84-1	Iodine-129			
15117-48-3	Plutonium-239			
15117-96-1	Uranium-235			
15262-20-1	Radium-228			
15510-73-3	Curium-242			
15585-10-1	Europium-154			
15594-54-4	Thorium-229			
156-59-2	cis-1,2-Dichloroethene	1.31E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
156-60-5	1,2-trans-Dichloroethene	9.62E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
15715-94-3	Samarium-151			
15751-77-6	Zirconium-93			
15757-87-6	Curium-243			
15758-45-9	Selenium-79			
15832-50-5	Tin-126			
1634-04-4	Methyl tert-butyl ether	7.54E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
16887-00-6	Chloride	6.91E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
16984-48-8	Fluoride			
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	4.00E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
189-55-9	Dibenzo[a,i]pyrene	9.37E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
189-64-0	Dibenzo[a,h]pyrene	9.37E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
191-24-2	Benzo(g,h,i)perylene	2.96E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
191-30-0	Dibenzo(a,l)pyrene	2.01E+05	(µg/g DW plant)/(µg/mL soil water)	[2]
192-65-4	Dibenzo[a,e]pyrene	9.37E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
192-97-2	Benzo(e)pyrene	2.11E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
193-39-5	Indeno(1,2,3-cd)pyrene	2.81E+04	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	9.71E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
205-82-3	Benzo[j]fluoranthene	1.18E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
205-99-2	Benzo(b)fluoranthene	1.21E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
206-44-0	Fluoranthene	1.64E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
207-08-9	Benzo(k)fluoranthene	1.16E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
208-96-8	Acenaphthylene	2.51E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
218-01-9	Chrysene	5.69E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
224-42-0	Dibenz[a,j]acridine	2.35E+04	(µg/g DW plant)/(µg/mL soil water)	[10]
2245-38-7	2,3,5-Trimethylnaphthalene			
226-36-8	Dibenz[a,h]acridine	2.35E+04	(µg/g DW plant)/(µg/mL soil water)	[10]
22967-92-6	Methyl mercury			
23950-58-5	Pronamide	1.02E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
24959-67-9	Bromide	7.02E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
27154-33-2	Trichlorofluoroethane	1.95E+01	(µg/g DW plant)/(µg/mL soil water)	[11]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	7.05E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
319-84-6	alpha-BHC	1.96E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
319-85-7	beta-BHC	1.96E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	2.96E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	3.93E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
3268-87-9	Octachlorodibenzo(p)dioxin	4.79E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	1.18E+05	(µg/g DW plant)/(µg/mL soil water)	[2]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	3.36E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
3697-24-3	5-Methylchrysene	5.69E+03	(µg/g DW plant)/(µg/mL soil water)	[9]
378253-40-8	Barium-137m			
378253-44-2	Cadmium-113m			
378782-82-2	Niobium-93m			
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.65E+05	(µg/g DW plant)/(µg/mL soil water)	[2]
39001-02-0	Octachlorodibenzofuran	4.79E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	2.36E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	4.79E+05	(µg/g DW plant)/(µg/mL soil water)	[1]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	3.01E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	6.98E+00	(µg/g DW plant)/(µg/mL soil water)	[4]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
41851-50-7	Chlorocyclopentadiene	1.73E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
460-19-5	Cyanogen (oxalonitrile)	6.57E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
4786-20-3	2-Butenenitrile			
50-00-0	Formaldehyde	6.74E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
50-32-8	Benzo(a)pyrene	9.68E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
506-68-3	Cyanogen bromide (bromocyanide)	6.45E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
506-77-4	Cyanogen chloride	6.43E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
51-28-5	2,4-Dinitrophenol	9.87E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
51-79-6	Ethyl carbamate (urethane)	6.49E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
510-15-6	Chlorobenzilate	5.29E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	1.16E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.38E+05	(µg/g DW plant)/(µg/mL soil water)	[2]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	1.10E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
53-70-3	Dibenz[a,h]anthracene	2.35E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
532-27-4	2-Chloroacetophenone	1.34E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
534-52-1	4,6-Dinitro-o-cresol	9.96E+00	(µg/g DW plant)/(µg/mL soil water)	[2]
5385-75-1	Dibenzo(a,e)fluoranthene	4.78E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	9.45E+00	(µg/g DW plant)/(µg/mL soil water)	[2]
540-73-8	1,2-Dimethylhydrazine	6.40E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
540-84-1	2,2,4-Trimethylpentane	3.11E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
541-73-1	1,3-Dichlorobenzene	1.37E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
542-75-6	1,3-Dichloropropene	1.03E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
542-88-1	Bis(chloromethyl)ether	6.96E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.16E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
56-23-5	Carbon tetrachloride	3.33E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
56-49-5	3-Methylcholanthrene	2.04E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
56-55-3	Benzo(a)anthracene	5.69E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
57-12-5	Cyanide	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
57-24-9	Strychnine	1.34E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
57-74-9	Chlordane	3.99E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2.35E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	3.93E+04	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	5.70E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	5.50E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	9.71E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
58-89-9	gamma-BHC (Lindane)	3.58E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
58-90-2	2,3,4,6-Tetrachlorophenol	6.20E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
581-42-0	2,6-Dimethylnaphthalene			
584-84-9	2,4-Toluene diisocyanate	1.41E+01	(µg/g DW plant)/(µg/mL soil water)	[6]
589-38-8	3-Hexanone	8.40E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
59-50-7	4-Chloro-3-methylphenol	5.66E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
59-89-2	N-Nitrosomorpholine	6.41E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
591-50-4	Benzene, iodo-			
591-78-6	2-Hexanone	8.99E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
593-60-2	Bromoethene (Vinyl bromide)	1.01E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
593-74-8	Dimethyl Mercury			
60-11-7	Dimethyl aminoazobenzene	7.81E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
60-29-7	Ethyl ether	7.43E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
60-35-5	Acetamide	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
602-87-9	5-Nitroacenaphthene	2.34E+02	(µg/g DW plant)/(µg/mL soil water)	[7]
606-20-2	2,6-Dinitrotoluene	1.12E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
608-93-5	Pentachlorobenzene	2.22E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	5.70E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
61626-71-9	Dichloropentadiene	6.64E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
62-50-0	Ethyl methanesulfonate	6.56E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
62-53-3	Aniline	7.45E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
62-75-9	N-Nitroso-N,N-dimethylamine	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
621-64-7	N-Nitroso-di-n-propylamine	8.90E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
624-83-9	Methyl isocyanate	6.67E+00	(µg/g DW plant)/(µg/mL soil water)	[8]
628-73-9	Hexanenitrile	1.07E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
630-08-0	Carbon monoxide	1.18E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
630-20-6	1,1,1,2-Tetrachloroethane	5.00E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
64-18-6	Formic acid (methanoic acid)	6.40E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
65-85-0	Benzoic acid	1.27E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	5.50E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
67-56-1	Methyl alcohol	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
67-63-0	2-Propyl alcohol	6.56E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
67-64-1	2-Propanone (Acetone)	6.46E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
67-66-3	Chloroform	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
67-72-1	Hexachloroethane	2.47E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.16E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.71E+05	(µg/g DW plant)/(µg/mL soil water)	[2]
70-30-4	Hexachlorophene	1.49E+05	(µg/g DW plant)/(µg/mL soil water)	[5]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	1.77E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	5.70E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
71-36-3	n-Butyl alcohol	7.41E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
71-43-2	Benzene	9.62E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
71-55-6	1,1,1-Trichloroethane	1.95E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
72-43-5	Methoxychlor	1.15E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
72-55-9	4,4-DDE	5.69E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	5.70E+04	(µg/g DW plant)/(µg/mL soil water)	[5]
74-83-9	Bromomethane	8.22E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
74-87-3	Chloromethane	7.47E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
74-88-4	Iodomethane	9.69E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
74-95-3	Methylene bromide	9.80E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
74-97-5	Bromochloromethane	9.14E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7429-90-5	Aluminum			
7439-89-6	Iron			
7439-92-1	Lead	7.16E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7439-93-2	Lithium			
7439-95-4	Magnesium			
7439-96-5	Manganese			
7439-97-6	Mercury	7.01E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7439-98-7	Molybdenum			
7440-02-0	Nickel	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
7440-16-6	Rhodium			
7440-22-4	Silver	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-23-5	Sodium			
7440-24-6	Strontium (total)	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
7440-25-7	Tantalum			
7440-28-0	Thallium	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-29-1	Thorium-232			
7440-31-5	Tin			
7440-33-7	Tungsten			
7440-36-0	Antimony	7.16E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-38-2	Arsenic	7.08E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-39-3	Barium	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-41-7	Beryllium	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
7440-43-9	Cadmium	6.51E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-47-3	Chromium	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-48-4	Cobalt			
7440-50-8	Copper			
7440-61-1	Uranium			
7440-61-1R	Uranium-238			
7440-62-2	Vanadium			
7440-65-5	Yttrium			
7440-66-6	Zinc	6.41E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7440-67-7	Zirconium			
7446-09-5	Sulfur dioxide	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	5.50E+04	(µg/g DW plant)/(µg/mL soil water)	[2]
7487-94-7	Mercury (Hg^{+2})	6.47E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
75-00-3	Chloroethane	9.09E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-01-4	1-Chloroethene	9.09E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-02-5	Fluoroethene (Vinyl fluoride)	8.22E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
75-05-8	Acetonitrile	6.43E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-07-0	Acetaldehyde	6.46E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-09-2	Dichloromethane (Methylene chloride)	8.64E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-15-0	Carbon disulfide	1.15E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
75-21-8	Ethylene oxide (Oxirane)	6.44E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-25-2	Bromoform	1.55E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
75-27-4	Bromodichloromethane	9.62E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-29-6	2-Chloropropane	1.31E+01	(µg/g DW plant)/(µg/mL soil water)	[4]
75-34-3	1,1-Dichloroethane	1.20E+01	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
75-35-4	1,1-Dichloroethene	9.62E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-44-5	Phosgene (Hydrogen phosphide)	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
75-45-6	Chlorodifluoromethane	7.88E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
75-50-3	Trimethylamine	6.62E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
75-69-4	Trichlorofluoromethane	1.95E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
75-71-8	Dichlorodifluoromethane	1.07E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
76-01-7	Pentachloroethane	7.01E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
76-13-1	1,2,2-Trichlorotrifluoroethane	6.30E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
76-44-8	Heptachlor	4.75E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
764-41-0	1,4-Dichloro-2-butene	2.33E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
7647-01-0	Hydrogen chloride			
765-34-4	Glycidylaldehyde	6.50E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7664-39-3	Hydrogen Fluoride	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7664-41-7	Ammonia/Ammonium	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
77-47-4	Hexachlorocyclopentadiene	1.77E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
77-78-1	Dimethyl sulfate	6.62E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7704-34-9	Total Sulfur (thermodynamically stable)			
7723-14-0	Phosphorus	6.45E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7782-41-4	Fluorine gas (F_2)			
7782-49-2	Selenium	6.66E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
7782-50-5	Chlorine	7.36E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
78-83-1	2-Methylpropyl alcohol	7.20E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
78-87-5	1,2-Dichloropropane	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
78-93-3	2-Butanone	6.70E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
79-00-5	1,1,2-Trichloroethane	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
79-01-6	1,1,2-Trichloroethylene	1.64E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
79-10-7	2-Propenoic acid	6.74E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
79-34-5	1,1,2,2-Tetrachloroethane	1.64E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
79-46-9	2-Nitropropane	7.52E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
80-62-6	Methyl methacrylate	8.99E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
82-68-8	Pentachloronitrobenzene (PCNB)	8.69E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
822-06-0	Hexamethylene-1,5-diisocyanate	6.76E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
823-40-5	Toluene-2,6-diamine	6.62E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
83-32-9	Acenaphthene	2.34E+02	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
832-69-9	1-Methylphenanthrene			
84-66-2	Diethyl phthalate	1.95E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
84-74-2	Di-n-butylphthalate	9.66E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
85-01-8	Phenanthrene	6.78E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
85-68-7	Butylbenzylphthalate	1.38E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
86-73-7	Fluorene	3.98E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
87-61-6	1,2,3-Trichlorobenzene	3.05E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
87-68-3	Hexachlorobutadiene	1.15E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
87-86-5	Pentachlorophenol	1.96E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
88-06-2	2,4,6-Trichlorophenol	1.64E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
88-74-4	o-Nitroaniline (2-nitroaniline)	1.25E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
88-75-5	2-Nitrophenol	1.19E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
90-04-0	o-Anisidine	8.19E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
90-12-0	1-Methylnaphthalene	2.22E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
91-20-3	Naphthalene	8.07E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
91-22-5	Quinoline	8.49E+00	(µg/g DW plant)/(µg/mL soil water)	[2]
91-57-6	2-Methylnaphthalene	2.18E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
91-58-7	2-Chloronaphthalene	9.30E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
91-94-1	3,3'-Dichlorobenzidine	1.17E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
92-52-4	1,1`-Biphenyl	2.70E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
924-16-3	N-Nitroso-di-n-Buetylamine	1.33E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	2.60E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
94-75-7	2,4-D	3.39E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
95-48-7	o-Cresol	1.37E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
95-49-8	o-Chlorotoluene	9.99E+01	(µg/g DW plant)/(µg/mL soil water)	[2]
95-50-1	1,2-Dichlorobenzene	9.30E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
95-53-4	o-Toluidine	8.72E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
95-57-8	2-Chlorophenol	1.05E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
95-63-6	1,2,4-Trimethyl benzene	1.45E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
95-94-3	1,2,4,5-Tetrachlorobenzene	1.15E+03	(µg/g DW plant)/(µg/mL soil water)	[5]
95-95-4	2,4,5-Trichlorophenol	1.70E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
96-12-8	1,2-Dibromo-3-chloropropane	1.37E+01	(µg/g DW plant)/(µg/mL soil water)	[5]

Table 3-1 Root Concentration Factors for Produce

CAS Registry Number	Analyte Name	Root Concentration Factor (*RCF*)	Units for Root Concentration Factor	Reference
96-18-4	1,2,3-Trichloropropane	8.05E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
96-45-7	Ethylene thiourea	6.39E+00	(µg/g DW plant)/(µg/mL soil water)	[3]
97-63-2	Ethyl methacrylate	1.35E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
98-01-1	Furfural	6.79E+00	(µg/g DW plant)/(µg/mL soil water)	[4]
98-06-6	tert-Butyl benzene	3.39E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
98-07-7	Benzotrichloride	2.34E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
98-82-8	Cumene	1.64E+02	(µg/g DW plant)/(µg/mL soil water)	[5]
98-83-9	Methyl styrene (mixed isomers)	1.11E+02	(µg/g DW plant)/(µg/mL soil water)	[2]
98-86-2	Acetophenone	1.01E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
98-95-3	Nitrobenzene	1.25E+01	(µg/g DW plant)/(µg/mL soil water)	[5]
99-35-4	1,3,5-Trinitrobenzene	8.26E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
99-65-0	1,3-Dinitrobenzene	9.63E+00	(µg/g DW plant)/(µg/mL soil water)	[5]
99-87-6	p-Cymene	3.33E+02	(µg/g DW plant)/(µg/mL soil water)	[2]

Reference	Reference (source) for Root Concentration Factor
[1]	Calculated value per Eq. A-2-14 (using log(Kow)=8.2) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	Calculated value per Eq. A-2-14 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-15 (using log(Kow)=-0.57) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	Calculated value per Eq. A-2-15 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[5]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[6]	Surrogate value from 2,4-Dinitrotoluene.
[7]	Surrogate value from Acenaphthene.
[8]	Surrogate value from Acrylonitrile.
[9]	Surrogate value from Chrysene.
[10]	Surrogate value from Dibenz[a,h]anthracene.
[11]	Surrogate value from Trichlorofluoromethane.
[12]	Surrogate value from cis-1,2-Dichloroethene.

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
100-02-7	p-Nitrophenol	1.75E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-21-0	Phthalic acid	2.53E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-25-4	1,4-Dinitrobenzene	9.62E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-40-3	4-Ethenylcyclohexene	3.58E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-41-4	Ethyl benzene	7.76E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-42-5	Styrene	3.95E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.95E-01	[3]	3.95E-01	[3]	(µg/g DW plant)/ (µg/g soil)
100-44-7	Benzyl chloride	7.51E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-47-0	Benzonitrile	2.93E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-51-6	Benzyl alcohol	6.58E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-52-7	Benzaldehyde	3.34E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
10028-15-6	Ozone								
10028-17-8	Tritium								
10045-97-3	Cesium-137	1.30E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.30E-01	[5]	1.30E-01	[5]	(µg/g DW plant)/ (µg/g soil)
10061-01-5	cis-1,3-Dichloropropene	1.84E+02	(µg/g DW plant)/ (µg/g soil)	[11]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
10061-02-6	trans-1,3-Dichloropropene	1.93E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
10098-91-6	Yttrium-90	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.00E-02	[5]	1.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
10098-97-2	Strontium-90	5.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	5.00E-01	[5]	5.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
101-55-3	4-Bromophenylphenyl ether	1.77E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.77E+00	[3]	1.77E+00	[3]	(µg/g DW plant)/(µg/g soil)
101-77-9	4,4-Methylenedianiline	4.64E-01	(µg/g DW plant)/(µg/g soil)	[2]	4.64E-01	[2]	4.64E-01	[2]	(µg/g DW plant)/(µg/g soil)
10102-44-0	Nitrogen dioxide								
10198-40-0	Cobalt-60	6.70E-02	(µg/g DW plant)/(µg/g soil)	[4]	6.70E-02	[5]	6.70E-02	[5]	(µg/g DW plant)/(µg/g soil)
103-33-3	Azobenzene	2.34E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
103-65-1	n-Propyl benzene (Isocumene)	3.63E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
104-51-8	n-Butylbenzene	5.03E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
104-76-7	2-Ethyl-1-hexanol	1.37E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
105-67-9	2,4-Dimethylphenol	4.28E-01	(µg/g DW plant)/(µg/g soil)	[3]	4.28E-01	[3]	4.28E-01	[3]	(µg/g DW plant)/(µg/g soil)
10595-95-6	n-Nitrosomethyl-ethylamine	2.00E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	1.02E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-44-5	p-Cresol (4-methyl phenol)	1.09E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.09E+00	[3]	1.09E+00	[3]	(µg/g DW plant)/(µg/g soil)
106-46-7	1,4-Dichlorobenzene	9.59E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-47-8	p-Chloroaniline	1.95E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-49-0	p-Toluidine	2.81E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-51-4	Quinone	9.50E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
106-88-7	1,2-Epoxybutane	3.70E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1.04E+03	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
106-93-4	Ethylene dibromide	9.48E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
106-99-0	1,3-Butadiene	7.31E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-02-8	Acrolein	4.36E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-05-1	3-Chloropropene	6.90E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-06-2	1,2-Dichloroethane	2.75E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-12-0	Propionitrile	1.04E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-13-1	Acrylonitrile	3.79E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-19-7	Propargyl alcohol	1.09E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-21-1	Ethylene glycol (1,2-ethanediol)	1.44E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-98-2	Propylene glycol monomethyl ether	1.44E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-05-4	Acetic acid vinyl ester	9.06E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-10-1	4-Methyl-2-pentanone	3.75E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-39-4	m-Cresol	1.63E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-60-1	Bis (2-chloroisopropyl) ether	1.08E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
108-67-8	1,3,5-Trimethylbenzene	1.63E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-86-1	Bromobenzene (Phenyl bromide)	3.92E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-87-2	Methylcyclohexane	1.18E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-88-3	Toluene	7.74E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-90-7	Chlorobenzene	7.56E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-94-1	Cyclohexanone	1.08E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
108-95-2	Phenol	2.19E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.19E+00	[3]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
109-74-0	n-Butanenitrile	4.68E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
109-75-1	3-Butenenitrile				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
109-77-3	Malononitrile	9.40E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
109-86-4	2-Methoxyethanol	1.44E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
109-99-9	Tetrahydrofuran	2.41E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
110-00-9	Furan	2.21E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
110-54-3	n-Hexane	3.54E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
110-59-8	Pentanenitrile	1.43E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
110-80-5	2-Ethoxyethanol	1.45E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
110-82-7	Cyclohexane	3.67E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
110-83-8	Cyclohexene	3.78E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
110-86-1	Pyridine	1.62E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-15-9	Ethylene glycol monoethyl ether acetate	7.50E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-44-4	Bis(2-chloroethyl) ether	1.13E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-65-9	n-Octane	3.36E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-76-2	2-Butoxyethanol	1.65E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-84-2	n-Nonane	3.29E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-91-1	Bis(2-chloroethoxy) methane	7.03E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
112-30-1	1-Decanol	5.56E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
112-31-2	Decanal			-	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
112-40-3	Dodecane			-	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
1120-21-4	Undecane			-	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
1120-71-4	1,3-Propane sultone	2.74E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
117-81-7	Bis(2-ethylhexyl) phthalate	8.54E-04	(µg/g DW plant)/ (µg/g soil)	[3]	8.54E-04	[3]	8.54E-04	[3]	(µg/g DW plant)/ (µg/g soil)
117-84-0	Di-n-octylphthalate	3.08E-02	(µg/g DW plant)/ (µg/g soil)	[3]	3.08E-02	[3]	3.08E-02	[3]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
118-74-1	Hexachlorobenzene	2.50E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
119-90-4	3,3'-Dimethoxybenz-idine	2.00E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
120-12-7	Anthracene	1.51E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.51E-01	[3]	1.51E-01	[3]	(µg/g DW plant)/ (µg/g soil)
120-82-1	1,2,4-Trichlorobenzene	7.76E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
120-83-2	2,4-Dichlorophenol	1.37E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
121-14-2	2,4-Dinitrotoluene	1.59E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
122-39-4	N,N-Diphenylamine	1.37E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
122-66-7	1,2-Diphenylhydrazine	3.31E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.31E-01	[3]	3.31E-01	[3]	(µg/g DW plant)/ (µg/g soil)
123-33-1	Maleic hydrazide	1.39E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
123-38-6	Propionaldehyde	4.13E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
123-72-8	Butanal	2.28E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
123-91-1	1,4-Dioxan	1.19E+03	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
124-18-5	Decane				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
124-38-9	Carbon dioxide				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
124-48-1	Chlorodibromo-methane	1.73E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
126-73-8	Tributyl phosphate	3.33E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
126-98-7	2-Methyl-2-propenenitrile	2.03E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
127-18-4	1,1,2,2-Tetrachloroethene	3.11E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1.92E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
129-00-0	Pyrene	1.45E-01	(µg/g DW plant)/(µg/g soil)	[3]	1.45E-01	[3]	1.45E-01	[3]	(µg/g DW plant)/(µg/g soil)
131-11-3	Dimethyl Phthalate	2.93E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	5.56E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
132-64-9	Dibenzofuran	6.89E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
133-06-2	Captan	8.69E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
1330-20-7	Xylenes (mixed isomers)	2.98E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
1336-36-3	Polychlorinated biphenyls	8.14E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
134-32-7	alpha-Naphthylamine	9.30E-01	(µg/g DW plant)/(µg/g soil)	[2]	9.30E-01	[2]	9.30E-01	[2]	(µg/g DW plant)/(µg/g soil)
135-98-8	sec-Butylbenzene	3.47E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
13966-29-5	Uranium-234	1.20E-02	(µg/g DW plant)/(µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/(µg/g soil)
13967-48-1	Ruthenium-106	4.00E-02	(µg/g DW plant)/(µg/g soil)	[4]	4.00E-02	[5]	4.00E-02	[5]	(µg/g DW plant)/(µg/g soil)
13967-70-9	Cesium-134	1.30E-01	(µg/g DW plant)/(µg/g soil)	[4]	1.30E-01	[5]	1.30E-01	[5]	(µg/g DW plant)/(µg/g soil)
13968-55-3	Uranium-233	1.20E-02	(µg/g DW plant)/(µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
13981-15-2	Curium-244	4.30E-04	(µg/g DW plant)/ (µg/g soil)	[4]	4.30E-04	[5]	4.30E-04	[5]	(µg/g DW plant)/ (µg/g soil)
13981-16-3	Plutonium-238	1.10E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.10E-03	[5]	1.10E-03	[5]	(µg/g DW plant)/ (µg/g soil)
13981-37-8	Nickel-63	6.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.00E-02	[5]	6.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
13982-10-0	Plutonium-242	1.10E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.10E-03	[5]	1.10E-03	[5]	(µg/g DW plant)/ (µg/g soil)
13982-63-3	Radium-226	2.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-03	[5]	2.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)
13982-70-2	Uranium-236	1.20E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/ (µg/g soil)
13994-20-2	Neptunium-237	1.30E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.30E-02	[5]	1.30E-02	[5]	(µg/g DW plant)/ (µg/g soil)
141-78-6	Acetic acid ethyl ester	2.63E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
14119-32-5	Plutonium-241	1.10E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.10E-03	[5]	1.10E-03	[5]	(µg/g DW plant)/ (µg/g soil)
14119-33-6	Plutonium-240	1.10E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.10E-03	[5]	1.10E-03	[5]	(µg/g DW plant)/ (µg/g soil)
14133-76-7	Technetium-99	2.40E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.40E-01	[5]	2.40E-01	[5]	(µg/g DW plant)/ (µg/g soil)
14158-29-3	Uranium-232	1.20E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/ (µg/g soil)
14234-35-6	Antimony-125	5.60E-04	(µg/g DW plant)/ (µg/g soil)	[4]	5.60E-04	[5]	5.60E-04	[5]	(µg/g DW plant)/ (µg/g soil)
14265-44-2	Phosphate								
14331-85-2	Protactinium-231	3.50E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.50E-04	[5]	3.50E-04	[5]	(µg/g DW plant)/ (µg/g soil)
14336-70-0	Nickel-59	6.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.00E-02	[5]	6.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
14391-16-3	Europium-155	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-02	[5]	2.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
145-73-3	Endothall	2.97E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
14596-10-2	Americium-241	3.50E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.50E-04	[5]	3.50E-04	[5]	(µg/g DW plant)/ (µg/g soil)
14683-23-9	Europium-152	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-02	[5]	2.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
14762-75-5	Carbon-14	7.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	7.00E-01	[5]	7.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
14797-55-8	Nitrate								
14797-65-0	Nitrite								
14808-79-8	Sulfate								
14952-40-0	Actinium-227	3.50E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.50E-04	[5]	3.50E-04	[5]	(µg/g DW plant)/ (µg/g soil)
14993-75-0	Americium-243	3.50E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.50E-04	[5]	3.50E-04	[5]	(µg/g DW plant)/ (µg/g soil)
15046-84-1	Iodine-129	4.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.00E-02	[5]	4.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
15117-48-3	Plutonium-239	1.10E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.10E-03	[5]	1.10E-03	[5]	(µg/g DW plant)/ (µg/g soil)
15117-96-1	Uranium-235	1.20E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/ (µg/g soil)
15262-20-1	Radium-228	2.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-03	[5]	2.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)
15510-73-3	Curium-242	4.30E-04	(µg/g DW plant)/ (µg/g soil)	[4]	4.30E-04	[5]	4.30E-04	[5]	(µg/g DW plant)/ (µg/g soil)
15585-10-1	Europium-154	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-02	[5]	2.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
15594-54-4	Thorium-229	3.30E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.30E-04	[5]	3.30E-04	[5]	(µg/g DW plant)/ (µg/g soil)
156-59-2	cis-1,2-Dichloroethene	1.84E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
156-60-5	1,2-trans-Dichloroethene	9.62E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
15715-94-3	Samarium-151	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-02	[5]	2.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
15751-77-6	Zirconium-93	1.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.00E-03	[5]	1.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)
15757-87-6	Curium-243	4.30E-04	(µg/g DW plant)/ (µg/g soil)	[4]	4.30E-04	[5]	4.30E-04	[5]	(µg/g DW plant)/ (µg/g soil)
15758-45-9	Selenium-79	5.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	5.00E-02	[5]	5.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
15832-50-5	Tin-126	6.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	6.00E-03	[5]	6.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)
1634-04-4	Methyl tert-butyl ether	1.54E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
16887-00-6	Chloride								
16984-48-8	Fluoride								
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	1.03E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.03E+00	[3]	1.03E+00	[3]	(µg/g DW plant)/ (µg/g soil)
189-55-9	Dibenzo[a,i]pyrene	1.47E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.47E+00	[2]	1.47E+00	[2]	(µg/g DW plant)/ (µg/g soil)
189-64-0	Dibenzo[a,h]-pyrene	1.47E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.47E+00	[2]	1.47E+00	[2]	(µg/g DW plant)/ (µg/g soil)
191-24-2	Benzo(g,h,i)-perylene	2.49E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.49E+00	[2]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
191-30-0	Dibenzo(a,l)pyrene	1.19E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.19E+00	[2]	1.19E+00	[2]	(µg/g DW plant)/ (µg/g soil)
192-65-4	Dibenzo[a,e]pyrene	1.47E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.47E+00	[2]	1.47E+00	[2]	(µg/g DW plant)/ (µg/g soil)
192-97-2	Benzo(e)pyrene	2.22E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.22E+00	[2]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
193-39-5	Indeno(1,2,3-cd)-pyrene	5.29E-02	(µg/g DW plant)/ (µg/g soil)	[3]	5.29E-02	[3]	5.29E-02	[3]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	7.89E-01	(µg/g DW plant)/ (µg/g soil)	[3]	7.89E-01	[3]	7.89E-01	[3]	(µg/g DW plant)/ (µg/g soil)
205-82-3	Benzo[j]fluor-anthene	2.61E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.61E+00	[2]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
205-99-2	Benzo(b)fluor-anthene	1.15E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.15E+00	[3]	1.15E+00	[3]	(µg/g DW plant)/ (µg/g soil)
206-44-0	Fluoranthene	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.50E-01	[3]	1.50E-01	[3]	(µg/g DW plant)/ (µg/g soil)
207-08-9	Benzo(k)fluor-anthene	6.09E-02	(µg/g DW plant)/ (µg/g soil)	[3]	6.09E-02	[3]	6.09E-02	[3]	(µg/g DW plant)/ (µg/g soil)
208-96-8	Acenaphthylene	9.24E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
218-01-9	Chrysene	9.48E-02	(µg/g DW plant)/ (µg/g soil)	[3]	9.48E-02	[3]	9.48E-02	[3]	(µg/g DW plant)/ (µg/g soil)
224-42-0	Dibenz[a,j]acridine	4.05E-02	(µg/g DW plant)/ (µg/g soil)	[9]	4.05E-02	[8]	4.05E-02	[8]	(µg/g DW plant)/ (µg/g soil)
2245-38-7	2,3,5-Trimethyl-naphthalene				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
226-36-8	Dibenz[a,h]acridine	4.05E-02	(µg/g DW plant)/ (µg/g soil)	[9]	4.05E-02	[8]	4.05E-02	[8]	(µg/g DW plant)/ (µg/g soil)
22967-92-6	Methyl mercury	9.90E-02	(µg/g DW plant)/ (µg/g soil)	[3]	9.90E-02	[3]	9.90E-02	[3]	(µg/g DW plant)/ (µg/g soil)
23950-58-5	Pronamide	4.32E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
24959-67-9	Bromide								
27154-33-2	Trichlorofluoro-ethane	8.14E+01	(µg/g DW plant)/ (µg/g soil)	[10]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
31508-00-6	2,3',4,4',5-Pentachloro-biphenyl (PCB 118)	1.59E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.59E+00	[2]	1.59E+00	[2]	(µg/g DW plant)/ (µg/g soil)
319-84-6	alpha-BHC	7.84E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
319-85-7	beta-BHC	7.84E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	2.02E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.02E+00	[2]	2.02E+00	[2]	(µg/g DW plant)/ (µg/g soil)
32598-14-4	2,3,3',4,4'-Pentachloro-biphenyl (PCB 105)	1.87E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.87E+00	[2]	1.87E+00	[2]	(µg/g DW plant)/ (µg/g soil)
3268-87-9	Octachlorodibenzo (p)dioxin	4.90E-01	(µg/g DW plant)/ (µg/g soil)	[3]	4.90E-01	[3]	4.90E-01	[3]	(µg/g DW plant)/ (µg/g soil)
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	1.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.38E+00	[2]	1.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	5.45E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.45E-01	[3]	5.45E-01	[3]	(µg/g DW plant)/ (µg/g soil)
3697-24-3	5-Methylchrysene	9.48E-02	(µg/g DW plant)/ (µg/g soil)	[8]	9.48E-02	[7]	9.48E-02	[7]	(µg/g DW plant)/ (µg/g soil)
378253-40-8	Barium-137m	1.50E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.50E-02	[5]	1.50E-02	[5]	(µg/g DW plant)/ (µg/g soil)
378253-44-2	Cadmium-113m	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.50E-01	[5]	1.50E-01	[5]	(µg/g DW plant)/ (µg/g soil)
378782-82-2	Niobium-93m	2.50E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.50E-02	[5]	2.50E-02	[5]	(µg/g DW plant)/ (µg/g soil)
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.26E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.26E+00	[2]	1.26E+00	[2]	(µg/g DW plant)/ (µg/g soil)
39001-02-0	Octachlorodibenzofuran	7.76E-01	(µg/g DW plant)/ (µg/g soil)	[3]	7.76E-01	[3]	7.76E-01	[3]	(µg/g DW plant)/ (µg/g soil)
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	6.05E-01	(µg/g DW plant)/ (µg/g soil)	[3]	6.05E-01	[3]	6.05E-01	[3]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
39635-31-9	2,3,3',4,4',5,5'-Heptachloro-biphenyl (PCB 189)	8.00E-01	(µg/g DW plant)/(µg/g soil)	[2]	8.00E-01	[2]	8.00E-01	[2]	(µg/g DW plant)/(µg/g soil)
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	1.12E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.12E+00	[3]	1.12E+00	[3]	(µg/g DW plant)/(µg/g soil)
4170-30-3	Crotonaldehyde (Propylene aldehyde)	4.04E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
41851-50-7	Chlorocyclopenta-diene	2.68E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
460-19-5	Cyanogen (oxalonitrile)	1.09E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
4786-20-3	2-Butenenitrile				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
50-00-0	Formaldehyde	3.05E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
50-32-8	Benzo(a)pyrene	6.05E-02	(µg/g DW plant)/(µg/g soil)	[3]	6.05E-02	[3]	6.05E-02	[3]	(µg/g DW plant)/(µg/g soil)
506-68-3	Cyanogen bromide (bromocyanide)	2.06E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
506-77-4	Cyanogen chloride	2.42E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
51-28-5	2,4-Dinitrophenol	9.87E+04	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
51-79-6	Ethyl carbamate (urethane)	2.05E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
510-15-6	Chlorobenzilate	2.74E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.74E+00	[3]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	1.49E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.49E+00	[3]	1.49E+00	[3]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.32E+00	(µg/g DW plant)/(µg/g soil)	[2]	1.32E+00	[2]	1.32E+00	[2]	(µg/g DW plant)/(µg/g soil)
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	1.10E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
53-70-3	Dibenz[a,h]-anthracene	4.05E-02	(µg/g DW plant)/(µg/g soil)	[3]	4.05E-02	[3]	4.05E-02	[3]	(µg/g DW plant)/(µg/g soil)
532-27-4	2-Chloroaceto-phenone	3.39E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
534-52-1	4,6-Dinitro-o-cresol	3.73E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
5385-75-1	Dibenzo(a,e)fluor-anthene	1.77E+00	(µg/g DW plant)/(µg/g soil)	[2]	1.77E+00	[2]	1.77E+00	[2]	(µg/g DW plant)/(µg/g soil)
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	5.60E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
540-73-8	1,2-Dimethylhydrazine	5.83E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
540-84-1	2,2,4-Trimethylpentane	3.56E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
541-73-1	1,3-Dichlorobenzene	1.62E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
542-75-6	1,3-Dichloropropene	1.13E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
542-88-1	Bis(chloromethyl)-ether	3.57E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
55673-89-7	1,2,3,4,7,8,9-Heptachloro-dibenzofuran	7.48E-01	(µg/g DW plant)/(µg/g soil)	[3]	7.48E-01	[3]	7.48E-01	[3]	(µg/g DW plant)/(µg/g soil)
56-23-5	Carbon tetrachloride	9.51E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
56-49-5	3-Methylcholanthrene	3.03E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
56-55-3	Benzo(a)anthracene	9.48E-02	(µg/g DW plant)/ (µg/g soil)	[3]	9.48E-02	[3]	9.48E-02	[3]	(µg/g DW plant)/ (µg/g soil)
57-12-5	Cyanide	6.46E-01	(µg/g DW plant)/ (µg/g soil)	[3]	6.46E-01	[3]	6.46E-01	[3]	(µg/g DW plant)/ (µg/g soil)
57-24-9	Strychnine	1.70E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
57-74-9	Chlordane	1.66E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
57117-31-4	2,3,4,7,8-Pentachloro-dibenzofuran	1.21E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.21E+00	[3]	1.21E+00	[3]	(µg/g DW plant)/ (µg/g soil)
57117-41-6	1,2,3,7,8-Pentachloro-dibenzofuran	1.03E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.03E+00	[3]	1.03E+00	[3]	(µg/g DW plant)/ (µg/g soil)
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	9.25E-01	(µg/g DW plant)/ (µg/g soil)	[3]	9.25E-01	[3]	9.25E-01	[3]	(µg/g DW plant)/ (µg/g soil)
57465-28-8	3,3',4,4',5-Pentachloro-biphenyl (PCB 126)	1.70E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.70E+00	[2]	1.70E+00	[2]	(µg/g DW plant)/ (µg/g soil)
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	7.89E-01	(µg/g DW plant)/ (µg/g soil)	[3]	7.89E-01	[3]	7.89E-01	[3]	(µg/g DW plant)/ (µg/g soil)
58-89-9	gamma-BHC (Lindane)	5.96E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
58-90-2	2,3,4,6-Tetrachlorophenol	2.22E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
581-42-0	2,6-Dimethyl-naphthalene				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
584-84-9	2,4-Toluene diisocyanate	1.59E+01	(µg/g DW plant)/ (µg/g soil)	[5]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
589-38-8	3-Hexanone	1.39E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
59-50-7	4-Chloro-3-methylphenol	5.08E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
59-89-2	N-Nitrosomorpholine	3.91E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
591-50-4	Benzene, iodo-				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
591-78-6	2-Hexanone	1.56E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
593-60-2	Bromoethene (Vinyl bromide)	9.55E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
593-74-8	Dimethyl Mercury				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
60-11-7	Dimethyl aminoazobenzene	5.53E+00	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
60-29-7	Ethyl ether	3.81E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
60-35-5	Acetamide	2.49E+04	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
602-87-9	5-Nitroacenaphthene	2.13E-01	(µg/g DW plant)/(µg/g soil)	[6]	2.13E-01	[6]	2.13E-01	[6]	(µg/g DW plant)/(µg/g soil)
606-20-2	2,6-Dinitrotoluene	2.28E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
608-93-5	Pentachlorobenzene	1.84E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.84E+00	[3]	1.84E+00	[3]	(µg/g DW plant)/(µg/g soil)
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	9.25E-01	(µg/g DW plant)/(µg/g soil)	[3]	9.25E-01	[3]	9.25E-01	[3]	(µg/g DW plant)/(µg/g soil)
61626-71-9	Dichloropentadiene	1.03E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
62-50-0	Ethyl methanesulfonate	5.84E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
62-53-3	Aniline	6.21E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
62-75-9	N-Nitroso-N,N-dimethylamine	3.77E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
621-64-7	N-Nitroso-di-n-propylamine	4.09E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
624-83-9	Methyl isocyanate	3.79E+02	(µg/g DW plant)/(µg/g soil)	[7]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
628-73-9	Hexanenitrile	5.63E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
630-08-0	Carbon monoxide								
630-20-6	1,1,1,2-Tetrachloroethane	1.66E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
64-18-6	Formic acid (Methanoic acid)	2.17E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
65-85-0	Benzoic acid	2.12E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
65510-44-3	2',3,4,4',5-Pentachloro-biphenyl (PCB 123)	1.70E+00	(µg/g DW plant)/(µg/g soil)	[2]	1.70E+00	[2]	1.70E+00	[2]	(µg/g DW plant)/(µg/g soil)
67-56-1	Methyl alcohol	3.65E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-63-0	2-Propyl alcohol	1.39E+03	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-64-1	2-Propanone (Acetone)	7.42E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-66-3	Chloroform	1.01E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-72-1	Hexachloroethane	1.59E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
67562-39-4	1,2,3,4,6,7,8-Heptachloro-dibenzofuran	7.48E-01	(µg/g DW plant)/(µg/g soil)	[3]	7.48E-01	[3]	7.48E-01	[3]	(µg/g DW plant)/(µg/g soil)
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.25E+00	(µg/g DW plant)/(µg/g soil)	[2]	1.25E+00	[2]	1.25E+00	[2]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
70-30-4	Hexachlorophene	5.75E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.75E-01	[3]	5.75E-01	[3]	(µg/g DW plant)/ (µg/g soil)
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	2.33E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.33E+00	[2]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	9.25E-01	(µg/g DW plant)/ (µg/g soil)	[3]	9.25E-01	[3]	9.25E-01	[3]	(µg/g DW plant)/ (µg/g soil)
71-36-3	n-Butyl alcohol	6.83E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
71-43-2	Benzene	8.01E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
71-55-6	1,1,1-Trichloroethane	8.88E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
72-43-5	Methoxychlor	7.69E-02	(µg/g DW plant)/ (µg/g soil)	[3]	7.69E-02	[3]	7.69E-02	[3]	(µg/g DW plant)/ (µg/g soil)
72-55-9	4,4-DDE	8.37E-03	(µg/g DW plant)/ (µg/g soil)	[3]	8.37E-03	[3]	8.37E-03	[3]	(µg/g DW plant)/ (µg/g soil)
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	9.25E-01	(µg/g DW plant)/ (µg/g soil)	[3]	9.25E-01	[3]	9.25E-01	[3]	(µg/g DW plant)/ (µg/g soil)
74-83-9	Bromomethane	9.14E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-87-3	Chloromethane	1.19E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-88-4	Iodomethane	7.15E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-95-3	Methylene bromide	3.08E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-97-5	Bromochloro-methane	8.67E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
7429-90-5	Aluminum	6.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	6.50E-04	[1]	6.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
7439-89-6	Iron	5.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	5.00E-02	[5]	5.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7439-92-1	Lead	9.00E-03	(µg/g DW plant)/ (µg/g soil)	[3]	9.00E-03	[3]	9.00E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7439-93-2	Lithium	4.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	4.00E-03	[1]	4.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7439-95-4	Magnesium	5.50E-01	(µg/g DW plant)/ (µg/g soil)	[4]	5.50E-01	[5]	5.50E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7439-96-5	Manganese	2.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-01	[5]	2.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7439-97-6	Mercury	2.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-01	[5]	2.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7439-98-7	Molybdenum	8.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	8.00E-01	[5]	8.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7440-02-0	Nickel	8.00E-03	(µg/g DW plant)/ (µg/g soil)	[3]	8.00E-03	[3]	8.00E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7440-16-6	Rhodium	4.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.00E-02	[5]	4.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7440-22-4	Silver	1.00E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.00E-01	[3]	1.00E-01	[3]	(µg/g DW plant)/ (µg/g soil)
7440-23-5	Sodium	3.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	3.00E-01	[5]	3.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7440-24-6	Strontium (total)	5.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	5.00E-01	[5]	5.00E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7440-25-7	Tantalum	2.50E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.50E-02	[5]	2.50E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7440-28-0	Thallium	4.00E-04	(µg/g DW plant)/ (µg/g soil)	[3]	4.00E-04	[3]	4.00E-04	[3]	(µg/g DW plant)/ (µg/g soil)
7440-29-1	Thorium-232	3.30E-04	(µg/g DW plant)/ (µg/g soil)	[4]	3.30E-04	[5]	3.30E-04	[5]	(µg/g DW plant)/ (µg/g soil)
7440-31-5	Tin	6.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	6.00E-03	[5]	6.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
7440-33-7	Tungsten	3.00E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.00E+00	[5]	3.00E+00	[5]	(µg/g DW plant)/ (µg/g soil)
7440-36-0	Antimony	3.00E-02	(µg/g DW plant)/ (µg/g soil)	[3]	3.00E-02	[3]	3.00E-02	[3]	(µg/g DW plant)/ (µg/g soil)
7440-38-2	Arsenic	8.00E-03	(µg/g DW plant)/ (µg/g soil)	[3]	8.00E-03	[3]	8.00E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7440-39-3	Barium	1.50E-02	(µg/g DW plant)/ (µg/g soil)	[3]	1.50E-02	[3]	1.50E-02	[3]	(µg/g DW plant)/ (µg/g soil)
7440-41-7	Beryllium	1.50E-03	(µg/g DW plant)/ (µg/g soil)	[3]	1.50E-03	[3]	1.50E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7440-43-9	Cadmium	6.40E-02	(µg/g DW plant)/ (µg/g soil)	[3]	6.40E-02	[3]	6.40E-02	[3]	(µg/g DW plant)/ (µg/g soil)
7440-47-3	Chromium	4.50E-03	(µg/g DW plant)/ (µg/g soil)	[3]	4.50E-03	[3]	4.50E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7440-48-4	Cobalt	6.70E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.70E-02	[5]	6.70E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7440-50-8	Copper	2.50E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.50E-01	[5]	2.50E-01	[5]	(µg/g DW plant)/ (µg/g soil)
7440-61-1	Uranium	1.20E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.20E-02	[5]	1.20E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7440-61-1R	Uranium-238	4.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	4.00E-03	[1]	4.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7440-62-2	Vanadium	3.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	3.00E-03	[1]	3.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7440-65-5	Yttrium	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.00E-02	[5]	1.00E-02	[5]	(µg/g DW plant)/ (µg/g soil)
7440-66-6	Zinc	9.00E-01	(µg/g DW plant)/ (µg/g soil)	[3]	9.00E-01	[3]	9.00E-01	[3]	(µg/g DW plant)/ (µg/g soil)
7440-67-7	Zirconium	1.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.00E-03	[5]	1.00E-03	[5]	(µg/g DW plant)/ (µg/g soil)
7446-09-5	Sulfur dioxide								

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
74472-37-0	2,3,4,4',5-Pentachloro-biphenyl (PCB 114)	1.70E+00	(µg/g DW plant)/(µg/g soil)	[2]	1.70E+00	[2]	1.70E+00	[2]	(µg/g DW plant)/(µg/g soil)
7487-94-7	Mercury (Hg^{+2})	3.60E-02	(µg/g DW plant)/(µg/g soil)	[3]	3.60E-02	[3]	3.60E-02	[3]	(µg/g DW plant)/(µg/g soil)
75-00-3	Chloroethane	2.84E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-01-4	1-Chloroethene	2.46E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-02-5	Fluoroethene (vinyl fluoride)	7.12E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-05-8	Acetonitrile	1.39E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-07-0	Acetaldehyde	1.06E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-09-2	Dichloromethane (Methylene Chloride)	3.59E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-15-0	Carbon disulfide	1.26E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-21-8	Ethylene oxide (Oxirane)	1.27E+03	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-25-2	Bromoform	1.23E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-27-4	Bromodichlorometh ane	8.74E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-29-6	2-Chloropropane	8.39E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-34-3	1,1-Dichloroethane	1.89E+02	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
75-35-4	1,1-Dichloroethene	8.01E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
75-44-5	Phosgene (Hydrogen phosphide)	4.39E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-45-6	Chlorodifluoro-methane	9.19E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-50-3	Trimethylamine	1.00E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-69-4	Trichlorofluoro-methane	8.14E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-71-8	Dichlorodifluoro-methane	1.74E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
76-01-7	Pentachloroethane	1.08E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
76-13-1	1,2,2-Trichlorotrifluoro-ethane	6.31E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
76-44-8	Heptachlor	2.26E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.26E-03	[3]	2.26E-03	[3]	(µg/g DW plant)/ (µg/g soil)
764-41-0	1,4-Dichloro-2-butene	3.53E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
7647-01-0	Hydrogen chloride								
765-34-4	Glycidylaldehyde	1.46E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
7664-39-3	Hydrogen Fluoride								
7664-41-7	Ammonia/ Ammonium								
77-47-4	Hexachlorocyclope ntadiene	1.50E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
77-78-1	Dimethyl sulfate	6.17E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
7704-34-9	Total Sulfur (thermodynamically stable)								

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
7723-14-0	Phosphorus	3.50E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.50E+00	[5]	3.50E+00	[5]	(µg/g DW plant)/ (µg/g soil)
7782-41-4	Fluorine gas (F_2)				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
7782-49-2	Selenium	2.20E-02	(µg/g DW plant)/ (µg/g soil)	[3]	2.20E-02	[3]	2.20E-02	[3]	(µg/g DW plant)/ (µg/g soil)
7782-50-5	Chlorine	7.00E+01	(µg/g DW plant)/ (µg/g soil)	[4]	7.00E+01	[5]	7.00E+01	[5]	(µg/g DW plant)/ (µg/g soil)
78-83-1	2-Methylpropyl alcohol	7.92E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
78-87-5	1,2-Dichloropropane	9.26E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
78-93-3	2-Butanone	2.31E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-00-5	1,1,2-Trichloroethane	8.05E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-01-6	1,1,2-Trichloroethylene	4.96E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-10-7	2-Propenoic acid	1.26E+03	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-34-5	1,1,2,2-Tetrachloroethane	8.62E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-46-9	2-Nitropropane	6.78E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
80-62-6	Methyl methacrylate	2.00E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
82-68-8	Pentachloronitro-benzene (PCNB)	2.38E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.38E+00	[3]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
822-06-0	Hexamethylene-1,5-diisocyanate	2.60E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.60E+00	[2]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
823-40-5	Toluene-2,6-diamine	1.22E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
83-32-9	Acenaphthene	2.13E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.13E-01	[3]	2.13E-01	[3]	(µg/g DW plant)/ (µg/g soil)
832-69-9	1-Methylphen-anthrene				2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
84-66-2	Diethyl phthalate	4.44E-01	(µg/g DW plant)/ (µg/g soil)	[3]	4.44E-01	[3]	4.44E-01	[3]	(µg/g DW plant)/ (µg/g soil)
84-74-2	Di-n-butylphthalate	1.86E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.86E-01	[3]	1.86E-01	[3]	(µg/g DW plant)/ (µg/g soil)
85-01-8	Phenanthrene	1.83E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.83E-01	[3]	1.83E-01	[3]	(µg/g DW plant)/ (µg/g soil)
85-44-9	Phthalic anhydride (1,2-benzenedicarb-oxylic anhydride)	2.60E+03	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
85-68-7	Butylbenzyl-phthalate	1.58E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.58E-01	[3]	1.58E-01	[3]	(µg/g DW plant)/ (µg/g soil)
86-73-7	Fluorene	1.90E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.90E-01	[3]	1.90E-01	[3]	(µg/g DW plant)/ (µg/g soil)
87-61-6	1,2,3-Trichlorobenzene	1.58E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
87-68-3	Hexachlorobuta-diene	1.52E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.52E-01	[3]	1.52E-01	[3]	(µg/g DW plant)/ (µg/g soil)
87-86-5	Pentachlorophenol	1.64E+03	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
88-06-2	2,4,6-Trichlorophenol	2.16E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
88-74-4	o-Nitroaniline (2-nitroaniline)	1.89E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
88-75-5	2-Nitrophenol	2.06E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
90-04-0	o-Anisidine	1.28E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
90-12-0	1-Methylnaphthalene	1.64E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
91-20-3	Naphthalene	2.69E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.69E-01	[3]	2.69E-01	[3]	(µg/g DW plant)/ (µg/g soil)
91-22-5	Quinoline	1.04E+00	(µg/g DW plant)/ (µg/g soil)	[2]	1.04E+00	[2]	1.04E+00	[2]	(µg/g DW plant)/ (µg/g soil)
91-57-6	2-Methylnaphthalene	1.65E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
91-58-7	2-Chloronaphthalene	4.42E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
91-94-1	3,3'-Dichlorobenzidine	1.62E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
92-52-4	1,1`-Biphenyl	9.71E+00	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
924-16-3	N-Nitroso-di-n-Buetylamine	1.72E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	6.30E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
94-75-7	2,4-D	2.59E+02	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-48-7	o-Cresol	1.66E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-49-8	o-Chlorotoluene	5.08E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-50-1	1,2-Dichlorobenzene	2.45E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-53-4	o-Toluidine	4.39E+01	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-57-8	2-Chlorophenol	2.71E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.71E+00	[3]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-63-6	1,2,4-Trimethyl benzene	4.55E+01	(µg/g DW plant)/ (µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-94-3	1,2,4,5-Tetrachlorobenzene	1.05E+02	(µg/g DW plant)/ (µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-2 Plant-Soil Bioconcentration Factors in Root Vegetables

CAS Registry Number	Analyte Name	Plant-Soil Bioconcentration Factor For Belowground Produce From Literature, Database, or Study	Units For Plant-Soil Bioconcentration Factor For Belowground Produce	Reference	Plant-Soil Bioconcentration Factor For Belowground Domestic Produce ($Br_{rootveg}$)	Reference	Plant-Soil Bioconcentration Factor For Belowground Wild Produce ($Br_{rootveg}$)	Reference	Units For Plant-Soil Bioconcentration Factor For Belowground Wild Produce
95-95-4	2,4,5-Trichlorophenol	1.06E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
96-12-8	1,2-Dibromo-3-chloropropane	8.07E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
96-18-4	1,2,3-Trichloropropane	5.75E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
96-45-7	Ethylene thiourea	2.21E+02	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
97-63-2	Ethyl methacrylate	1.68E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-01-1	Furfural	8.63E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-06-6	tert-Butyl benzene	3.55E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-07-7	Benzotrichloride	4.46E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-82-8	Cumene	2.73E-01	(µg/g DW plant)/(µg/g soil)	[3]	2.73E-01	[3]	2.73E-01	[3]	(µg/g DW plant)/(µg/g soil)
98-83-9	Methyl styrene (mixed isomers)	3.06E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-86-2	Acetophenone	2.83E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
98-95-3	Nitrobenzene	1.05E+01	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
99-35-4	1,3,5-Trinitrobenzene	3.75E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
99-65-0	1,3-Dinitrobenzene	2.19E+00	(µg/g DW plant)/(µg/g soil)	[3]	2.19E+00	[3]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)
99-87-6	p-Cymene	3.55E+01	(µg/g DW plant)/(µg/g soil)	[2]	2.78E+00	[4]	2.08E+00	[4]	(µg/g DW plant)/(µg/g soil)

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Belowground Produce (from literature, study, or database)
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture.* ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-16 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chrysene.
[9]	Surrogate value from Dibenz[a,h]anthracene.
[10]	Surrogate value from Trichlorofluoromethane.
[11]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Belowground Domestic Produce
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-16 in EPA. 2005. Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Mass-limited plant-soil bioconcentration factor for belowground domestic produce (tilled soil)
[5]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. A Compendium of Transfer Factors for Agricultural and Animal Products, PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Belowground Wild Produce
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture.* ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Belowground Wild Produce
[2]	Calculated value per Eq. A-2-16 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Mass-limited plant-soil bioconcentration factor for belowground wild produce (root zone soil)
[5]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA. June 2003.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
100-02-7	p-Nitrophenol	3.05E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.05E+00	[11]	3.05E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-21-0	Phthalic acid	2.70E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.70E+00	[2]	2.70E+00	[3]	(µg/g DW plant)/ (µg/g soil)
100-25-4	1,4-Dinitrobenzene	5.55E+00	(µg/g DW plant)/ (µg/g soil)	[3]	5.55E+00	[2]	5.55E+00	[3]	(µg/g DW plant)/ (µg/g soil)
100-40-3	4-Ethenylcyclohexene	2.07E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.07E-01	[2]	2.07E-01	[3]	(µg/g DW plant)/ (µg/g soil)
100-41-4	Ethyl benzene	6.25E-01	(µg/g DW plant)/ (µg/g soil)	[4]	6.25E-01	[11]	6.25E-01	[4]	(µg/g DW plant)/ (µg/g soil)
100-42-5	Styrene	7.14E-01	(µg/g DW plant)/ (µg/g soil)	[4]	7.14E-01	[11]	7.14E-01	[4]	(µg/g DW plant)/ (µg/g soil)
100-44-7	Benzyl chloride	1.81E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.81E+00	[11]	1.81E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-47-0	Benzonitrile	4.86E+00	(µg/g DW plant)/ (µg/g soil)	[4]	4.86E+00	[11]	4.86E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-51-6	Benzyl alcohol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
100-52-7	Benzaldehyde	5.40E+00	(µg/g DW plant)/ (µg/g soil)	[4]	5.40E+00	[11]	5.40E+00	[4]	(µg/g DW plant)/ (µg/g soil)
10028-15-6	Ozone	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
10028-17-8	Tritium								
10045-97-3	Cesium-137	8.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	8.00E-02	[1]	8.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
10061-01-5	cis-1,3-Dichloropropene	3.09E+00	(µg/g DW plant)/ (µg/g soil)	[11]	3.09E+00	[8]	3.09E+00	[13]	(µg/g DW plant)/ (µg/g soil)
10061-02-6	trans-1,3-Dichloropropene	2.60E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.60E+00	[2]	2.60E+00	[3]	(µg/g DW plant)/ (µg/g soil)
10098-91-6	Yttrium-90	1.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-02	[1]	1.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
10098-97-2	Strontium-90	2.50E+00	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E+00	[1]	2.50E+00	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
101-55-3	4-Bromophenylphenyl ether	3.61E-02	(µg/g DW plant)/(µg/g soil)	[4]	3.61E-02	[11]	3.61E-02	[4]	(µg/g DW plant)/(µg/g soil)
101-77-9	4,4-Methylenedianiline	4.67E+00	(µg/g DW plant)/(µg/g soil)	[3]	4.67E+00	[2]	4.67E+00	[3]	(µg/g DW plant)/(µg/g soil)
10102-44-0	Nitrogen dioxide								
10198-40-0	Cobalt-60	2.00E-02	(µg/g DW plant)/(µg/g soil)	[1]	2.00E-02	[1]	2.00E-02	[1]	(µg/g DW plant)/(µg/g soil)
103-33-3	Azobenzene	2.40E-01	(µg/g DW plant)/(µg/g soil)	[3]	2.40E-01	[2]	2.40E-01	[3]	(µg/g DW plant)/(µg/g soil)
103-65-1	n-Propyl benzene (Isocumene)	2.85E-01	(µg/g DW plant)/(µg/g soil)	[3]	2.85E-01	[2]	2.85E-01	[3]	(µg/g DW plant)/(µg/g soil)
104-51-8	n-Butylbenzene	1.14E-01	(µg/g DW plant)/(µg/g soil)	[3]	1.14E-01	[2]	1.14E-01	[3]	(µg/g DW plant)/(µg/g soil)
104-76-7	2-Ethyl-1-hexanol	1.02E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.02E+00	[2]	1.02E+00	[3]	(µg/g DW plant)/(µg/g soil)
105-67-9	2,4-Dimethylphenol	1.81E+00	(µg/g DW plant)/(µg/g soil)	[4]	1.81E+00	[11]	1.81E+00	[4]	(µg/g DW plant)/(µg/g soil)
10595-95-6	n-Nitrosomethyl-ethylamine	8.38E+00	(µg/g DW plant)/(µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/(µg/g soil)
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	4.61E-01	(µg/g DW plant)/(µg/g soil)	[3]	4.61E-01	[2]	4.61E-01	[3]	(µg/g DW plant)/(µg/g soil)
106-44-5	p-Cresol (4-methyl phenol)	3.09E+00	(µg/g DW plant)/(µg/g soil)	[4]	3.09E+00	[11]	3.09E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-46-7	1,4-Dichlorobenzene	3.67E-01	(µg/g DW plant)/(µg/g soil)	[4]	3.67E-01	[11]	3.67E-01	[4]	(µg/g DW plant)/(µg/g soil)
106-47-8	p-Chloroaniline	3.39E+00	(µg/g DW plant)/(µg/g soil)	[4]	3.39E+00	[11]	3.39E+00	[4]	(µg/g DW plant)/(µg/g soil)
106-49-0	p-Toluidine	6.09E+00	(µg/g DW plant)/(µg/g soil)	[3]	6.09E+00	[2]	6.09E+00	[3]	(µg/g DW plant)/(µg/g soil)
106-51-4	Quinone	8.38E+00	(µg/g DW plant)/(µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/(µg/g soil)
106-88-7	1,2-Epoxybutane	8.38E+00	(µg/g DW plant)/(µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/(µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
106-93-4	Ethylene dibromide	2.70E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.70E+00	[11]	2.70E+00	[4]	(µg/g DW plant)/ (µg/g soil)
106-99-0	1,3-Butadiene	2.74E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.74E+00	[2]	2.74E+00	[3]	(µg/g DW plant)/ (µg/g soil)
107-02-8	Acrolein	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-05-1	3-Chloropropene	2.97E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.97E+00	[2]	2.97E+00	[3]	(µg/g DW plant)/ (µg/g soil)
107-06-2	1,2-Dichloroethane	5.26E+00	(µg/g DW plant)/ (µg/g soil)	[4]	5.26E+00	[11]	5.26E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-12-0	Propionitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
107-13-1	Acrylonitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
107-19-7	Propargyl alcohol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
107-21-1	Ethylene glycol (1,2-ethanediol)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
107-98-2	Propylene glycol monomethyl ether	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
108-05-4	Acetic acid vinyl ester	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-10-1	4-Methyl-2-pentanone	7.84E+00	(µg/g DW plant)/ (µg/g soil)	[4]	7.84E+00	[11]	7.84E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-39-4	m-Cresol	2.85E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.85E+00	[11]	2.85E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-60-1	Bis(2-chloroiso-propyl)ether	1.43E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.43E+00	[2]	1.43E+00	[3]	(µg/g DW plant)/ (µg/g soil)
108-67-8	1,3,5-Trimethylbenzene	4.09E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.09E-01	[11]	4.09E-01	[4]	(µg/g DW plant)/ (µg/g soil)
108-86-1	Bromobenzene (Phenyl bromide)	7.24E-01	(µg/g DW plant)/ (µg/g soil)	[3]	7.24E-01	[2]	7.24E-01	[3]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
108-87-2	Methylcyclohexane	3.17E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.17E-01	[2]	3.17E-01	[3]	(µg/g DW plant)/ (µg/g soil)
108-88-3	Toluene	1.07E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.07E+00	[11]	1.07E+00	[4]	(µg/g DW plant)/ (µg/g soil)
108-90-7	Chlorobenzene	9.32E-01	(µg/g DW plant)/ (µg/g soil)	[4]	9.32E-01	[11]	9.32E-01	[4]	(µg/g DW plant)/ (µg/g soil)
108-94-1	Cyclohexanone	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
108-95-2	Phenol	5.26E+00	(µg/g DW plant)/ (µg/g soil)	[4]	5.26E+00	[11]	5.26E+00	[4]	(µg/g DW plant)/ (µg/g soil)
109-74-0	n-Butanenitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
109-75-1	3-Butenenitrile				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
109-77-3	Malononitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
109-86-4	2-Methoxyethanol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
109-99-9	Tetrahydrofuran	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
110-00-9	Furan	6.51E+00	(µg/g DW plant)/ (µg/g soil)	[3]	6.51E+00	[2]	6.51E+00	[3]	(µg/g DW plant)/ (µg/g soil)
110-54-3	n-Hexane	2.16E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.16E-01	[2]	2.16E-01	[3]	(µg/g DW plant)/ (µg/g soil)
110-59-8	Pentanenitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
110-80-5	2-Ethoxyethanol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
110-82-7	Cyclohexane	3.98E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.98E-01	[2]	3.98E-01	[3]	(µg/g DW plant)/ (µg/g soil)
110-83-8	Cyclohexene	8.61E-01	(µg/g DW plant)/ (µg/g soil)	[3]	8.61E-01	[2]	8.61E-01	[3]	(µg/g DW plant)/ (µg/g soil)
110-86-1	Pyridine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
111-15-9	Ethylene glycol monoethyl ether acetate	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
111-44-4	Bis(2-chloro-ethyl)ether	6.96E+00	(µg/g DW plant)/ (µg/g soil)	[4]	6.96E+00	[11]	6.96E+00	[4]	(µg/g DW plant)/ (µg/g soil)
111-65-9	n-Octane	3.93E-02	(µg/g DW plant)/ (µg/g soil)	[3]	3.93E-02	[2]	3.93E-02	[3]	(µg/g DW plant)/ (µg/g soil)
111-76-2	2-Butoxyethanol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
111-84-2	n-Nonane	2.10E-02	(µg/g DW plant)/ (µg/g soil)	[3]	2.10E-02	[2]	2.10E-02	[3]	(µg/g DW plant)/ (µg/g soil)
111-91-1	Bis(2-chloro-ethoxy)methane	6.86E+00	(µg/g DW plant)/ (µg/g soil)	[3]	6.86E+00	[2]	6.86E+00	[3]	(µg/g DW plant)/ (µg/g soil)
112-30-1	1-Decanol	8.84E-02	(µg/g DW plant)/ (µg/g soil)	[3]	8.84E-02	[2]	8.84E-02	[3]	(µg/g DW plant)/ (µg/g soil)
112-31-2	Decanal				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
112-40-3	Dodecane				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
1120-21-4	Undecane				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
1120-71-4	1,3-Propane sultone	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
117-81-7	Bis(2-ethylhexyl) phthalate	4.37E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.37E-02	[11]	4.37E-02	[4]	(µg/g DW plant)/ (µg/g soil)
117-84-0	Di-n-octylphthalate	8.06E-04	(µg/g DW plant)/ (µg/g soil)	[4]	8.06E-04	[11]	8.06E-04	[4]	(µg/g DW plant)/ (µg/g soil)
118-74-1	Hexachlorobenzene	3.30E-02	(µg/g DW plant)/ (µg/g soil)	[4]	3.30E-02	[11]	3.30E-02	[4]	(µg/g DW plant)/ (µg/g soil)
119-90-4	3,3'-Dimethoxybenzidine	3.48E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.48E+00	[11]	3.48E+00	[4]	(µg/g DW plant)/ (µg/g soil)
120-12-7	Anthracene	9.71E-02	(µg/g DW plant)/ (µg/g soil)	[4]	9.71E-02	[11]	9.71E-02	[4]	(µg/g DW plant)/ (µg/g soil)
120-82-1	1,2,4-Trichlorobenzene	1.89E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.89E-01	[11]	1.89E-01	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
120-83-2	2,4-Dichlorophenol	8.16E-01	(µg/g DW plant)/ (µg/g soil)	[4]	8.16E-01	[11]	8.16E-01	[4]	(µg/g DW plant)/ (µg/g soil)
121-14-2	2,4-Dinitrotoluene	2.78E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.78E+00	[11]	2.78E+00	[4]	(µg/g DW plant)/ (µg/g soil)
122-39-4	N,N-Diphenylamine	3.67E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.67E-01	[2]	3.67E-01	[3]	(µg/g DW plant)/ (µg/g soil)
122-66-7	1,2-Diphenylhydrazine	8.16E-01	(µg/g DW plant)/ (µg/g soil)	[4]	8.16E-01	[11]	8.16E-01	[4]	(µg/g DW plant)/ (µg/g soil)
123-33-1	Maleic hydrazide	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
123-38-6	Propionaldehyde	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
123-72-8	Butanal	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
123-91-1	1,4-Dioxan	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
124-18-5	Decane				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
124-38-9	Carbon dioxide				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
124-48-1	Chlorodibromo-methane	1.99E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.99E+00	[11]	1.99E+00	[4]	(µg/g DW plant)/ (µg/g soil)
126-73-8	Tributyl phosphate	1.89E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.89E-01	[2]	1.89E-01	[3]	(µg/g DW plant)/ (µg/g soil)
126-98-7	2-Methyl-2-propenenitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
127-18-4	1,1,2,2-Tetrachloroethene	4.20E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.20E-01	[11]	4.20E-01	[4]	(µg/g DW plant)/ (µg/g soil)
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	4.37E-02	(µg/g DW plant)/ (µg/g soil)	[3]	4.37E-02	[2]	4.37E-02	[3]	(µg/g DW plant)/ (µg/g soil)
129-00-0	Pyrene	5.70E-02	(µg/g DW plant)/ (µg/g soil)	[4]	5.70E-02	[11]	5.70E-02	[4]	(µg/g DW plant)/ (µg/g soil)
131-11-3	Dimethyl Phthalate	4.86E+00	(µg/g DW plant)/ (µg/g soil)	[4]	4.86E+00	[11]	4.86E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	1.61E-01	(µg/g DW plant)/(µg/g soil)	[3]	1.61E-01	[2]	1.61E-01	[3]	(µg/g DW plant)/(µg/g soil)
132-64-9	Dibenzofuran	1.61E-01	(µg/g DW plant)/(µg/g soil)	[3]	1.61E-01	[2]	1.61E-01	[3]	(µg/g DW plant)/(µg/g soil)
133-06-2	Captan	9.32E-01	(µg/g DW plant)/(µg/g soil)	[3]	9.32E-01	[2]	9.32E-01	[3]	(µg/g DW plant)/(µg/g soil)
1330-20-7	Xylenes (mixed isomers)	6.09E-01	(µg/g DW plant)/(µg/g soil)	[3]	6.09E-01	[2]	6.09E-01	[3]	(µg/g DW plant)/(µg/g soil)
1336-36-3	Polychlorinated biphenyls	8.96E-03	(µg/g DW plant)/(µg/g soil)	[3]	8.96E-03	[2]	8.96E-03	[3]	(µg/g DW plant)/(µg/g soil)
134-32-7	alpha-Naphthylamine	1.94E+00	(µg/g DW plant)/(µg/g soil)	[3]	1.94E+00	[2]	1.94E+00	[3]	(µg/g DW plant)/(µg/g soil)
135-98-8	sec-Butylbenzene	8.84E-02	(µg/g DW plant)/(µg/g soil)	[3]	8.84E-02	[2]	8.84E-02	[3]	(µg/g DW plant)/(µg/g soil)
13966-29-5	Uranium-234	8.50E-03	(µg/g DW plant)/(µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/(µg/g soil)
13967-48-1	Ruthenium-106	7.50E-02	(µg/g DW plant)/(µg/g soil)	[1]	7.50E-02	[1]	7.50E-02	[1]	(µg/g DW plant)/(µg/g soil)
13967-70-9	Cesium-134	8.00E-02	(µg/g DW plant)/(µg/g soil)	[1]	8.00E-02	[1]	8.00E-02	[1]	(µg/g DW plant)/(µg/g soil)
13968-55-3	Uranium-233	8.50E-03	(µg/g DW plant)/(µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/(µg/g soil)
13981-15-2	Curium-244	8.50E-04	(µg/g DW plant)/(µg/g soil)	[1]	8.50E-04	[1]	8.50E-04	[1]	(µg/g DW plant)/(µg/g soil)
13981-16-3	Plutonium-238	4.50E-04	(µg/g DW plant)/(µg/g soil)	[1]	4.50E-04	[1]	4.50E-04	[1]	(µg/g DW plant)/(µg/g soil)
13981-37-8	Nickel-63	6.00E-02	(µg/g DW plant)/(µg/g soil)	[1]	6.00E-02	[1]	6.00E-02	[1]	(µg/g DW plant)/(µg/g soil)
13982-10-0	Plutonium-242	4.50E-04	(µg/g DW plant)/(µg/g soil)	[1]	4.50E-04	[1]	4.50E-04	[1]	(µg/g DW plant)/(µg/g soil)
13982-63-3	Radium-226	1.50E-02	(µg/g DW plant)/(µg/g soil)	[1]	1.50E-02	[1]	1.50E-02	[1]	(µg/g DW plant)/(µg/g soil)
13982-70-2	Uranium-236	8.50E-03	(µg/g DW plant)/(µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/(µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
13994-20-2	Neptunium-237	1.00E-01	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-01	[1]	1.00E-01	[1]	(µg/g DW plant)/ (µg/g soil)
141-78-6	Acetic acid ethyl ester	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
14119-32-5	Plutonium-241	4.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	4.50E-04	[1]	4.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
14119-33-6	Plutonium-240	4.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	4.50E-04	[1]	4.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
14133-76-7	Technetium-99	9.50E+00	(µg/g DW plant)/ (µg/g soil)	[1]	9.50E+00	[1]	9.50E+00	[1]	(µg/g DW plant)/ (µg/g soil)
14158-29-3	Uranium-232	8.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
14234-35-6	Antimony-125	2.00E-01	(µg/g DW plant)/ (µg/g soil)	[1]	2.00E-01	[1]	2.00E-01	[1]	(µg/g DW plant)/ (µg/g soil)
14265-44-2	Phosphate								
14331-85-2	Protactinium-231	2.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E-03	[1]	2.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
14336-70-0	Nickel-59	6.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	6.00E-02	[1]	6.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
14391-16-3	Europium-155	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-02	[1]	1.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
145-73-3	Endothall	3.05E+00	(µg/g DW plant)/ (µg/g soil)	[3]	3.05E+00	[2]	3.05E+00	[3]	(µg/g DW plant)/ (µg/g soil)
14596-10-2	Americium-241	5.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	5.50E-03	[1]	5.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
14683-23-9	Europium-152	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-02	[1]	1.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
14762-75-5	Carbon-14				7.00E-01	[13]	7.00E-01	[6]	(µg/g DW plant)/ (µg/g soil)
14797-55-8	Nitrate								
14797-65-0	Nitrite								
14808-79-8	Sulfate								
14952-40-0	Actinium-227	3.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	3.50E-03	[1]	3.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
14993-75-0	Americium-243	5.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	5.50E-03	[1]	5.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
15046-84-1	Iodine-129	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-01	[1]	1.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)
15117-48-3	Plutonium-239	4.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	4.50E-04	[1]	4.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
15117-96-1	Uranium-235	8.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
15262-20-1	Radium-228	1.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-02	[1]	1.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
15510-73-3	Curium-242	8.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-04	[1]	8.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
15585-10-1	Europium-154	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-02	[1]	1.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
15594-54-4	Thorium-229	8.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-04	[1]	8.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
156-59-2	cis-1,2-Dichloroethene	3.09E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.09E+00	[11]	3.09E+00	[4]	(µg/g DW plant)/ (µg/g soil)
156-60-5	1,2-trans-Dichloroethene	2.37E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.37E+00	[11]	2.37E+00	[4]	(µg/g DW plant)/ (µg/g soil)
15715-94-3	Samarium-151	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-02	[1]	1.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
15751-77-6	Zirconium-93	2.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	2.00E-03	[1]	2.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
15757-87-6	Curium-243	8.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-04	[1]	8.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
15758-45-9	Selenium-79	2.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E-02	[1]	2.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
15832-50-5	Tin-126	3.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	3.00E-02	[1]	3.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
1634-04-4	Methyl tert-butyl ether	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
16887-00-6	Chloride	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
16984-48-8	Fluoride								

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	4.55E-03	(µg/g DW plant)/ (µg/g soil)	[4]	4.55E-03	[11]	4.55E-03	[4]	(µg/g DW plant)/ (µg/g soil)
189-55-9	Dibenzo[a,i]pyrene	2.40E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.40E-03	[2]	2.40E-03	[3]	(µg/g DW plant)/ (µg/g soil)
189-64-0	Dibenzo[a,h]pyrene	2.40E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.40E-03	[2]	2.40E-03	[3]	(µg/g DW plant)/ (µg/g soil)
191-24-2	Benzo(g,h,i)perylene	5.70E-03	(µg/g DW plant)/ (µg/g soil)	[3]	5.70E-03	[2]	5.70E-03	[3]	(µg/g DW plant)/ (µg/g soil)
191-30-0	Dibenzo(a,l)pyrene	1.35E-03	(µg/g DW plant)/ (µg/g soil)	[3]	1.35E-03	[2]	1.35E-03	[3]	(µg/g DW plant)/ (µg/g soil)
192-65-4	Dibenzo[a,e]pyrene	2.40E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.40E-03	[2]	2.40E-03	[3]	(µg/g DW plant)/ (µg/g soil)
192-97-2	Benzo(e)pyrene	7.34E-03	(µg/g DW plant)/ (µg/g soil)	[3]	7.34E-03	[2]	7.34E-03	[3]	(µg/g DW plant)/ (µg/g soil)
193-39-5	Indeno(1,2,3-cd)pyrene	5.93E-03	(µg/g DW plant)/ (µg/g soil)	[4]	5.93E-03	[11]	5.93E-03	[4]	(µg/g DW plant)/ (µg/g soil)
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	2.34E-03	(µg/g DW plant)/ (µg/g soil)	[4]	2.34E-03	[11]	2.34E-03	[4]	(µg/g DW plant)/ (µg/g soil)
205-82-3	Benzo[j]fluoranthene	1.14E-02	(µg/g DW plant)/ (µg/g soil)	[3]	1.14E-02	[2]	1.14E-02	[3]	(µg/g DW plant)/ (µg/g soil)
205-99-2	Benzo(b)fluoranthene	1.12E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.12E-02	[11]	1.12E-02	[4]	(µg/g DW plant)/ (µg/g soil)
206-44-0	Fluoranthene	4.99E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.99E-02	[11]	4.99E-02	[4]	(µg/g DW plant)/ (µg/g soil)
207-08-9	Benzo(k)fluoranthene	1.15E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.15E-02	[11]	1.15E-02	[4]	(µg/g DW plant)/ (µg/g soil)
208-96-8	Acenaphthylene	2.04E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.04E-01	[2]	2.04E-01	[3]	(µg/g DW plant)/ (µg/g soil)
218-01-9	Chrysene	1.97E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.97E-02	[11]	1.97E-02	[4]	(µg/g DW plant)/ (µg/g soil)
224-42-0	Dibenz[a,j]acridine	6.78E-03	(µg/g DW plant)/ (µg/g soil)	[9]	6.78E-03	[6]	6.78E-03	[11]	(µg/g DW plant)/ (µg/g soil)
2245-38-7	2,3,5-Trimethylnaphthalene				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
226-36-8	Dibenz[a,h]acridine	6.78E-03	(µg/g DW plant)/ (µg/g soil)	[9]	6.78E-03	[6]	6.78E-03	[11]	(µg/g DW plant)/ (µg/g soil)
22967-92-6	Methyl mercury	0.00E+00	(µg/g DW plant)/ (µg/g soil)	[4]	0.00E+00	[11]	0.00E+00	[4]	(µg/g DW plant)/ (µg/g soil)
23950-58-5	Pronamide	4.03E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.03E-01	[11]	4.03E-01	[4]	(µg/g DW plant)/ (µg/g soil)
24959-67-9	Bromide	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
27154-33-2	Trichlorofluoroethane	1.39E+00	(µg/g DW plant)/ (µg/g soil)	[10]	1.39E+00	[7]	1.39E+00	[12]	(µg/g DW plant)/ (µg/g soil)
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	2.97E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.97E-03	[2]	2.97E-03	[3]	(µg/g DW plant)/ (µg/g soil)
319-84-6	alpha-BHC	2.46E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.46E-01	[11]	2.46E-01	[4]	(µg/g DW plant)/ (µg/g soil)
319-85-7	beta-BHC	2.46E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.46E-01	[11]	2.46E-01	[4]	(µg/g DW plant)/ (µg/g soil)
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	5.70E-03	(µg/g DW plant)/ (µg/g soil)	[3]	5.70E-03	[2]	5.70E-03	[3]	(µg/g DW plant)/ (µg/g soil)
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	4.61E-03	(µg/g DW plant)/ (µg/g soil)	[3]	4.61E-03	[2]	4.61E-03	[3]	(µg/g DW plant)/ (µg/g soil)
3268-87-9	Octachlorodibenzo (p)dioxin	7.05E-04	(µg/g DW plant)/ (µg/g soil)	[4]	7.05E-04	[11]	7.05E-04	[4]	(µg/g DW plant)/ (µg/g soil)
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	2.02E-03	(µg/g DW plant)/ (µg/g soil)	[3]	2.02E-03	[2]	2.02E-03	[3]	(µg/g DW plant)/ (µg/g soil)
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	9.20E-04	(µg/g DW plant)/ (µg/g soil)	[4]	9.20E-04	[11]	9.20E-04	[4]	(µg/g DW plant)/ (µg/g soil)
3697-24-3	5-Methylchrysene	1.97E-02	(µg/g DW plant)/ (µg/g soil)	[8]	1.97E-02	[5]	1.97E-02	[10]	(µg/g DW plant)/ (µg/g soil)
378253-40-8	Barium-137m	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-01	[1]	1.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
378253-44-2	Cadmium-113m	5.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	5.50E-01	[1]	5.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)
378782-82-2	Niobium-93m	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	2.00E-02	[1]	2.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.57E-03	(µg/g DW plant)/ (µg/g soil)	[3]	1.57E-03	[2]	1.57E-03	[3]	(µg/g DW plant)/ (µg/g soil)
39001-02-0	Octachlorodibenzo-furan	9.20E-04	(µg/g DW plant)/ (µg/g soil)	[4]	9.20E-04	[11]	9.20E-04	[4]	(µg/g DW plant)/ (µg/g soil)
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	1.20E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.20E-03	[11]	1.20E-03	[4]	(µg/g DW plant)/ (µg/g soil)
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	6.43E-04	(µg/g DW plant)/ (µg/g soil)	[3]	6.43E-04	[2]	6.43E-04	[3]	(µg/g DW plant)/ (µg/g soil)
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	5.62E-03	(µg/g DW plant)/ (µg/g soil)	[4]	5.62E-03	[11]	5.62E-03	[4]	(µg/g DW plant)/ (µg/g soil)
4170-30-3	Crotonaldehyde (Propylene aldehyde)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
41851-50-7	Chlorocyclopenta-diene	1.53E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.53E+00	[2]	1.53E+00	[3]	(µg/g DW plant)/ (µg/g soil)
460-19-5	Cyanogen (oxalonitrile)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
4786-20-3	2-Butenenitrile				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
50-00-0	Formaldehyde	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
50-32-8	Benzo(a)pyrene	1.32E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.32E-02	[11]	1.32E-02	[4]	(µg/g DW plant)/ (µg/g soil)
506-68-3	Cyanogen bromide (bromocyanide)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
506-77-4	Cyanogen chloride	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
51-28-5	2,4-Dinitrophenol	4.99E+00	(µg/g DW plant)/ (µg/g soil)	[4]	4.99E+00	[11]	4.99E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
51-79-6	Ethyl carbamate (Urethane)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
510-15-6	Chlorobenzilate	1.17E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.17E-01	[11]	1.17E-01	[4]	(µg/g DW plant)/ (µg/g soil)
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	1.15E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.15E-02	[11]	1.15E-02	[4]	(µg/g DW plant)/ (µg/g soil)
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.79E-03	(µg/g DW plant)/ (µg/g soil)	[3]	1.79E-03	[2]	1.79E-03	[3]	(µg/g DW plant)/ (µg/g soil)
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	4.08E+00	(µg/g DW plant)/ (µg/g soil)	[3]	4.08E+00	[2]	4.08E+00	[3]	(µg/g DW plant)/ (µg/g soil)
53-70-3	Dibenz[a,h]-anthracene	6.78E-03	(µg/g DW plant)/ (µg/g soil)	[4]	6.78E-03	[11]	6.78E-03	[4]	(µg/g DW plant)/ (µg/g soil)
532-27-4	2-Chloroacetophenone	2.97E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.97E+00	[2]	2.97E+00	[3]	(µg/g DW plant)/ (µg/g soil)
534-52-1	4,6-Dinitro-o-cresol	2.30E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.30E+00	[2]	2.30E+00	[3]	(µg/g DW plant)/ (µg/g soil)
5385-75-1	Dibenzo(a,e)fluoranthene	3.98E-03	(µg/g DW plant)/ (µg/g soil)	[3]	3.98E-03	[2]	3.98E-03	[3]	(µg/g DW plant)/ (µg/g soil)
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	2.40E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.40E+00	[2]	2.40E+00	[3]	(µg/g DW plant)/ (µg/g soil)
540-73-8	1,2-Dimethylhydrazine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
540-84-1	2,2,4-Trimethylpentane	1.74E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.74E-01	[2]	1.74E-01	[3]	(µg/g DW plant)/ (µg/g soil)
541-73-1	1,3-Dichlorobenzene	3.22E-01	(µg/g DW plant)/ (µg/g soil)	[4]	3.22E-01	[11]	3.22E-01	[4]	(µg/g DW plant)/ (µg/g soil)
542-75-6	1,3-Dichloropropene	4.60E+00	(µg/g DW plant)/ (µg/g soil)	[4]	4.60E+00	[11]	4.60E+00	[4]	(µg/g DW plant)/ (µg/g soil)
542-88-1	Bis(chloromethyl) ether	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	2.05E-03	(µg/g DW plant)/ (µg/g soil)	[4]	2.05E-03	[11]	2.05E-03	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
56-23-5	Carbon tetrachloride	9.32E-01	(µg/g DW plant)/ (µg/g soil)	[4]	9.32E-01	[11]	9.32E-01	[4]	(µg/g DW plant)/ (µg/g soil)
56-49-5	3-Methylcholanthrene	7.54E-03	(µg/g DW plant)/ (µg/g soil)	[3]	7.54E-03	[2]	7.54E-03	[3]	(µg/g DW plant)/ (µg/g soil)
56-55-3	Benzo(a)anthracene	1.97E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.97E-02	[11]	1.97E-02	[4]	(µg/g DW plant)/ (µg/g soil)
57-12-5	Cyanide	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.38E+00	[11]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
57-24-9	Strychnine	2.97E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.97E+00	[11]	2.97E+00	[4]	(µg/g DW plant)/ (µg/g soil)
57-74-9	Chlordane	2.56E-02	(µg/g DW plant)/ (µg/g soil)	[4]	2.56E-02	[11]	2.56E-02	[4]	(µg/g DW plant)/ (µg/g soil)
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	6.78E-03	(µg/g DW plant)/ (µg/g soil)	[4]	6.78E-03	[11]	6.78E-03	[4]	(µg/g DW plant)/ (µg/g soil)
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	4.61E-03	(µg/g DW plant)/ (µg/g soil)	[4]	4.61E-03	[11]	4.61E-03	[4]	(µg/g DW plant)/ (µg/g soil)
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	3.48E-03	(µg/g DW plant)/ (µg/g soil)	[4]	3.48E-03	[11]	3.48E-03	[4]	(µg/g DW plant)/ (µg/g soil)
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	3.58E-03	(µg/g DW plant)/ (µg/g soil)	[3]	3.58E-03	[2]	3.58E-03	[3]	(µg/g DW plant)/ (µg/g soil)
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	2.33E-03	(µg/g DW plant)/ (µg/g soil)	[4]	2.33E-03	[11]	2.33E-03	[4]	(µg/g DW plant)/ (µg/g soil)
58-89-9	gamma-BHC (Lindane)	1.57E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.57E-01	[2]	1.57E-01	[3]	(µg/g DW plant)/ (µg/g soil)
58-90-2	2,3,4,6-Tetrachlorophenol	1.04E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.04E-01	[11]	1.04E-01	[4]	(µg/g DW plant)/ (µg/g soil)
581-42-0	2,6-Dimethylnaphthalene				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
584-84-9	2,4-Toluene diisocyanate	2.78E+00	(µg/g DW plant)/ (µg/g soil)	[5]	2.78E+00	[3]	2.78E+00	[7]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
589-38-8	3-Hexanone	7.43E+00	(µg/g DW plant)/ (µg/g soil)	[3]	7.43E+00	[2]	7.43E+00	[3]	(µg/g DW plant)/ (µg/g soil)
59-50-7	4-Chloro-3-methylphenol	6.25E-01	(µg/g DW plant)/ (µg/g soil)	[4]	6.25E-01	[11]	6.25E-01	[4]	(µg/g DW plant)/ (µg/g soil)
59-89-2	N-Nitrosomorpholine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
591-50-4	Benzene, iodo-				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
591-78-6	2-Hexanone	6.17E+00	(µg/g DW plant)/ (µg/g soil)	[3]	6.17E+00	[2]	6.17E+00	[3]	(µg/g DW plant)/ (µg/g soil)
593-60-2	Bromoethene (Vinyl bromide)	4.79E+00	(µg/g DW plant)/ (µg/g soil)	[3]	4.79E+00	[2]	4.79E+00	[3]	(µg/g DW plant)/ (µg/g soil)
593-74-8	Dimethyl Mercury				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
60-11-7	Dimethyl aminoazobenzene	8.72E-02	(µg/g DW plant)/ (µg/g soil)	[3]	8.72E-02	[2]	8.72E-02	[3]	(µg/g DW plant)/ (µg/g soil)
60-29-7	Ethyl ether	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
60-35-5	Acetamide	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
602-87-9	5-Nitroacenaphthene	2.16E-01	(µg/g DW plant)/ (µg/g soil)	[6]	2.16E-01	[4]	2.16E-01	[8]	(µg/g DW plant)/ (µg/g soil)
606-20-2	2,6-Dinitrotoluene	3.93E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.93E+00	[11]	3.93E+00	[4]	(µg/g DW plant)/ (µg/g soil)
608-93-5	Pentachlorobenzene	3.98E-02	(µg/g DW plant)/ (µg/g soil)	[4]	3.98E-02	[11]	3.98E-02	[4]	(µg/g DW plant)/ (µg/g soil)
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	3.48E-03	(µg/g DW plant)/ (µg/g soil)	[4]	3.48E-03	[11]	3.48E-03	[4]	(µg/g DW plant)/ (µg/g soil)
61626-71-9	Dichloropentadiene	5.55E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.55E-01	[2]	5.55E-01	[3]	(µg/g DW plant)/ (µg/g soil)
62-50-0	Ethyl methanesulfonate	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
62-53-3	Aniline	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
62-75-9	N-Nitroso-N,N-dimethylamine	8.38E+00	(µg/g DW plant)/(µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/(µg/g soil)
621-64-7	N-Nitroso-di-n-propylamine	6.34E+00	(µg/g DW plant)/(µg/g soil)	[4]	6.34E+00	[11]	6.34E+00	[4]	(µg/g DW plant)/(µg/g soil)
624-83-9	Methyl isocyanate	8.38E+00	(µg/g DW plant)/(µg/g soil)	[7]	8.13E+00	[12]	8.38E+00	[9]	(µg/g DW plant)/(µg/g soil)
628-73-9	Hexanenitrile	4.25E+00	(µg/g DW plant)/(µg/g soil)	[3]	4.25E+00	[2]	4.25E+00	[3]	(µg/g DW plant)/(µg/g soil)
630-08-0	Carbon monoxide	3.62E+00	(µg/g DW plant)/(µg/g soil)	[3]	3.62E+00	[10]	3.62E+00	[3]	(µg/g DW plant)/(µg/g soil)
630-20-6	1,1,1,2-Tetrachloroethane	6.87E-01	(µg/g DW plant)/(µg/g soil)	[4]	6.87E-01	[11]	6.87E-01	[4]	(µg/g DW plant)/(µg/g soil)
64-18-6	Formic acid (methanoic acid)	8.38E+00	(µg/g DW plant)/(µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/(µg/g soil)
65-85-0	Benzoic acid	3.21E+00	(µg/g DW plant)/(µg/g soil)	[4]	3.21E+00	[11]	3.21E+00	[4]	(µg/g DW plant)/(µg/g soil)
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	3.58E-03	(µg/g DW plant)/(µg/g soil)	[3]	3.58E-03	[2]	3.58E-03	[3]	(µg/g DW plant)/(µg/g soil)
67-56-1	Methyl alcohol	8.38E+00	(µg/g DW plant)/(µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-63-0	2-Propyl alcohol	8.38E+00	(µg/g DW plant)/(µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/(µg/g soil)
67-64-1	2-Propanone (Acetone)	8.38E+00	(µg/g DW plant)/(µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-66-3	Chloroform	2.70E+00	(µg/g DW plant)/(µg/g soil)	[4]	2.70E+00	[11]	2.70E+00	[4]	(µg/g DW plant)/(µg/g soil)
67-72-1	Hexachloroethane	2.07E-01	(µg/g DW plant)/(µg/g soil)	[4]	2.07E-01	[11]	2.07E-01	[4]	(µg/g DW plant)/(µg/g soil)
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzo-furan	2.05E-03	(µg/g DW plant)/(µg/g soil)	[4]	2.05E-03	[11]	2.05E-03	[4]	(µg/g DW plant)/(µg/g soil)
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.53E-03	(µg/g DW plant)/(µg/g soil)	[3]	1.53E-03	[2]	1.53E-03	[3]	(µg/g DW plant)/(µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
70-30-4	Hexachlorophene	1.70E-03	(µg/g DW plant)/ (µg/g soil)	[4]	1.70E-03	[11]	1.70E-03	[4]	(µg/g DW plant)/ (µg/g soil)
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	8.38E-03	(µg/g DW plant)/ (µg/g soil)	[3]	8.38E-03	[2]	8.38E-03	[3]	(µg/g DW plant)/ (µg/g soil)
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	3.48E-03	(µg/g DW plant)/ (µg/g soil)	[4]	3.48E-03	[11]	3.48E-03	[4]	(µg/g DW plant)/ (µg/g soil)
71-36-3	n-Butyl alcohol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
71-43-2	Benzene	2.37E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.37E+00	[11]	2.37E+00	[4]	(µg/g DW plant)/ (µg/g soil)
71-55-6	1,1,1-Trichloroethane	1.39E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.39E+00	[11]	1.39E+00	[4]	(µg/g DW plant)/ (µg/g soil)
72-43-5	Methoxychlor	6.51E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.51E-02	[11]	6.51E-02	[4]	(µg/g DW plant)/ (µg/g soil)
72-55-9	4,4-DDE	1.97E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.97E-02	[11]	1.97E-02	[4]	(µg/g DW plant)/ (µg/g soil)
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	3.48E-03	(µg/g DW plant)/ (µg/g soil)	[4]	3.48E-03	[11]	3.48E-03	[4]	(µg/g DW plant)/ (µg/g soil)
74-83-9	Bromomethane	7.95E+00	(µg/g DW plant)/ (µg/g soil)	[4]	7.95E+00	[11]	7.95E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-87-3	Chloromethane	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-88-4	Iodomethane	5.19E+00	(µg/g DW plant)/ (µg/g soil)	[3]	5.19E+00	[2]	5.19E+00	[3]	(µg/g DW plant)/ (µg/g soil)
74-95-3	Methylene bromide	5.06E+00	(µg/g DW plant)/ (µg/g soil)	[4]	5.06E+00	[11]	5.06E+00	[4]	(µg/g DW plant)/ (µg/g soil)
74-97-5	Bromochloromethane	5.93E+00	(µg/g DW plant)/ (µg/g soil)	[3]	5.93E+00	[2]	5.93E+00	[3]	(µg/g DW plant)/ (µg/g soil)
7429-90-5	Aluminum	4.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	4.00E-03	[1]	4.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7439-89-6	Iron	4.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	4.00E-03	[1]	4.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
7439-92-1	Lead	4.50E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.50E-02	[11]	4.50E-02	[4]	(µg/g DW plant)/ (µg/g soil)
7439-93-2	Lithium	2.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E-02	[1]	2.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7439-95-4	Magnesium	1.00E+00	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E+00	[1]	1.00E+00	[1]	(µg/g DW plant)/ (µg/g soil)
7439-96-5	Manganese	2.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E-01	[1]	2.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)
7439-97-6	Mercury	9.00E-01	(µg/g DW plant)/ (µg/g soil)	[1]	9.00E-01	[1]	9.00E-01	[1]	(µg/g DW plant)/ (µg/g soil)
7439-98-7	Molybdenum	2.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E-01	[1]	2.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)
7440-02-0	Nickel	3.20E-02	(µg/g DW plant)/ (µg/g soil)	[4]	3.20E-02	[11]	3.20E-02	[4]	(µg/g DW plant)/ (µg/g soil)
7440-16-6	Rhodium	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-01	[1]	1.50E-01	[1]	(µg/g DW plant)/ (µg/g soil)
7440-22-4	Silver	4.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.00E-01	[11]	4.00E-01	[4]	(µg/g DW plant)/ (µg/g soil)
7440-23-5	Sodium	7.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	7.50E-02	[1]	7.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-24-6	Strontium (total)	2.50E+00	(µg/g DW plant)/ (µg/g soil)	[1]	2.50E+00	[1]	2.50E+00	[1]	(µg/g DW plant)/ (µg/g soil)
7440-25-7	Tantalum	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.00E-02	[1]	1.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-28-0	Thallium	4.00E-03	(µg/g DW plant)/ (µg/g soil)	[4]	4.00E-03	[11]	4.00E-03	[4]	(µg/g DW plant)/ (µg/g soil)
7440-29-1	Thorium-232	8.50E-04	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-04	[1]	8.50E-04	[1]	(µg/g DW plant)/ (µg/g soil)
7440-31-5	Tin	3.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	3.00E-02	[1]	3.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-33-7	Tungsten	4.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	4.50E-02	[1]	4.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-36-0	Antimony	2.00E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.00E-01	[11]	2.00E-01	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
7440-38-2	Arsenic	3.60E-02	(µg/g DW plant)/ (µg/g soil)	[4]	3.60E-02	[11]	3.60E-02	[4]	(µg/g DW plant)/ (µg/g soil)
7440-39-3	Barium	1.50E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.50E-01	[11]	1.50E-01	[4]	(µg/g DW plant)/ (µg/g soil)
7440-41-7	Beryllium	1.00E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.00E-02	[11]	1.00E-02	[4]	(µg/g DW plant)/ (µg/g soil)
7440-43-9	Cadmium	3.64E-01	(µg/g DW plant)/ (µg/g soil)	[4]	3.64E-01	[11]	3.64E-01	[4]	(µg/g DW plant)/ (µg/g soil)
7440-47-3	Chromium	7.50E-03	(µg/g DW plant)/ (µg/g soil)	[4]	7.50E-03	[11]	7.50E-03	[4]	(µg/g DW plant)/ (µg/g soil)
7440-48-4	Cobalt	2.00E-02	(µg/g DW plant)/ (µg/g soil)	[1]	2.00E-02	[1]	2.00E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-50-8	Copper	4.00E-01	(µg/g DW plant)/ (µg/g soil)	[1]	4.00E-01	[1]	4.00E-01	[1]	(µg/g DW plant)/ (µg/g soil)
7440-61-1	Uranium	8.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7440-61-1R	Uranium-238	8.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	8.50E-03	[1]	8.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7440-62-2	Vanadium	5.50E-03	(µg/g DW plant)/ (µg/g soil)	[1]	5.50E-03	[1]	5.50E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7440-65-5	Yttrium	1.50E-02	(µg/g DW plant)/ (µg/g soil)	[1]	1.50E-02	[1]	1.50E-02	[1]	(µg/g DW plant)/ (µg/g soil)
7440-66-6	Zinc	2.50E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.50E-01	[11]	2.50E-01	[4]	(µg/g DW plant)/ (µg/g soil)
7440-67-7	Zirconium	2.00E-03	(µg/g DW plant)/ (µg/g soil)	[1]	2.00E-03	[1]	2.00E-03	[1]	(µg/g DW plant)/ (µg/g soil)
7446-09-5	Sulfur dioxide	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	3.58E-03	(µg/g DW plant)/ (µg/g soil)	[3]	3.58E-03	[2]	3.58E-03	[3]	(µg/g DW plant)/ (µg/g soil)
7487-94-7	Mercury (Hg^{+2})	0.00E+00	(µg/g DW plant)/ (µg/g soil)	[4]	0.00E+00	[11]	0.00E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-00-3	Chloroethane	6.01E+00	(µg/g DW plant)/ (µg/g soil)	[4]	6.01E+00	[11]	6.01E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
75-01-4	1-Chloroethene	6.01E+00	(µg/g DW plant)/ (µg/g soil)	[4]	6.01E+00	[11]	6.01E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-02-5	Fluoroethene (Vinyl fluoride)	7.95E+00	(µg/g DW plant)/ (µg/g soil)	[3]	7.95E+00	[2]	7.95E+00	[3]	(µg/g DW plant)/ (µg/g soil)
75-05-8	Acetonitrile	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-07-0	Acetaldehyde	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-09-2	Dichloromethane (Methylene chloride)	6.86E+00	(µg/g DW plant)/ (µg/g soil)	[4]	6.86E+00	[11]	6.86E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-15-0	Carbon disulfide	2.07E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.07E+00	[11]	2.07E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-21-8	Ethylene oxide (Oxirane)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-25-2	Bromoform	1.65E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.65E+00	[11]	1.65E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-27-4	Bromodichloro-methane	2.37E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.37E+00	[11]	2.37E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-29-6	2-Chloropropane	3.09E+00	(µg/g DW plant)/ (µg/g soil)	[3]	3.09E+00	[2]	3.09E+00	[3]	(µg/g DW plant)/ (µg/g soil)
75-34-3	1,1-Dichloroethane	3.53E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.53E+00	[11]	3.53E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-35-4	1,1-Dichloroethene	2.37E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.37E+00	[11]	2.37E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-44-5	Phosgene (Hydrogen phosphide)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
75-45-6	Chlorodifluoro-methane	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-50-3	Trimethylamine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
75-69-4	Trichlorofluoro-methane	1.39E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.39E+00	[11]	1.39E+00	[4]	(µg/g DW plant)/ (µg/g soil)
75-71-8	Dichlorodifluoro-methane	2.19E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.19E+00	[11]	2.19E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
76-01-7	Pentachloroethane	5.33E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.33E-01	[2]	5.33E-01	[3]	(µg/g DW plant)/ (µg/g soil)
76-13-1	1,2,2-Trichlorotrifluoro-ethane	5.77E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.77E-01	[2]	5.77E-01	[3]	(µg/g DW plant)/ (µg/g soil)
76-44-8	Heptachlor	1.27E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.27E-01	[11]	1.27E-01	[4]	(µg/g DW plant)/ (µg/g soil)
764-41-0	1,4-Dichloro-2-butene	1.22E+00	(µg/g DW plant)/ (µg/g soil)	[3]	1.22E+00	[2]	1.22E+00	[3]	(µg/g DW plant)/ (µg/g soil)
7647-01-0	Hydrogen chloride								
765-34-4	Glycidylaldehyde	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
7664-39-3	Hydrogen Fluoride	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
7664-41-7	Ammonia/ Ammonium	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.38E+00	[9]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
77-47-4	Hexachlorocyclo-pentadiene	4.73E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.73E-02	[11]	4.73E-02	[4]	(µg/g DW plant)/ (µg/g soil)
77-78-1	Dimethyl sulfate	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
7704-34-9	Total Sulfur (thermodynamically stable)								
7723-14-0	Phosphorus	3.50E+00	(µg/g DW plant)/ (µg/g soil)	[1]	3.50E+00	[1]	3.50E+00	[1]	(µg/g DW plant)/ (µg/g soil)
7782-41-4	Fluorine gas (F_2)				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
7782-49-2	Selenium	1.60E-02	(µg/g DW plant)/ (µg/g soil)	[4]	1.60E-02	[11]	1.60E-02	[4]	(µg/g DW plant)/ (µg/g soil)
7782-50-5	Chlorine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.38E+00	[11]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
78-83-1	2-Methylpropyl alcohol	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
78-87-5	1,2-Dichloropropane	2.70E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.70E+00	[11]	2.70E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
78-93-3	2-Butanone	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-00-5	1,1,2-Trichloroethane	2.70E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.70E+00	[11]	2.70E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-01-6	1,1,2-Trichloroethylene	1.59E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.59E+00	[11]	1.59E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-10-7	2-Propenoic acid	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
79-34-5	1,1,2,2-Tetrachloroethane	1.59E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.59E+00	[11]	1.59E+00	[4]	(µg/g DW plant)/ (µg/g soil)
79-46-9	2-Nitropropane	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
80-62-6	Methyl methacrylate	6.17E+00	(µg/g DW plant)/ (µg/g soil)	[3]	6.17E+00	[2]	6.17E+00	[3]	(µg/g DW plant)/ (µg/g soil)
82-68-8	Pentachloronitro-benzene (PCNB)	8.06E-02	(µg/g DW plant)/ (µg/g soil)	[4]	8.06E-02	[11]	8.06E-02	[4]	(µg/g DW plant)/ (µg/g soil)
822-06-0	Hexamethylene-1,5-diisocyanate	5.48E-01	(µg/g DW plant)/ (µg/g soil)	[3]	5.48E-01	[2]	5.48E-01	[3]	(µg/g DW plant)/ (µg/g soil)
823-40-5	Toluene-2,6-diamine	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
83-32-9	Acenaphthene	2.16E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.16E-01	[11]	2.16E-01	[4]	(µg/g DW plant)/ (µg/g soil)
832-69-9	1-Methylphenanthrene				8.13E+00	[12]	1.30E+03	[5]	(µg/g DW plant)/ (µg/g soil)
84-66-2	Diethyl phthalate	1.39E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.39E+00	[11]	1.39E+00	[4]	(µg/g DW plant)/ (µg/g soil)
84-74-2	Di-n-butylphthalate	7.44E-02	(µg/g DW plant)/ (µg/g soil)	[4]	7.44E-02	[11]	7.44E-02	[4]	(µg/g DW plant)/ (µg/g soil)
85-01-8	Phenanthrene	9.71E-02	(µg/g DW plant)/ (µg/g soil)	[4]	9.71E-02	[11]	9.71E-02	[4]	(µg/g DW plant)/ (µg/g soil)
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[4]	8.13E+00	[12]	8.38E+00	[4]	(µg/g DW plant)/ (µg/g soil)
85-68-7	Butylbenzylphthalate	5.70E-02	(µg/g DW plant)/ (µg/g soil)	[4]	5.70E-02	[11]	5.70E-02	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
86-73-7	Fluorene	1.45E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.45E-01	[11]	1.45E-01	[4]	(µg/g DW plant)/ (µg/g soil)
87-61-6	1,2,3-Trichlorobenzene	1.77E-01	(µg/g DW plant)/ (µg/g soil)	[4]	1.77E-01	[11]	1.77E-01	[4]	(µg/g DW plant)/ (µg/g soil)
87-68-3	Hexachlorobutadiene	6.51E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.51E-02	[11]	6.51E-02	[4]	(µg/g DW plant)/ (µg/g soil)
87-86-5	Pentachlorophenol	4.37E-02	(µg/g DW plant)/ (µg/g soil)	[4]	4.37E-02	[11]	4.37E-02	[4]	(µg/g DW plant)/ (µg/g soil)
88-06-2	2,4,6-Trichlorophenol	2.81E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.81E-01	[11]	2.81E-01	[4]	(µg/g DW plant)/ (µg/g soil)
88-74-4	o-Nitroaniline (2-nitroaniline)	3.30E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.30E+00	[11]	3.30E+00	[4]	(µg/g DW plant)/ (µg/g soil)
88-75-5	2-Nitrophenol	3.58E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.58E+00	[11]	3.58E+00	[4]	(µg/g DW plant)/ (µg/g soil)
90-04-0	o-Anisidine	8.05E+00	(µg/g DW plant)/ (µg/g soil)	[3]	8.05E+00	[2]	8.05E+00	[3]	(µg/g DW plant)/ (µg/g soil)
90-12-0	1-Methylnaphthalene	2.24E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.24E-01	[2]	2.24E-01	[3]	(µg/g DW plant)/ (µg/g soil)
91-20-3	Naphthalene	4.79E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.79E-01	[11]	4.79E-01	[4]	(µg/g DW plant)/ (µg/g soil)
91-22-5	Quinoline	2.60E+00	(µg/g DW plant)/ (µg/g soil)	[3]	2.60E+00	[2]	2.60E+00	[3]	(µg/g DW plant)/ (µg/g soil)
91-57-6	2-Methylnaphthalene	2.27E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.27E-01	[2]	2.27E-01	[3]	(µg/g DW plant)/ (µg/g soil)
91-58-7	2-Chloronaphthalene	4.31E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.31E-01	[11]	4.31E-01	[4]	(µg/g DW plant)/ (µg/g soil)
91-94-1	3,3'-Dichlorobenzidine	3.62E-01	(µg/g DW plant)/ (µg/g soil)	[4]	3.62E-01	[11]	3.62E-01	[4]	(µg/g DW plant)/ (µg/g soil)
92-52-4	1,1`-Biphenyl	1.94E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.94E-01	[2]	1.94E-01	[3]	(µg/g DW plant)/ (µg/g soil)
924-16-3	N-Nitroso-di-n-Buetylamine	3.01E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.01E+00	[11]	3.01E+00	[4]	(µg/g DW plant)/ (µg/g soil)
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1.12E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.12E+00	[11]	1.12E+00	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
94-75-7	2,4-D	9.20E-01	(µg/g DW plant)/ (µg/g soil)	[3]	9.20E-01	[2]	9.20E-01	[3]	(µg/g DW plant)/ (µg/g soil)
95-48-7	o-Cresol	2.89E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.89E+00	[11]	2.89E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-49-8	o-Chlorotoluene	4.09E-01	(µg/g DW plant)/ (µg/g soil)	[3]	4.09E-01	[2]	4.09E-01	[3]	(µg/g DW plant)/ (µg/g soil)
95-50-1	1,2-Dichlorobenzene	4.31E-01	(µg/g DW plant)/ (µg/g soil)	[4]	4.31E-01	[11]	4.31E-01	[4]	(µg/g DW plant)/ (µg/g soil)
95-53-4	o-Toluidine	6.68E+00	(µg/g DW plant)/ (µg/g soil)	[4]	6.68E+00	[11]	6.68E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-57-8	2-Chlorophenol	2.21E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.21E+00	[11]	2.21E+00	[4]	(µg/g DW plant)/ (µg/g soil)
95-63-6	1,2,4-Trimethyl benzene	3.09E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.09E-01	[2]	3.09E-01	[3]	(µg/g DW plant)/ (µg/g soil)
95-94-3	1,2,4,5-Tetrachlorobenzene	6.51E-02	(µg/g DW plant)/ (µg/g soil)	[4]	6.51E-02	[11]	6.51E-02	[4]	(µg/g DW plant)/ (µg/g soil)
95-95-4	2,4,5-Trichlorophenol	2.74E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.74E-01	[11]	2.74E-01	[4]	(µg/g DW plant)/ (µg/g soil)
96-12-8	1,2-Dibromo-3-chloropropane	1.81E+00	(µg/g DW plant)/ (µg/g soil)	[4]	1.81E+00	[11]	1.81E+00	[4]	(µg/g DW plant)/ (µg/g soil)
96-18-4	1,2,3-Trichloropropane	2.70E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.70E+00	[11]	2.70E+00	[4]	(µg/g DW plant)/ (µg/g soil)
96-45-7	Ethylene thiourea	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
97-63-2	Ethyl methacrylate	2.93E+00	(µg/g DW plant)/ (µg/g soil)	[4]	2.93E+00	[11]	2.93E+00	[4]	(µg/g DW plant)/ (µg/g soil)
98-01-1	Furfural	8.38E+00	(µg/g DW plant)/ (µg/g soil)	[2]	8.13E+00	[12]	8.38E+00	[2]	(µg/g DW plant)/ (µg/g soil)
98-06-6	tert-Butyl benzene	1.63E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.63E-01	[2]	1.63E-01	[3]	(µg/g DW plant)/ (µg/g soil)
98-07-7	Benzotrichloride	2.16E-01	(µg/g DW plant)/ (µg/g soil)	[3]	2.16E-01	[2]	2.16E-01	[3]	(µg/g DW plant)/ (µg/g soil)
98-82-8	Cumene	2.81E-01	(µg/g DW plant)/ (µg/g soil)	[4]	2.81E-01	[11]	2.81E-01	[4]	(µg/g DW plant)/ (µg/g soil)

Table 3-3 Plant-Soil Bioconcentration Factors for Aboveground Silage and Forage

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for forage from literature, database, or study	Units for plant-soil bioconcentration factor for forage	Reference	Plant-soil bioconcentration factor in silage (Br_{silage})	Reference	Plant-soil bioconcentration factor in forage (Br_{forage})	Reference	Units for plant-soil bioconcentration factor in forage
98-83-9	Methyl styrene (mixed isomers)	3.77E-01	(µg/g DW plant)/ (µg/g soil)	[3]	3.77E-01	[2]	3.77E-01	[3]	(µg/g DW plant)/ (µg/g soil)
98-86-2	Acetophenone	4.73E+00	(µg/g DW plant)/ (µg/g soil)	[4]	4.73E+00	[11]	4.73E+00	[4]	(µg/g DW plant)/ (µg/g soil)
98-95-3	Nitrobenzene	3.30E+00	(µg/g DW plant)/ (µg/g soil)	[4]	3.30E+00	[11]	3.30E+00	[4]	(µg/g DW plant)/ (µg/g soil)
99-35-4	1,3,5-Trinitrobenzene	7.84E+00	(µg/g DW plant)/ (µg/g soil)	[4]	7.84E+00	[11]	7.84E+00	[4]	(µg/g DW plant)/ (µg/g soil)
99-65-0	1,3-Dinitrobenzene	5.26E+00	(µg/g DW plant)/ (µg/g soil)	[4]	5.26E+00	[11]	5.26E+00	[4]	(µg/g DW plant)/ (µg/g soil)
99-87-6	p-Cymene	1.65E-01	(µg/g DW plant)/ (µg/g soil)	[3]	1.65E-01	[2]	1.65E-01	[3]	(µg/g DW plant)/ (µg/g soil)

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Forage (from literature, study, or database)
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-18 (using log(K_{ow})=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chrysene.
[9]	Surrogate value from Dibenz[a,h]anthracene.
[10]	Surrogate value from Trichlorofluoromethane.
[11]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor in Silage
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Calculated value per Eq. A-2-18 (using log(K_{ow})=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Mass-limited plant-soil bioconcentration factor for forage (root zone soil)
[6]	Staven LH, Rhoads K, Napier BA, Strenge DL, *A Compendium of Transfer Factors for Agricultural and Animal Products*, PNNL-13421, Pacific Northwest National Laboratory, Richland, WA. June 2003. (average vegetable & fruit value)
[7]	Surrogate value from 2,4-Dinitrotoluene.
[8]	Surrogate value from Acenaphthene.
[9]	Surrogate value from Acrylonitrile.
[10]	Surrogate value from Chrysene.
[11]	Surrogate value from Dibenz[a,h]anthracene.
[12]	Surrogate value from Trichlorofluoromethane.
[13]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor on Forage
[1]	Baes et al. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN (http://homer.ornl.gov/baes/documents/ornl5786.html).
[2]	Based on the plant-soil bioconcentration factor for forage. (Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).).
[3]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from 2,4-Dinitrotoluene.).
[4]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from Acenaphthene.).
[5]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from Chrysene.).
[6]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from Dibenz[a,h]anthracene.).
[7]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from Trichlorofluoromethane.).
[8]	Based on the plant-soil bioconcentration factor for forage. (Surrogate value from cis-1,2-Dichloroethene.).
[9]	Calculated value per Eq. A-2-18 (using log(K_{ow})=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Plant-Soil Bioconcentration Factor on Forage
[10]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[11]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[12]	Mass-limited plant-soil bioconcentration factor for silage (tilled soil)
[13]	Staven LH, Rhoads K, Napier BA, Strenge DL, *A Compendium of Transfer Factors for Agricultural and Animal Products*, PNNL-13421, Pacific Northwest National Laboratory, Richland, WA. June 2003. (average vegetable & fruit value)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
100-00-5	p-Nitrochlorobenzene				1.4659528	[1]	1.4659528	[1]	(µg/g DW plant)/(µg/g soil)
100-02-7	4-Nitrophenol	3.05	unitless	[1]	3.05	[1]	3.05	[1]	(µg/g DW plant)/(µg/g soil)
100-21-0	p-Phthalic acid				2.7039584	[1]	2.7039584	[1]	(µg/g DW plant)/(µg/g soil)
100-25-4	1,4-Dinitrobenzene				5.5477898	[1]	5.5477898	[1]	(µg/g DW plant)/(µg/g soil)
100-40-3	4-Vinylcyclohexene				0.2072335	[1]	0.2072335	[1]	(µg/g DW plant)/(µg/g soil)
100-41-4	Ethyl benzene	0.625	unitless	[1]	0.625	[1]	0.625	[1]	(µg/g DW plant)/(µg/g soil)
100-42-5	Styrene	0.714	unitless	[1]	0.714	[1]	0.714	[1]	(µg/g DW plant)/(µg/g soil)
100-44-7	Benzyl chloride	1.81	unitless	[1]	1.81	[1]	1.81	[1]	(µg/g DW plant)/(µg/g soil)
100-51-6	Benzyl alcohol	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
100-52-7	Benzaldehyde	5.4	unitless	[1]	5.4	[1]	5.4	[1]	(µg/g DW plant)/(µg/g soil)
10028-17-8	Tritium								
10045-97-3	Cesium-137	0.026	(µg/g DW plant)	[2]	0.026	[7]	0.026	[7]	(µg/g DW plant)
10061-01-5	cis-1,3-Dichloropropene	3.09	unitless	[15]	3.09	[1]	3.09	[1]	(µg/g DW plant)/(µg/g soil)
10061-02-6	trans-1,3-Dichloropropene				2.5981247	[1]	2.5981247	[1]	(µg/g DW plant)/(µg/g soil)
10098-91-6	Yttrium-90	0.01	(µg/g DW plant)	[2]	0.01	[7]	0.01	[7]	(µg/g DW plant)
10098-97-2	Strontium-90	0.21	(µg/g DW plant)	[2]	0.21	[7]	0.21	[7]	(µg/g DW plant)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
101-55-3	4-Bromophenylphenyl ether	0.0361	unitless	[1]	0.0361	[1]	0.0361	[1]	(µg/g DW plant)/(µg/g soil)
101-77-9	4,4'-Methylenedianiline				4.6663789	[1]	4.6663789	[1]	(µg/g DW plant)/(µg/g soil)
101-84-8	Diphenyl ether				0.1427644	[1]	0.1427644	[1]	(µg/g DW plant)/(µg/g soil)
10102-44-0	Nitrogen dioxide								
10198-40-0	Cobalt-60	0.0037	(µg/g DW plant)	[2]	0.0037	[7]	0.0037	[7]	(µg/g DW plant)
103-33-3	Azobenzene				0.2399054	[1]	0.2399054	[1]	(µg/g DW plant)/(µg/g soil)
103-65-1	n-Propyl benzene				0.28522	[1]	0.28522	[1]	(µg/g DW plant)/(µg/g soil)
104-51-8	n-Butyl benzene				0.1138571	[1]	0.1138571	[1]	(µg/g DW plant)/(µg/g soil)
104-76-7	2-Ethyl-1-Hexanol				26	[5]	19.5	[5]	(µg/g DW plant)/(µg/g soil)
105-67-9	2,4-Dimethylphenol	1.81	unitless	[1]	1.81	[1]	1.81	[1]	(µg/g DW plant)/(µg/g soil)
10595-95-6	N-Methyl-N-Nitrosoethamine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
106-35-4	3-Heptanone				3.8731115	[1]	3.8731115	[1]	(µg/g DW plant)/(µg/g soil)
106-42-3	p-Xylene	0.625	unitless	[1]	0.625	[1]	0.625	[1]	(µg/g DW plant)/(µg/g soil)
106-43-4	4-Chlorotoluene				0.4605322	[1]	0.4605322	[1]	(µg/g DW plant)/(µg/g soil)
106-44-5	p-Cresol	3.09	unitless	[1]	3.09	[1]	3.09	[1]	(µg/g DW plant)/(µg/g soil)
106-46-7	1,4-Dichlorobenzene	0.367	unitless	[1]	0.367	[1]	0.367	[1]	(µg/g DW plant)/(µg/g soil)
106-47-8	p-Chloroaniline	3.39	unitless	[1]	3.39	[1]	3.39	[1]	(µg/g DW plant)/(µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
106-49-0	p-Toluidine				6.0894771	[1]	6.0894771	[1]	(µg/g DW plant)/ (µg/g soil)
106-51-4	Quinone				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
106-88-7	1,2-Epoxybutane				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
106-89-8	Epichlorohydrin	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
106-93-4	Ethylene dibromide	2.7	unitless	[1]	2.7	[1]	2.7	[1]	(µg/g DW plant)/ (µg/g soil)
106-97-8	Butane				0.8271419	[1]	0.8271419	[1]	(µg/g DW plant)/ (µg/g soil)
106-99-0	1,3-Butadiene				2.7401857	[1]	2.7401857	[1]	(µg/g DW plant)/ (µg/g soil)
107-02-8	Acrolein	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
107-05-1	3-Chloropropene (Allyl chloride)				2.9679734	[1]	2.9679734	[1]	(µg/g DW plant)/ (µg/g soil)
107-06-2	1,2-Dichloroethane	5.26	unitless	[1]	5.26	[1]	5.26	[1]	(µg/g DW plant)/ (µg/g soil)
107-12-0	Propionitrile				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-13-1	Acrylonitrile	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
107-18-6	2-Propene-1-ol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-19-7	Propargyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-21-1	Ethylene glycol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-31-3	Formic acid, methyl ester				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-66-4	Dibutylphosphate				1.838146	[1]	1.838146	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
107-87-9	2-Pentanone				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
107-98-2	Propylene glycol monomethyl ether				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
108-03-2	1-Nitropropane				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
108-05-4	Vinyl acetate	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
108-10-1	4-Methyl-2-pentanone	7.84	unitless	[1]	7.84	[1]	7.84	[1]	(µg/g DW plant)/ (µg/g soil)
108-20-3	Bis(isopropyl)ether				5.122005	[1]	5.122005	[1]	(µg/g DW plant)/ (µg/g soil)
108-38-3	m-Xylene	0.548	unitless	[1]	0.548	[1]	0.548	[1]	(µg/g DW plant)/ (µg/g soil)
108-39-4	m-Cresol	2.85	unitless	[1]	2.85	[1]	2.85	[1]	(µg/g DW plant)/ (µg/g soil)
108-60-1	Dichloroisopropyl ether				1.427447	[1]	1.427447	[1]	(µg/g DW plant)/ (µg/g soil)
108-67-8	1,3,5-Trimethyl benzene	0.409	unitless	[1]	0.409	[1]	0.409	[1]	(µg/g DW plant)/ (µg/g soil)
108-86-1	Bromobenzene				0.7240691	[1]	0.7240691	[1]	(µg/g DW plant)/ (µg/g soil)
108-87-2	Methylcyclohexane				0.3172634	[1]	0.3172634	[1]	(µg/g DW plant)/ (µg/g soil)
108-88-3	Toluene	1.07	unitless	[1]	1.07	[1]	1.07	[1]	(µg/g DW plant)/ (µg/g soil)
108-90-7	Chlorobenzene	0.932	unitless	[1]	0.932	[1]	0.932	[1]	(µg/g DW plant)/ (µg/g soil)
108-93-0	Cyclohexanol				7.5345965	[1]	7.5345965	[1]	(µg/g DW plant)/ (µg/g soil)
108-94-1	Cyclohexanone				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
108-95-2	Phenol	5.26	unitless	[1]	5.26	[1]	5.26	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
109-66-0	n-Pentane				0.425187	[1]	0.425187	[1]	(µg/g DW plant)/ (µg/g soil)
109-74-0	Butyronitrile				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
109-77-3	Malononitrile				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
109-86-4	2-Methoxyethanol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
109-99-9	Tetrahydrofuran	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
110-12-3	5-Methyl-2-hexanone				3.1721959	[1]	3.1721959	[1]	(µg/g DW plant)/ (µg/g soil)
110-43-0	2-Heptanone				2.7768985	[1]	2.7768985	[1]	(µg/g DW plant)/ (µg/g soil)
110-54-3	n-Hexane				0.2156751	[1]	0.2156751	[1]	(µg/g DW plant)/ (µg/g soil)
110-59-8	Valeronitrile				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
110-62-3	n-Valeraldehyde				6.7736071	[1]	6.7736071	[1]	(µg/g DW plant)/ (µg/g soil)
110-80-5	2-Ethoxyethanol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
110-82-7	Cyclohexane				0.3978139	[1]	0.3978139	[1]	(µg/g DW plant)/ (µg/g soil)
110-83-8	Cyclohexene				0.8608352	[1]	0.8608352	[1]	(µg/g DW plant)/ (µg/g soil)
110-86-1	Pyridine	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
111-15-9	Ethylene glycol monoethyl ether acetate				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
111-44-4	Bis(2-chloroethyl) ether	6.96	unitless	[1]	6.96	[1]	6.96	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
111-65-9	n-Octane				0.0392609	[1]	0.0392609	[1]	(µg/g DW plant)/ (µg/g soil)
111-76-2	Ethylene glycol monobutyl ether				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
111-84-2	n-Nonane				0.0210039	[1]	0.0210039	[1]	(µg/g DW plant)/ (µg/g soil)
111-91-1	Bis(2-chloroethoxy) methane				6.8643592	[1]	6.8643592	[1]	(µg/g DW plant)/ (µg/g soil)
1120-71-4	1,3-Propane sultone				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)	0.0437	unitless	[1]	0.0437	[1]	0.0437	[1]	(µg/g DW plant)/ (µg/g soil)
117-84-0	n-Dioctyl phthalate	0.000806	unitless	[1]	0.000806	[1]	0.000806	[1]	(µg/g DW plant)/ (µg/g soil)
118-74-1	Hexachlorobenzene	0.0335	unitless	[1]	0.033	[1]	0.033	[1]	(µg/g DW plant)/ (µg/g soil)
119-90-4	3,3'-Dimethoxybenzidine	3.48	unitless	[1]	3.48	[1]	3.48	[1]	(µg/g DW plant)/ (µg/g soil)
120-12-7	Anthracene	0.0971	unitless	[1]	0.0971	[1]	0.0971	[1]	(µg/g DW plant)/ (µg/g soil)
120-82-1	1,2,4-Trichlorobenzene	0.189	unitless	[1]	0.189	[1]	0.189	[1]	(µg/g DW plant)/ (µg/g soil)
120-83-2	2,4-Dichlorophenol	0.816	unitless	[1]	0.816	[1]	0.816	[1]	(µg/g DW plant)/ (µg/g soil)
121-14-2	2,4-Dinitrotoluene	2.78	unitless	[1]	2.78	[1]	2.78	[1]	(µg/g DW plant)/ (µg/g soil)
121-44-8	Triethylamine				5.6221186	[1]	5.6221186	[1]	(µg/g DW plant)/ (µg/g soil)
121-69-7	Dimethylaniline				1.7898639	[1]	1.7898639	[1]	(µg/g DW plant)/ (µg/g soil)
122-39-4	N,N-Diphenylamine				0.3672823	[1]	0.3672823	[1]	(µg/g DW plant)/ (µg/g soil)
122-66-7	1,2-Diphenylhydrazine	0.816	unitless	[1]	0.816	[1]	0.816	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
123-19-3	4-Heptanone				3.8731115	[1]	3.8731115	[1]	(µg/g DW plant)/ (µg/g soil)
123-33-1	Maleic hydrazide				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
123-38-6	n-Propionaldehyde				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
123-51-3	3-Methyl-1-butanol	7.84	unitless	[5]	7.84	[1]	7.84	[1]	(µg/g DW plant)/ (µg/g soil)
123-72-8	Butyraldehyde				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
123-86-4	Acetic acid n-butyl ester				3.6237648	[1]	3.6237648	[1]	(µg/g DW plant)/ (µg/g soil)
123-91-1	1,4-Dioxane	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
124-48-1	Chlorodibromomethane	1.99	unitless	[1]	1.99	[1]	1.99	[1]	(µg/g DW plant)/ (µg/g soil)
126-73-8	Tributyl phosphate				0.1887991	[1]	0.1887991	[1]	(µg/g DW plant)/ (µg/g soil)
126-98-7	2-Methyl-2-propenenitrile	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
127-18-4	1,1,2,2-Tetrachloroethene	0.42	unitless	[1]	0.42	[1]	0.42	[1]	(µg/g DW plant)/ (µg/g soil)
127-19-5	N,N-Dimethylacetamide				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol				0.0436717	[1]	0.0436717	[1]	(µg/g DW plant)/ (µg/g soil)
129-00-0	Pyrene	0.057	unitless	[1]	0.057	[1]	0.057	[1]	(µg/g DW plant)/ (µg/g soil)
131-11-3	Dimethyl phthalate	4.86	unitless	[1]	4.86	[1]	4.86	[1]	(µg/g DW plant)/ (µg/g soil)
131-89-5	2-Cyclohexyl-4,6-dinitrophenol				0.1609311	[1]	0.1609311	[1]	(µg/g DW plant)/ (µg/g soil)
132-64-9	Dibenzofuran				0.1609311	[1]	0.1609311	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
1321-64-8	Pentachloro-naphthalene				0.0039792	[1]	0.0039792	[1]	(µg/g DW plant)/(µg/g soil)
1321-65-9	Trichloro-naphthalene				0.0382296	[1]	0.0382296	[1]	(µg/g DW plant)/(µg/g soil)
133-06-2	Captan				0.9323951	[1]	0.9323951	[1]	(µg/g DW plant)/(µg/g soil)
1335-87-1	Hexachloro-naphthalene				0.0015675	[1]	0.0015675	[1]	(µg/g DW plant)/(µg/g soil)
1335-88-2	Tetrachloro-naphthalene				0.0158825	[1]	0.0158825	[1]	(µg/g DW plant)/(µg/g soil)
1336-36-3	Polychlorinated biphenyls (PCBs)				0.0089615	[1]	0.0089615	[1]	(µg/g DW plant)/(µg/g soil)
134-32-7	1-Naphthylamine				1.9386526	[1]	1.9386526	[1]	(µg/g DW plant)/(µg/g soil)
135-98-8	sec-Butyl benzene				0.0884179	[1]	0.0884179	[1]	(µg/g DW plant)/(µg/g soil)
13966-29-5	Uranium-234	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
13967-48-1	Ruthenium-106	0.005	(µg/g DW plant)	[2]	0.005	[7]	0.005	[7]	(µg/g DW plant)
13967-70-9	Cesium-134	0.026	(µg/g DW plant)	[2]	0.026	[7]	0.026	[7]	(µg/g DW plant)
13968-55-3	Uranium-233	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
13981-15-2	Curium-244	0.000021	(µg/g DW plant)	[2]	0.000021	[7]	0.000021	[7]	(µg/g DW plant)
13981-16-3	Plutonium-238	8.6E-6	(µg/g DW plant)	[2]	8.6E-6	[7]	8.6E-6	[7]	(µg/g DW plant)
13981-37-8	Nickel-63	0.03	(µg/g DW plant)	[2]	0.03	[7]	0.03	[7]	(µg/g DW plant)
13981-97-0	Barium-137m	0.015	(µg/g DW plant)	[2]	0.015	[7]	0.015	[7]	(µg/g DW plant)
13982-10-0	Plutonium-242	8.6E-6	(µg/g DW plant)	[2]	8.6E-6	[7]	8.6E-6	[7]	(µg/g DW plant)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
13982-63-3	Radium-226	0.0012	(µg/g DW plant)	[2]	0.0012	[7]	0.0012	[7]	(µg/g DW plant)
13982-70-2	Uranium-236	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
13994-20-2	Neptunium-237	0.0027	(µg/g DW plant)	[2]	0.0027	[7]	0.0027	[7]	(µg/g DW plant)
141-78-6	Acetic acid ethyl ester				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
141-79-7	4-Methyl-3-penten-2-one				6.2537426	[1]	6.2537426	[1]	(µg/g DW plant)/ (µg/g soil)
14119-32-5	Plutonium-241	8.6E-6	(µg/g DW plant)	[2]	8.6E-6	[7]	8.6E-6	[7]	(µg/g DW plant)
14119-33-6	Plutonium-240	8.6E-6	(µg/g DW plant)	[2]	8.6E-6	[7]	8.6E-6	[7]	(µg/g DW plant)
14133-76-7	Technetium-99	0.73	(µg/g DW plant)	[2]	0.73	[7]	0.73	[7]	(µg/g DW plant)
14158-29-3	Uranium-232	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
142-82-5	n-Heptane				0.0784368	[1]	0.0784368	[1]	(µg/g DW plant)/ (µg/g soil)
14234-35-6	Antimony-125	0.03	(µg/g DW plant)	[2]	0.03	[7]	0.03	[7]	(µg/g DW plant)
14265-44-2	Phosphate								
14280-30-9	Hydroxide								
14331-85-2	Protactinium-231	0.000022	(µg/g DW plant)	[2]	0.000022	[7]	0.000022	[7]	(µg/g DW plant)
14336-66-4	Cadmium-113m	0.15	(µg/g DW plant)	[2]	0.15	[7]	0.15	[7]	(µg/g DW plant)
14336-70-0	Nickel-59	0.03	(µg/g DW plant)	[2]	0.03	[7]	0.03	[7]	(µg/g DW plant)
14391-16-3	Europium-155	0.02	(µg/g DW plant)	[2]	0.02	[7]	0.02	[7]	(µg/g DW plant)
144-62-7	Oxalic acid				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
145-73-3	Endothall				3.0480354	[1]	3.0480354	[1]	(µg/g DW plant)/ (µg/g soil)
14596-10-2	Americium-241	0.000022	(µg/g DW plant)	[2]	0.000022	[7]	0.000022	[7]	(µg/g DW plant)
14683-23-9	Europium-152	0.02	(µg/g DW plant)	[2]	0.02	[7]	0.02	[7]	(µg/g DW plant)
14762-75-5	Carbon-14								
14797-55-8	Nitrate								
14797-65-0	Nitrite								
14808-79-8	Sulfate								
14952-40-0	Actinium-227	0.000022	(µg/g DW plant)	[2]	0.000022	[7]	0.000022	[7]	(µg/g DW plant)
14993-75-0	Americium-243	0.000022	(µg/g DW plant)	[2]	0.000022	[7]	0.000022	[7]	(µg/g DW plant)
15046-84-1	Iodine-129	0.04	(µg/g DW plant)	[2]	0.04	[7]	0.04	[7]	(µg/g DW plant)
15117-48-3	Plutonium-239	8.6E-6	(µg/g DW plant)	[2]	8.6E-6	[7]	8.6E-6	[7]	(µg/g DW plant)
15117-96-1	Uranium-235	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
15262-20-1	Radium-228	0.0012	(µg/g DW plant)	[2]	0.0012	[7]	0.0012	[7]	(µg/g DW plant)
15510-73-3	Curium-242	0.000021	(µg/g DW plant)	[2]	0.000021	[7]	0.000021	[7]	(µg/g DW plant)
15585-10-1	Europium-154	0.02	(µg/g DW plant)	[2]	0.02	[7]	0.02	[7]	(µg/g DW plant)
15594-54-4	Thorium-229	0.000034	(µg/g DW plant)	[2]	0.000034	[7]	0.000034	[7]	(µg/g DW plant)
156-59-2	cis-1,2-Dichloroethene	3.09	unitless	[1]	3.09	[1]	3.09	[1]	(µg/g DW plant)/ (µg/g soil)
156-60-5	trans-1,2-Dichloroethylene	2.37	unitless	[1]	2.37	[1]	2.37	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
15715-94-3	Samarium-151	0.02	(µg/g DW plant)	[2]	0.02	[7]	0.02	[7]	(µg/g DW plant)
15751-77-6	Zirconium-93	0.001	(µg/g DW plant)	[2]	0.001	[7]	0.001	[7]	(µg/g DW plant)
15757-87-6	Curium-243	0.000021	(µg/g DW plant)	[2]	0.000021	[7]	0.000021	[7]	(µg/g DW plant)
15758-45-9	Selenium-79	0.25	(µg/g DW plant)	[2]	0.25	[7]	0.25	[7]	(µg/g DW plant)
15832-50-5	Tin-126	0.006	(µg/g DW plant)	[2]	0.006	[7]	0.006	[7]	(µg/g DW plant)
1634-04-4	Methyl tert-butyl ether				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
16887-00-6	Chloride				8.3810803	[2]	8.3810803	[2]	(µg/g DW plant)/ (µg/g soil)
16984-48-8	Fluoride								
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin	0.00455	unitless	[1]	0.00455	[1]	0.00455	[1]	(µg/g DW plant)/ (µg/g soil)
18540-29-9	Chromium	0.0045	unitless	[1]	0.0045	[4]	0.0045	[4]	unitless
189-55-9	Dibenzo[a,i]pyrene				0.0023997	[1]	0.0023997	[1]	(µg/g DW plant)/ (µg/g soil)
189-64-0	Dibenzo[a,h]pyrene				0.0023997	[1]	0.0023997	[1]	(µg/g DW plant)/ (µg/g soil)
191-24-2	Benzo[g,h,i]perylene				0.0056998	[1]	0.0056998	[1]	(µg/g DW plant)/ (µg/g soil)
191-30-0	Benzo[a,i]pyrene	0.0132	unitless	[8]	0.0132	[1]	0.0132	[1]	(µg/g DW plant)/ (µg/g soil)
192-65-4	Dibenzo[a,e]pyrene				0.0023997	[1]	0.0023997	[1]	(µg/g DW plant)/ (µg/g soil)
192-97-2	Benzo[e]pyrene				0.0073397	[1]	0.0073397	[1]	(µg/g DW plant)/ (µg/g soil)
193-39-5	Indeno[1,2,3-cd]pyrene	0.00593	unitless	[1]	0.00593	[1]	0.00593	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	0.00234	unitless	[1]	0.00234	[1]	0.00234	[1]	(µg/g DW plant)/ (µg/g soil)
205-82-3	Benzo[j]fluor-anthene				0.0113873	[1]	0.0113873	[1]	(µg/g DW plant)/ (µg/g soil)
205-99-2	Benzo[b]fluor-anthene	0.0112	unitless	[1]	0.0112	[1]	0.0112	[1]	(µg/g DW plant)/ (µg/g soil)
206-44-0	Fluoranthene	0.0499	unitless	[1]	0.0499	[1]	0.0499	[1]	(µg/g DW plant)/ (µg/g soil)
207-08-9	Benzo[k]fluor-anthene	0.0115	unitless	[1]	0.0115	[1]	0.0115	[1]	(µg/g DW plant)/ (µg/g soil)
208-96-8	Acenaphthylene				0.2044937	[1]	0.2044937	[1]	(µg/g DW plant)/ (µg/g soil)
218-01-9	Chrysene	0.0197	unitless	[1]	0.0197	[1]	0.0197	[1]	(µg/g DW plant)/ (µg/g soil)
2234-13-1	Octachloro-naphthalene				0.0006688	[1]	0.0006688	[1]	(µg/g DW plant)/ (µg/g soil)
224-42-0	Dibenz[a,j]acridine	0.00678	unitless	[10]	0.00678	[1]	0.00678	[1]	(µg/g DW plant)/ (µg/g soil)
226-36-8	Dibenz[a,h]acridine	0.00678	unitless	[10]	0.00678	[1]	0.00678	[1]	(µg/g DW plant)/ (µg/g soil)
22967-92-6	Methylmercury	0.019	unitless	[1]	0.019	[4]	0.019	[4]	unitless
23950-58-5	Pronamide	0.403	unitless	[1]	0.403	[1]	0.403	[1]	(µg/g DW plant)/ (µg/g soil)
24959-67-9	Bromide				8.3810803	[2]	8.3810803	[2]	(µg/g DW plant)/ (µg/g soil)
25013-15-4	Methyl styrene (mixed isomers)				0.3771899	[1]	0.3771899	[1]	(µg/g DW plant)/ (µg/g soil)
25551-13-7	Trimethyl benzene				0.4085451	[1]	0.4085451	[1]	(µg/g DW plant)/ (µg/g soil)
26140-60-3	Terphenyls	0.0971	unitless	[13]	0.0971	[1]	0.0971	[1]	(µg/g DW plant)/ (µg/g soil)
27154-33-2	Trichlorofluoro-ethane	1.39	unitless	[14]	1.39	[1]	1.39	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
287-92-3	Cyclopentane				0.7144963	[1]	0.7144963	[1]	(µg/g DW plant)/ (µg/g soil)
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl				0.0029692	[1]	0.0029692	[1]	(µg/g DW plant)/ (µg/g soil)
319-84-6	alpha-BHC	0.246	unitless	[1]	0.246	[1]	0.246	[1]	(µg/g DW plant)/ (µg/g soil)
319-85-7	beta-BHC	0.246	unitless	[1]	0.246	[1]	0.246	[1]	(µg/g DW plant)/ (µg/g soil)
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl				0.0056998	[1]	0.0056998	[1]	(µg/g DW plant)/ (µg/g soil)
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl				0.0046066	[1]	0.0046066	[1]	(µg/g DW plant)/ (µg/g soil)
3268-87-9	Octachlorodibenzo(p)dioxin	0.000705	unitless	[1]	0.000705	[1]	0.000705	[1]	(µg/g DW plant)/ (µg/g soil)
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl				0.0020185	[1]	0.0020185	[1]	(µg/g DW plant)/ (µg/g soil)
35065-29-3	2,2',3,4,4',5,5'-Heptachlorobiphenyl				0.0006426	[1]	0.0006426	[1]	(µg/g DW plant)/ (µg/g soil)
35065-30-6	2,2',3,3',4,4',5-Heptachlorobiphenyl				0.0006426	[1]	0.0006426	[1]	(µg/g DW plant)/ (µg/g soil)
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	0.00092	unitless	[1]	0.00092	[1]	0.00092	[1]	(µg/g DW plant)/ (µg/g soil)
3697-24-3	5-Methylchrysene	0.0197	unitless	[9]	0.0197	[1]	0.0197	[1]	(µg/g DW plant)/ (µg/g soil)
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl				0.0015675	[1]	0.0015675	[1]	(µg/g DW plant)/ (µg/g soil)
39001-02-0	Octachlorodibenzo-furan	0.00092	unitless	[1]	0.00092	[1]	0.00092	[1]	(µg/g DW plant)/ (µg/g soil)
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	0.0012	unitless	[1]	0.0012	[1]	0.0012	[1]	(µg/g DW plant)/ (µg/g soil)
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl				0.0006426	[1]	0.0006426	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	0.00562	unitless	[1]	0.00562	[1]	0.00562	[1]	(µg/g DW plant)/ (µg/g soil)
4170-30-3	2-Butenaldehyde (2-Butenal)				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
41851-50-7	Chlorocyclopentadiene				1.5256679	[1]	1.5256679	[1]	(µg/g DW plant)/ (µg/g soil)
460-19-5	Cyanogen				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
50-00-0	Formaldehyde	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
50-32-8	Benzo[a]pyrene	0.0132	unitless	[1]	0.0132	[1]	0.0132	[1]	(µg/g DW plant)/ (µg/g soil)
506-68-3	Cyanogen bromide				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
506-77-4	Cyanogen chloride				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
51-28-5	2,4-Dinitrophenol	4.99	unitless	[1]	4.99	[1]	4.99	[1]	(µg/g DW plant)/ (µg/g soil)
51-79-6	Ethyl carbamate (Urethane)				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
510-15-6	Chlorobenzilate	0.117	unitless	[1]	0.117	[1]	0.117	[1]	(µg/g DW plant)/ (µg/g soil)
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	0.0115	unitless	[1]	0.0115	[1]	0.0115	[1]	(µg/g DW plant)/ (µg/g soil)
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl				0.0017906	[1]	0.0017906	[1]	(µg/g DW plant)/ (µg/g soil)
528-29-0	o-Dinitrobenzene				4.0848866	[1]	4.0848866	[1]	(µg/g DW plant)/ (µg/g soil)
53-70-3	Dibenz[a,h]-anthracene	0.00678	unitless	[1]	0.00678	[1]	0.00678	[1]	(µg/g DW plant)/ (µg/g soil)
532-27-4	2-Chloroacetophenone				2.9679734	[1]	2.9679734	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
534-52-1	4,6-Dinitro-o-cresol				2.3048358	[1]	2.3048358	[1]	(µg/g DW plant)/ (µg/g soil)
5385-75-1	Dibenzo[a,e]fluor-anthene				0.0039792	[1]	0.0039792	[1]	(µg/g DW plant)/ (µg/g soil)
540-59-0	1,2-Dichloroethylene				2.3987225	[1]	2.3987225	[1]	(µg/g DW plant)/ (µg/g soil)
540-73-8	1,2-Dimethylhydrazine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
540-84-1	2,2,4-Trimethylpentane				0.1743091	[1]	0.1743091	[1]	(µg/g DW plant)/ (µg/g soil)
541-73-1	1,3-Dichlorobenzene	0.322	unitless	[1]	0.322	[1]	0.322	[1]	(µg/g DW plant)/ (µg/g soil)
542-75-6	1,3-Dichloropropene	4.6	unitless	[1]	4.6	[1]	4.6	[1]	(µg/g DW plant)/ (µg/g soil)
542-88-1	Dichloromethyl ether				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	0.00205	unitless	[1]	0.00205	[1]	0.00205	[1]	(µg/g DW plant)/ (µg/g soil)
56-23-5	Carbon tetrachloride	0.932	unitless	[1]	0.932	[1]	0.932	[1]	(µg/g DW plant)/ (µg/g soil)
56-49-5	3-Methylcholanthrene				0.0075377	[1]	0.0075377	[1]	(µg/g DW plant)/ (µg/g soil)
56-55-3	Benzo[a]anthracene	0.0197	unitless	[1]	0.0197	[1]	0.0197	[1]	(µg/g DW plant)/ (µg/g soil)
563-80-4	3-Methyl-2-butanone	7.84	unitless	[5]	7.84	[1]	7.84	[1]	(µg/g DW plant)/ (µg/g soil)
57-12-5	Cyanide	8.38	unitless	[1]	8.38	[4]	8.38	[4]	unitless
57-14-7	1,1-Dimethylhydrazine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
57-24-9	Strychnine	2.97	unitless	[1]	2.97	[1]	2.97	[1]	(µg/g DW plant)/ (µg/g soil)
57-74-9	Chlordane	0.0256	unitless	[1]	0.0256	[1]	0.0256	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	0.00678	unitless	[1]	0.00678	[1]	0.00678	[1]	(µg/g DW plant)/(µg/g soil)
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	0.00461	unitless	[1]	0.00461	[1]	0.00461	[1]	(µg/g DW plant)/(µg/g soil)
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	0.00348	unitless	[1]	0.00348	[1]	0.00348	[1]	(µg/g DW plant)/(µg/g soil)
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl				0.0029692	[1]	0.0029692	[1]	(µg/g DW plant)/(µg/g soil)
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo (p)dioxin	0.00234	unitless	[1]	0.00233	[1]	0.00233	[1]	(µg/g DW plant)/(µg/g soil)
58-89-9	gamma-BHC (Lindane)				0.156704	[1]	0.156704	[1]	(µg/g DW plant)/(µg/g soil)
58-90-2	2,3,4,6-Tetrachlorophenol	0.104	unitless	[1]	0.104	[1]	0.104	[1]	(µg/g DW plant)/(µg/g soil)
584-84-9	2,4-Toluene diisocyanate	2.78	unitless	[3]	2.78	[1]	2.78	[1]	(µg/g DW plant)/(µg/g soil)
589-38-8	3-Hexanone				26	[5]	19.5	[5]	(µg/g DW plant)/(µg/g soil)
59-50-7	4-Chloro-3-methylphenol	0.625	unitless	[1]	0.625	[1]	0.625	[1]	(µg/g DW plant)/(µg/g soil)
59-89-2	N-Nitrosomorpholine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
591-78-6	2-Hexanone				6.1710633	[1]	6.1710633	[1]	(µg/g DW plant)/(µg/g soil)
593-60-2	Bromoethene				4.7922559	[1]	4.7922559	[1]	(µg/g DW plant)/(µg/g soil)
60-11-7	Dimethyl aminoazobenzene				0.0872489	[1]	0.0872489	[1]	(µg/g DW plant)/(µg/g soil)
60-29-7	Ethyl ether				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
60-34-4	Methylhydrazine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
60-35-5	Acetamide				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
602-87-9	5-Nitroacenaphthene	0.216	unitless	[6]	0.216	[1]	0.216	[1]	(µg/g DW plant)/ (µg/g soil)
603-34-9	Triphenylamine				0.0186329	[1]	0.0186329	[1]	(µg/g DW plant)/ (µg/g soil)
606-20-2	2,6-Dinitrotoluene	3.93	unitless	[1]	3.93	[1]	3.93	[1]	(µg/g DW plant)/ (µg/g soil)
608-93-5	Pentachlorobenzene	0.0398	unitless	[1]	0.0398	[1]	0.0398	[1]	(µg/g DW plant)/ (µg/g soil)
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	0.00348	unitless	[1]	0.00348	[1]	0.00348	[1]	(µg/g DW plant)/ (µg/g soil)
61626-71-9	Dichloropentadiene				0.5548556	[1]	0.5548556	[1]	(µg/g DW plant)/ (µg/g soil)
62-50-0	Ethyl methanesulfonate	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
62-53-3	Aniline	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
62-75-9	N-Nitroso-N,N-dimethylamine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
621-64-7	di-n-Propylnitrosamine	6.34	unitless	[1]	6.34	[1]	6.34	[1]	(µg/g DW plant)/ (µg/g soil)
624-83-9	Methyl isocyanate	8.38	unitless	[7]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
627-13-4	Nitric acid, propyl ester				3.821906	[1]	3.821906	[1]	(µg/g DW plant)/ (µg/g soil)
628-73-9	Hexanenitrile				4.2512828	[1]	4.2512828	[1]	(µg/g DW plant)/ (µg/g soil)
630-08-0	Carbon monoxide				3.6237648	[3]	3.6237648	[3]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
630-20-6	1,1,1,2-Tetrachloroethane	0.687	unitless	[1]	0.687	[1]	0.687	[1]	(µg/g DW plant)/(µg/g soil)
63705-05-5	Total sulfur	1.5	(µg/g DW plant)	[2]	1.5	[7]	1.5	[7]	(µg/g DW plant)
64-17-5	Ethyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
64-18-6	Formic acid	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
64-19-7	Acetic acid				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
65-85-0	Benzoic acid	3.21	unitless	[1]	3.21	[1]	3.21	[1]	(µg/g DW plant)/(µg/g soil)
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl				26	[5]	19.5	[5]	(µg/g DW plant)/(µg/g soil)
67-56-1	Methyl alcohol	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
67-63-0	2-Propyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
67-64-1	2-Propanone (Acetone)	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
67-66-3	Chloroform	2.7	unitless	[1]	2.7	[1]	2.7	[1]	(µg/g DW plant)/(µg/g soil)
67-72-1	Hexachloroethane	0.207	unitless	[1]	0.207	[1]	0.207	[1]	(µg/g DW plant)/(µg/g soil)
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.00205	unitless	[1]	0.00205	[1]	0.00205	[1]	(µg/g DW plant)/(µg/g soil)
684-16-2	Hexafluoroacetone	8.38	unitless	[4]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl				0.0015263	[1]	0.0015263	[1]	(µg/g DW plant)/(µg/g soil)
70-30-4	Hexachlorophene	0.0017	unitless	[1]	0.0017	[1]	0.0017	[1]	(µg/g DW plant)/(µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
70362-50-4	3,4,4',5-Tetrachlorobiphenyl				0.0083846	[1]	0.0083846	[1]	(µg/g DW plant)/(µg/g soil)
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	0.00348	unitless	[1]	0.00348	[1]	0.00348	[1]	(µg/g DW plant)/(µg/g soil)
71-23-8	n-Propyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
71-36-3	n-Butyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
71-43-2	Benzene	2.37	unitless	[1]	2.37	[1]	2.37	[1]	(µg/g DW plant)/(µg/g soil)
71-55-6	1,1,1-Trichloroethane	1.39	unitless	[1]	1.39	[1]	1.39	[1]	(µg/g DW plant)/(µg/g soil)
72-43-5	Methoxychlor	0.0651	unitless	[1]	0.0651	[1]	0.0651	[1]	(µg/g DW plant)/(µg/g soil)
72-55-9	4,4'-DDE	0.0197	unitless	[1]	0.0197	[1]	0.0197	[1]	(µg/g DW plant)/(µg/g soil)
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	0.00348	unitless	[1]	0.00348	[1]	0.00348	[1]	(µg/g DW plant)/(µg/g soil)
74-83-9	Bromomethane	7.95	unitless	[1]	7.95	[1]	7.95	[1]	(µg/g DW plant)/(µg/g soil)
74-87-3	Chloromethane	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
74-88-4	Iodomethane				5.1906291	[1]	5.1906291	[1]	(µg/g DW plant)/(µg/g soil)
74-95-3	Methylene bromide	5.06	unitless	[1]	5.06	[1]	5.06	[1]	(µg/g DW plant)/(µg/g soil)
74-97-5	Bromochloro-methane				5.9295263	[1]	5.9295263	[1]	(µg/g DW plant)/(µg/g soil)
74-99-7	Methylacetylene				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
7429-90-5	Aluminum				0.004	[6]	0.004	[6]	(µg/g DW plant)/(µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
7439-89-6	Iron	0.05	(µg/g DW plant)	[2]	0.05	[7]	0.05	[7]	(µg/g DW plant)
7439-92-1	Lead	0.009	unitless	[1]	0.009	[4]	0.009	[4]	unitless
7439-93-2	Lithium				0.025	[6]	0.025	[6]	(µg/g DW plant)/ (µg/g soil)
7439-95-4	Magnesium	0.55	(µg/g DW plant)	[2]	0.55	[7]	0.55	[7]	(µg/g DW plant)
7439-96-5	Manganese	0.3	(µg/g DW plant)	[2]	0.3	[7]	0.3	[7]	(µg/g DW plant)
7439-97-6	Mercury	0.49	(µg/g DW plant)	[2]	0.49	[7]	0.49	[7]	(µg/g DW plant)
7439-98-7	Molybdenum	0.8	(µg/g DW plant)	[2]	0.8	[7]	0.8	[7]	(µg/g DW plant)
7440-02-0	Nickel	0.006	unitless	[1]	0.006	[4]	0.006	[4]	unitless
7440-03-1	Niobium-93m	0.025	(µg/g DW plant)	[2]	0.025	[7]	0.025	[7]	(µg/g DW plant)
7440-09-7	Potassium	0.55	(µg/g DW plant)	[2]	0.55	[7]	0.55	[7]	(µg/g DW plant)
7440-16-6	Rhodium	0.04	(µg/g DW plant)	[2]	0.04	[7]	0.04	[7]	(µg/g DW plant)
7440-21-3	Silicon	0.07	(µg/g DW plant)	[2]	0.07	[7]	0.07	[7]	(µg/g DW plant)
7440-22-4	Silver	0.1	unitless	[1]	0.1	[4]	0.1	[4]	unitless
7440-23-5	Sodium	0.3	(µg/g DW plant)	[2]	0.3	[7]	0.3	[7]	(µg/g DW plant)
7440-24-6	Strontium	0.21	(µg/g DW plant)	[2]	0.21	[7]	0.21	[7]	(µg/g DW plant)
7440-25-7	Tantalum	0.025	(µg/g DW plant)	[2]	0.025	[7]	0.025	[7]	(µg/g DW plant)
7440-28-0	Thallium	0.0004	unitless	[1]	0.0004	[4]	0.0004	[4]	unitless
7440-29-1	Thorium-232	0.000034	(µg/g DW plant)	[2]	0.000034	[7]	0.000034	[7]	(µg/g DW plant)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
7440-31-5	Tin	0.006	(µg/g DW plant)	[2]	0.006	[7]	0.006	[7]	(µg/g DW plant)
7440-33-7	Tungsten	3	(µg/g DW plant)	[2]	3	[7]	3	[7]	(µg/g DW plant)
7440-36-0	Antimony	0.03	unitless	[1]	0.03	[4]	0.03	[4]	unitless
7440-38-2	Arsenic	0.004	unitless	[1]	0.004	[4]	0.004	[4]	unitless
7440-39-3	Barium	0.015	unitless	[1]	0.015	[4]	0.015	[4]	unitless
7440-41-7	Beryllium	0.0015	unitless	[1]	0.0015	[4]	0.0015	[4]	unitless
7440-42-8	Boron				4	[6]	4	[6]	(µg/g DW plant)/ (µg/g soil)
7440-43-9	Cadmium	0.062	unitless	[1]	0.062	[4]	0.062	[4]	unitless
7440-48-4	Cobalt	0.0037	(µg/g DW plant)	[2]	0.0037	[7]	0.0037	[7]	(µg/g DW plant)
7440-50-8	Copper	0.25	(µg/g DW plant)	[2]	0.25	[7]	0.25	[7]	(µg/g DW plant)
7440-61-1	Uranium	0.0013	(µg/g DW plant)	[2]	0.0013	[7]	0.0013	[7]	(µg/g DW plant)
7440-61-1R	Uranium-238				0.039	[6]	0.039	[6]	(µg/g DW plant)/ (µg/g soil)
7440-62-2	Vanadium				0.0055	[6]	0.0055	[6]	(µg/g DW plant)/ (µg/g soil)
7440-65-5	Yttrium	0.01	(µg/g DW plant)	[2]	0.01	[7]	0.01	[7]	(µg/g DW plant)
7440-66-6	Zinc	0.054	unitless	[1]	0.054	[4]	0.054	[4]	unitless
7440-67-7	Zirconium	0.001	(µg/g DW plant)	[2]	0.001	[7]	0.001	[7]	(µg/g DW plant)
7440-69-9	Bismuth	0.5	(µg/g DW plant)	[2]	0.5	[7]	0.5	[7]	(µg/g DW plant)
7440-70-2	Calcium	0.35	(µg/g DW plant)	[2]	0.35	[7]	0.35	[7]	(µg/g DW plant)
7446-09-5	Sulfur dioxide				8.3810803	[2]	8.3810803	[2]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl				0.0029692	[1]	0.0029692	[1]	(µg/g DW plant)/(µg/g soil)
7487-94-7	Mercury (Hg^{+2})	0.0093	unitless	[1]	0.0093	[4]	0.0093	[4]	unitless
75-00-3	Chloroethane	6.01	unitless	[1]	6.01	[1]	6.01	[1]	(µg/g DW plant)/(µg/g soil)
75-01-4	1-Chloroethene	6.01	unitless	[1]	6.01	[1]	6.01	[1]	(µg/g DW plant)/(µg/g soil)
75-02-5	Vinyl fluoride				26	[5]	19.5	[5]	(µg/g DW plant)/(µg/g soil)
75-05-8	Acetonitrile	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
75-07-0	Acetaldehyde	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
75-09-2	Dichloromethane	6.86	unitless	[1]	6.86	[1]	6.86	[1]	(µg/g DW plant)/(µg/g soil)
75-12-7	Formamide				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/(µg/g soil)
75-15-0	Carbon disulfide	2.07	unitless	[1]	2.07	[1]	2.07	[1]	(µg/g DW plant)/(µg/g soil)
75-21-8	Oxirane	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/(µg/g soil)
75-25-2	Bromoform	1.65	unitless	[1]	1.65	[1]	1.65	[1]	(µg/g DW plant)/(µg/g soil)
75-27-4	Bromodichloro-methane	2.37	unitless	[1]	2.37	[1]	2.37	[1]	(µg/g DW plant)/(µg/g soil)
75-29-6	2-Chloropropane				3.0888726	[1]	3.0888726	[1]	(µg/g DW plant)/(µg/g soil)
75-34-3	1,1-Dichloroethane	3.53	unitless	[1]	3.53	[1]	3.53	[1]	(µg/g DW plant)/(µg/g soil)
75-35-4	1,1-Dichloroethene	2.37	unitless	[1]	2.37	[1]	2.37	[1]	(µg/g DW plant)/(µg/g soil)
75-43-4	Dichlorofluoro-methane				4.9215285	[1]	4.9215285	[1]	(µg/g DW plant)/(µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
75-44-5	Phosgene	3.09	unitless	[15]	3.09	[1]	3.09	[1]	(µg/g DW plant)/ (µg/g soil)
75-45-6	Chlorodifluoro-methane	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
75-50-3	Trimethylamine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
75-52-5	Nitromethane				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
75-55-8	2-Methylaziridine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
75-61-6	Difluorodibromomet hane	2.19	unitless	[11]	2.19	[1]	2.19	[1]	(µg/g DW plant)/ (µg/g soil)
75-63-8	Trifluorobromo-methane				3.2577669	[1]	3.2577669	[1]	(µg/g DW plant)/ (µg/g soil)
75-65-0	2-Methyl-2-propanol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
75-69-4	Trichlorofluoro-methane	1.39	unitless	[1]	1.39	[1]	1.39	[1]	(µg/g DW plant)/ (µg/g soil)
75-71-8	Dichlorodifluoro-methane	2.19	unitless	[1]	2.19	[1]	2.19	[1]	(µg/g DW plant)/ (µg/g soil)
7553-56-2	Iodine	0.04	(µg/g DW plant)	[2]	0.04	[7]	0.04	[7]	(µg/g DW plant)
76-01-7	Pentachloroethane				0.5331384	[1]	0.5331384	[1]	(µg/g DW plant)/ (µg/g soil)
76-03-9	Trichloroacetic acid				6.5956864	[1]	6.5956864	[1]	(µg/g DW plant)/ (µg/g soil)
76-11-9	1,1,1,2-Tetrachloro-2,2-difluoroethane				0.4140187	[1]	0.4140187	[1]	(µg/g DW plant)/ (µg/g soil)
76-12-0	1,1,2,2-Tetrachloro-1,2-difluoroethane				0.4140187	[1]	0.4140187	[1]	(µg/g DW plant)/ (µg/g soil)
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane				0.5774575	[1]	0.5774575	[1]	(µg/g DW plant)/ (µg/g soil)
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane				0.9079041	[1]	0.9079041	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
76-15-3	Chloropentafluoro-ethane				1.4465718	[1]	1.4465718	[1]	(µg/g DW plant)/ (µg/g soil)
76-44-8	Heptachlor	0.127	unitless	[1]	0.127	[1]	0.127	[1]	(µg/g DW plant)/ (µg/g soil)
764-41-0	1,4-Dichloro-2-butene				1.2167462	[1]	1.2167462	[1]	(µg/g DW plant)/ (µg/g soil)
7647-01-0	Hydrogen Chloride								
765-34-4	Glycidylaldehyde				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
7664-39-3	Hydrogen fluoride				8.3810803	[2]	8.3810803	[2]	(µg/g DW plant)/ (µg/g soil)
7664-41-7	Ammonia/ Ammonium				38	[6]	38	[6]	(µg/g DW plant)/ (µg/g soil)
77-47-4	Hexachlorocyclopent adiene	0.0473	unitless	[1]	0.0473	[1]	0.0473	[1]	(µg/g DW plant)/ (µg/g soil)
77-78-1	Dimethyl sulfate				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
7723-14-0	Phosphorus	3.5	(µg/g DW plant)	[2]	3.5	[7]	3.5	[7]	(µg/g DW plant)
7782-49-2	Selenium	0.002	unitless	[1]	0.002	[4]	0.002	[4]	unitless
7782-50-5	Chlorine	8.38	unitless	[1]	8.38	[4]	8.38	[4]	unitless
78-83-1	2-Methylpropyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
78-87-5	1,2-Dichloropropane	2.7	unitless	[1]	2.7	[1]	2.7	[1]	(µg/g DW plant)/ (µg/g soil)
78-92-2	1-Methylpropyl alcohol				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
78-93-3	2-Butanone	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
79-00-5	1,1,2-Trichloroethane	2.7	unitless	[1]	2.7	[1]	2.7	[1]	(µg/g DW plant)/ (µg/g soil)
79-01-6	1,1,2-Trichloroethylene	1.59	unitless	[1]	1.59	[1]	1.59	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
79-09-4	Propionic acid				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
79-10-7	2-Propenoic acid				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
79-20-9	Methyl acetate	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
79-34-5	1,1,2,2-Tetrachloroethane	1.59	unitless	[1]	1.59	[1]	1.59	[1]	(µg/g DW plant)/ (µg/g soil)
79-46-9	2-Nitropropane				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
80-62-6	Methyl methacrylate				6.1710633	[1]	6.1710633	[1]	(µg/g DW plant)/ (µg/g soil)
82-68-8	Pentachloronitro-benzene	0.0806	unitless	[1]	0.0806	[1]	0.0806	[1]	(µg/g DW plant)/ (µg/g soil)
822-06-0	Hexamethylene-1,5-diisocyanate				0.54752	[1]	0.54752	[1]	(µg/g DW plant)/ (µg/g soil)
823-40-5	Toluene-2,6-diamine				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
83-32-9	Acenaphthene	0.216	unitless	[1]	0.216	[1]	0.216	[1]	(µg/g DW plant)/ (µg/g soil)
84-66-2	Diethyl phthalate	1.39	unitless	[1]	1.39	[1]	1.39	[1]	(µg/g DW plant)/ (µg/g soil)
84-74-2	Dibutyl phthalate	0.0744	unitless	[1]	0.0744	[1]	0.0744	[1]	(µg/g DW plant)/ (µg/g soil)
85-01-8	Phenanthrene	0.0971	unitless	[1]	0.0971	[1]	0.0971	[1]	(µg/g DW plant)/ (µg/g soil)
85-44-9	Phthalic anhydride	8.38	unitless	[1]	8.38	[1]	8.38	[1]	(µg/g DW plant)/ (µg/g soil)
85-68-7	Butylbenzyl phthalate	0.057	unitless	[1]	0.057	[1]	0.057	[1]	(µg/g DW plant)/ (µg/g soil)
86-73-7	Fluorene	0.145	unitless	[1]	0.145	[1]	0.145	[1]	(µg/g DW plant)/ (µg/g soil)
87-61-6	1,2,3-Trichlorobenzene	0.177	unitless	[1]	0.177	[1]	0.177	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
87-68-3	Hexachlorobutadiene	0.065	unitless	[1]	0.0651	[1]	0.0651	[1]	(µg/g DW plant)/ (µg/g soil)
87-86-5	Pentachlorophenol	0.0437	unitless	[1]	0.0437	[1]	0.0437	[1]	(µg/g DW plant)/ (µg/g soil)
88-06-2	2,4,6-Trichlorophenol	0.281	unitless	[1]	0.281	[1]	0.281	[1]	(µg/g DW plant)/ (µg/g soil)
88-72-2	2-Nitrotoluene				1.8138443	[1]	1.8138443	[1]	(µg/g DW plant)/ (µg/g soil)
88-74-4	o-Nitroaniline	3.3	unitless	[1]	3.3	[1]	3.3	[1]	(µg/g DW plant)/ (µg/g soil)
88-75-5	2-Nitrophenol	3.58	unitless	[1]	3.58	[1]	3.58	[1]	(µg/g DW plant)/ (µg/g soil)
90-04-0	o-Anisidine				8.0530427	[1]	8.0530427	[1]	(µg/g DW plant)/ (µg/g soil)
91-20-3	Naphthalene	0.479	unitless	[1]	0.479	[1]	0.479	[1]	(µg/g DW plant)/ (µg/g soil)
91-22-5	Quinoline				2.5981247	[1]	2.5981247	[1]	(µg/g DW plant)/ (µg/g soil)
91-57-6	2-Methyl naphthalene				0.2274678	[1]	0.2274678	[1]	(µg/g DW plant)/ (µg/g soil)
91-58-7	2-Chloronaphthalene	0.431	unitless	[1]	0.431	[1]	0.431	[1]	(µg/g DW plant)/ (µg/g soil)
91-94-1	3,3'-Dichlorobenzidine	0.362	unitless	[1]	0.362	[1]	0.362	[1]	(µg/g DW plant)/ (µg/g soil)
92-52-4	1,1'-Biphenyl				0.193892	[1]	0.193892	[1]	(µg/g DW plant)/ (µg/g soil)
92-93-3	4-Nitrobiphenyl				0.256413	[1]	0.256413	[1]	(µg/g DW plant)/ (µg/g soil)
924-16-3	N-Nitrosodi-n-butylamine	3.01	unitless	[1]	3.01	[1]	3.01	[1]	(µg/g DW plant)/ (µg/g soil)
94-59-7	Safrole	1.123	unitless	[1]	1.12	[1]	1.12	[1]	(µg/g DW plant)/ (µg/g soil)
94-75-7	2,4-D and esters				0.9200682	[1]	0.9200682	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
95-13-6	Indene	0.216	unitless	[6]	0.216	[1]	0.216	[1]	(µg/g DW plant)/ (µg/g soil)
95-47-6	o-Xylene	0.625	unitless	[1]	0.625	[1]	0.625	[1]	(µg/g DW plant)/ (µg/g soil)
95-48-7	o-Cresol	2.89	unitless	[1]	2.89	[1]	2.89	[1]	(µg/g DW plant)/ (µg/g soil)
95-49-8	2-Chlorotoluene				0.4085451	[1]	0.4085451	[1]	(µg/g DW plant)/ (µg/g soil)
95-50-1	1,2-Dichlorobenzene	0.431	unitless	[1]	0.431	[1]	0.431	[1]	(µg/g DW plant)/ (µg/g soil)
95-53-4	o-Toluidine	6.68	unitless	[1]	6.68	[1]	6.68	[1]	(µg/g DW plant)/ (µg/g soil)
95-57-8	2-Chlorophenol	2.21	unitless	[1]	2.21	[1]	2.21	[1]	(µg/g DW plant)/ (µg/g soil)
95-63-6	1,2,4-Trimethyl benzene				0.3089299	[1]	0.3089299	[1]	(µg/g DW plant)/ (µg/g soil)
95-94-3	1,2,4,5-Tetrachlorobenzene	0.0651	unitless	[1]	0.0651	[1]	0.0651	[1]	(µg/g DW plant)/ (µg/g soil)
95-95-4	2,4,5-Trichlorophenol	0.274	unitless	[1]	0.274	[1]	0.274	[1]	(µg/g DW plant)/ (µg/g soil)
96-12-8	1,2-Dibromo-3-chloropropane	1.81	unitless	[1]	1.81	[1]	1.81	[1]	(µg/g DW plant)/ (µg/g soil)
96-18-4	1,2,3-Trichloropropane	2.7	unitless	[1]	2.7	[1]	2.7	[1]	(µg/g DW plant)/ (µg/g soil)
96-22-0	3-Pentanone				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
96-45-7	Ethylene thiourea				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
96-69-5	Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	2.85	unitless	[16]	2.85	[1]	2.85	[1]	(µg/g DW plant)/ (µg/g soil)
97-63-2	Ethyl methacrylate	2.93	unitless	[1]	2.93	[1]	2.93	[1]	(µg/g DW plant)/ (µg/g soil)

Table 3-4 Plant-Soil Bioconcentration Factors for Domestic and Wild Grain

CAS Registry Number	Analyte Name	Plant-soil bioconcentration factor for grain from literature, database, or study	Units for plant-soil bioconcentration factor for grain	Reference	Plant-soil bioconcentration factor in domestic grain (Br_{grain})	Reference	Plant-soil bioconcentration factor in wild grain (Br_{grain})	Reference	Units for plant-soil bioconcentration factor in grain
98-01-1	Furfural				8.3810803	[1]	8.3810803	[1]	(µg/g DW plant)/ (µg/g soil)
98-06-6	tert-Butyl benzene				0.1630872	[1]	0.1630872	[1]	(µg/g DW plant)/ (µg/g soil)
98-07-7	Benzotrichloride				0.2156751	[1]	0.2156751	[1]	(µg/g DW plant)/ (µg/g soil)
98-51-1	p-tert-Butyltoluene	0.625	unitless	[12]	0.625	[1]	0.625	[1]	(µg/g DW plant)/ (µg/g soil)
98-82-8	Cumene	0.281	unitless	[1]	0.281	[1]	0.281	[1]	(µg/g DW plant)/ (µg/g soil)
98-83-9	alpha-Methylstyrene				0.3771899	[1]	0.3771899	[1]	(µg/g DW plant)/ (µg/g soil)
98-86-2	Acetophenone	4.73	unitless	[1]	4.73	[1]	4.73	[1]	(µg/g DW plant)/ (µg/g soil)
98-95-3	Nitrobenzene	3.3	unitless	[1]	3.3	[1]	3.3	[1]	(µg/g DW plant)/ (µg/g soil)
99-35-4	1,3,5-Trinitrobenzene	7.84	unitless	[1]	7.84	[1]	7.84	[1]	(µg/g DW plant)/ (µg/g soil)
99-65-0	1,3-Dinitrobenzene	5.26	unitless	[1]	5.26	[1]	5.26	[1]	(µg/g DW plant)/ (µg/g soil)
99-87-6	p-Cymene				0.1652723	[1]	0.1652723	[1]	(µg/g DW plant)/ (µg/g soil)

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Grain (from literature, study, or database)
[1]	Based on the plant-soil bioconcentration factor for forage.
[2]	Calculated value per Eq. A-2-18 (using log(Kow)=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor for Grain (from literature, study, or database)
[5]	Mass-limited plant-soil bioconcentration factor for wild grain (root zone soil)
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. A Compendium of Transfer Factors for Agricultural and Animal Products. PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor in Domestic Grain
[1]	Based on the plant-soil bioconcentration factor for forage.
[2]	Calculated value per Eq. A-2-18 (using log(Kow)=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Mass-limited plant-soil bioconcentration factor for domestic grain (tilled soil)
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.

Reference	Reference (source) for Plant-Soil Bioconcentration Factor in Wild Grain
[1]	Based on the plant-soil bioconcentration factor for forage.
[2]	Calculated value per Eq. A-2-18 (using log(Kow)=1.15) in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-18 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Mass-limited plant-soil bioconcentration factor for wild grain (root zone soil)
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products*. PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
100-02-7	p-Nitrophenol	1.46E+04	(µg/g DW plant)/(µg/g air)	[3]
100-21-0	Phthalic acid	4.74E+05	(µg/g DW plant)/(µg/g air)	[1]
100-25-4	1,4-Dinitrobenzene	1.33E-01	(µg/g DW plant)/(µg/g air)	[1]
100-40-3	4-Ethenylcyclohexene	1.91E-02	(µg/g DW plant)/(µg/g air)	[1]
100-41-4	Ethyl benzene	1.42E-02	(µg/g DW plant)/(µg/g air)	[3]
100-42-5	Styrene	3.24E-02	(µg/g DW plant)/(µg/g air)	[3]
100-44-7	Benzyl chloride	3.79E-02	(µg/g DW plant)/(µg/g air)	[3]
100-47-0	Benzonitrile	4.92E-02	(µg/g DW plant)/(µg/g air)	[3]
100-51-6	Benzyl alcohol	2.46E+00	(µg/g DW plant)/(µg/g air)	[3]
100-52-7	Benzaldehyde	7.89E-02	(µg/g DW plant)/(µg/g air)	[3]
10028-15-6	Ozone			
10028-17-8	Tritium			
10045-97-3	Cesium-137	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
10061-01-5	cis-1,3-Dichloropropene	1.44E-03	(µg/g DW plant)/(µg/g air)	[10]
10061-02-6	trans-1,3-Dichloropropene	9.32E-03	(µg/g DW plant)/(µg/g air)	[1]
10098-91-6	Yttrium-90	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
10098-97-2	Strontium-90	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
101-55-3	4-Bromophenylphenyl ether	1.83E+02	(µg/g DW plant)/(µg/g air)	[3]
101-77-9	4,4-Methylenedianiline	4.27E+03	(µg/g DW plant)/(µg/g air)	[1]
10102-44-0	Nitrogen dioxide			
10198-40-0	Cobalt-60	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
103-33-3	Azobenzene	1.19E+00	(µg/g DW plant)/(µg/g air)	[1]
103-65-1	n-Propyl benzene (Isocumene)	4.53E-02	(µg/g DW plant)/(µg/g air)	[1]
104-51-8	n-Butylbenzene	1.62E-01	(µg/g DW plant)/(µg/g air)	[1]
104-76-7	2-Ethyl-1-hexanol	1.70E+00	(µg/g DW plant)/(µg/g air)	[1]
105-67-9	2,4-Dimethylphenol	7.87E+00	(µg/g DW plant)/(µg/g air)	[3]
10595-95-6	n-Nitrosomethylethylamine	3.54E-03	(µg/g DW plant)/(µg/g air)	[1]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	4.49E-02	(µg/g DW plant)/(µg/g air)	[1]
106-44-5	p-Cresol (4-methyl phenol)	7.47E+00	(µg/g DW plant)/(µg/g air)	[3]
106-46-7	1,4-Dichlorobenzene	1.24E-01	(µg/g DW plant)/(µg/g air)	[3]
106-47-8	p-Chloroaniline	4.28E+00	(µg/g DW plant)/(µg/g air)	[3]
106-49-0	p-Toluidine	2.05E-02	(µg/g DW plant)/(µg/g air)	[1]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
106-51-4	Quinone	1.91E-04	(µg/g DW plant)/(µg/g air)	[1]
106-88-7	1,2-Epoxybutane	6.26E-05	(µg/g DW plant)/(µg/g air)	[1]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1.10E-03	(µg/g DW plant)/(µg/g air)	[3]
106-93-4	Ethylene dibromide	1.02E-02	(µg/g DW plant)/(µg/g air)	[3]
106-99-0	1,3-Butadiene	2.44E-06	(µg/g DW plant)/(µg/g air)	[1]
107-02-8	Acrolein	4.55E-04	(µg/g DW plant)/(µg/g air)	[3]
107-05-1	3-Chloropropene	1.41E-05	(µg/g DW plant)/(µg/g air)	[1]
107-06-2	1,2-Dichloroethane	2.26E-03	(µg/g DW plant)/(µg/g air)	[3]
107-12-0	Propionitrile	2.24E-03	(µg/g DW plant)/(µg/g air)	[1]
107-13-1	Acrylonitrile	1.00E-03	(µg/g DW plant)/(µg/g air)	[3]
107-19-7	Propargyl alcohol	4.68E-04	(µg/g DW plant)/(µg/g air)	[1]
107-21-1	Ethylene glycol (1,2-ethanediol)	8.13E-04	(µg/g DW plant)/(µg/g air)	[1]
107-98-2	Propylene glycol monomethyl ether	4.47E-04	(µg/g DW plant)/(µg/g air)	[1]
108-05-4	Acetic acid vinyl ester	6.57E-04	(µg/g DW plant)/(µg/g air)	[3]
108-10-1	4-Methyl-2-pentanone	7.57E-03	(µg/g DW plant)/(µg/g air)	[3]
108-39-4	m-Cresol	7.90E+00	(µg/g DW plant)/(µg/g air)	[3]
108-60-1	bis (2-Chloroisopropyl)ether	5.30E-03	(µg/g DW plant)/(µg/g air)	[1]
108-67-8	1,3,5-Trimethylbenzene	2.80E-02	(µg/g DW plant)/(µg/g air)	[3]
108-86-1	Bromobenzene (Phenyl bromide)	7.77E-04	(µg/g DW plant)/(µg/g air)	[1]
108-87-2	Methylcyclohexane	2.22E-05	(µg/g DW plant)/(µg/g air)	[1]
108-88-3	Toluene	6.36E-03	(µg/g DW plant)/(µg/g air)	[3]
108-90-7	Chlorobenzene	1.45E-02	(µg/g DW plant)/(µg/g air)	[3]
108-94-1	Cyclohexanone	1.11E-03	(µg/g DW plant)/(µg/g air)	[1]
108-95-2	Phenol	5.53E+00	(µg/g DW plant)/(µg/g air)	[3]
109-74-0	n-Butanenitrile	3.92E-03	(µg/g DW plant)/(µg/g air)	[1]
109-75-1	3-Butenenitrile			
109-77-3	Malononitrile	2.47E-02	(µg/g DW plant)/(µg/g air)	[1]
109-86-4	2-Methoxyethanol	6.27E-04	(µg/g DW plant)/(µg/g air)	[1]
109-99-9	Tetrahydrofuran	2.45E-03	(µg/g DW plant)/(µg/g air)	[3]
110-00-9	Furan	6.76E-06	(µg/g DW plant)/(µg/g air)	[1]
110-54-3	n-Hexane	1.08E-05	(µg/g DW plant)/(µg/g air)	[1]
110-59-8	Pentanenitrile	1.22E-02	(µg/g DW plant)/(µg/g air)	[1]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
110-80-5	2-Ethoxyethanol	1.33E-03	(µg/g DW plant)/(µg/g air)	[1]
110-82-7	Cyclohexane	1.72E-03	(µg/g DW plant)/(µg/g air)	[1]
110-83-8	Cyclohexene	1.37E-03	(µg/g DW plant)/(µg/g air)	[1]
110-86-1	Pyridine	3.10E-02	(µg/g DW plant)/(µg/g air)	[3]
111-15-9	Ethylene glycol monoethyl ether acetate	1.81E-03	(µg/g DW plant)/(µg/g air)	[1]
111-44-4	Bis(2-chloroethyl)ether	7.34E-02	(µg/g DW plant)/(µg/g air)	[3]
111-65-9	n-Octane	5.72E-03	(µg/g DW plant)/(µg/g air)	[1]
111-76-2	2-Butoxyethanol	6.54E-03	(µg/g DW plant)/(µg/g air)	[1]
111-84-2	n-Nonane	1.71E-02	(µg/g DW plant)/(µg/g air)	[1]
111-91-1	Bis(2-chloroethoxy)methane	1.96E-01	(µg/g DW plant)/(µg/g air)	[1]
112-30-1	1-Decanol	1.29E+02	(µg/g DW plant)/(µg/g air)	[1]
112-31-2	Decanal			
112-40-3	Dodecane			
1120-21-4	Undecane			
1120-71-4	1,3-Propane sultone	1.19E-02	(µg/g DW plant)/(µg/g air)	[1]
117-81-7	Bis(2-ethylhexyl) phthalate	1.51E+05	(µg/g DW plant)/(µg/g air)	[3]
117-84-0	Di-n-octylphthalate	3.53E+05	(µg/g DW plant)/(µg/g air)	[3]
118-74-1	Hexachlorobenzene	1.90E+01	(µg/g DW plant)/(µg/g air)	[3]
119-90-4	3,3'-Dimethoxybenzidine	2.61E+07	(µg/g DW plant)/(µg/g air)	[3]
120-12-7	Anthracene	5.33E+01	(µg/g DW plant)/(µg/g air)	[3]
120-82-1	1,2,4-Trichlorobenzene	7.27E-01	(µg/g DW plant)/(µg/g air)	[3]
120-83-2	2,4-Dichlorophenol	2.14E+01	(µg/g DW plant)/(µg/g air)	[3]
121-14-2	2,4-Dinitrotoluene	7.75E+01	(µg/g DW plant)/(µg/g air)	[3]
122-39-4	N,N-Diphenylamine	2.15E+00	(µg/g DW plant)/(µg/g air)	[1]
122-66-7	1,2-Diphenylhydrazine	4.57E+01	(µg/g DW plant)/(µg/g air)	[3]
123-33-1	Maleic hydrazide	6.60E+00	(µg/g DW plant)/(µg/g air)	[1]
123-38-6	Propionaldehyde	3.24E-03	(µg/g DW plant)/(µg/g air)	[1]
123-72-8	Butanal	4.21E-03	(µg/g DW plant)/(µg/g air)	[1]
123-91-1	1,4-Dioxan	6.01E-03	(µg/g DW plant)/(µg/g air)	[3]
124-18-5	Decane			
124-38-9	Carbon dioxide			
124-48-1	Chlorodibromomethane	1.69E-02	(µg/g DW plant)/(µg/g air)	[3]
126-73-8	Tributyl phosphate	1.66E+02	(µg/g DW plant)/(µg/g air)	[1]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
126-98-7	2-Methyl-2-propenenitrile	8.51E-04	(µg/g DW plant)/(µg/g air)	[3]
127-18-4	1,1,2,2-Tetrachloroethene	1.30E-02	(µg/g DW plant)/(µg/g air)	[3]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	3.66E+03	(µg/g DW plant)/(µg/g air)	[1]
129-00-0	Pyrene	8.40E+02	(µg/g DW plant)/(µg/g air)	[3]
131-11-3	Dimethyl Phthalate	2.44E+01	(µg/g DW plant)/(µg/g air)	[3]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	9.89E+05	(µg/g DW plant)/(µg/g air)	[1]
132-64-9	Dibenzofuran	1.57E-01	(µg/g DW plant)/(µg/g air)	[1]
133-06-2	Captan	1.88E+02	(µg/g DW plant)/(µg/g air)	[1]
1330-20-7	Xylenes (mixed isomers)	4.34E-04	(µg/g DW plant)/(µg/g air)	[1]
1336-36-3	Polychlorinated biphenyls	2.00E+01	(µg/g DW plant)/(µg/g air)	[1]
134-32-7	alpha-Naphthylamine	1.25E+02	(µg/g DW plant)/(µg/g air)	[1]
135-98-8	sec-Butylbenzene	2.34E-01	(µg/g DW plant)/(µg/g air)	[1]
13966-29-5	Uranium-234	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13967-48-1	Ruthenium-106	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13967-70-9	Cesium-134	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13968-55-3	Uranium-233	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13981-15-2	Curium-244	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13981-16-3	Plutonium-238	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13981-37-8	Nickel-63	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13982-10-0	Plutonium-242	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13982-63-3	Radium-226	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13982-70-2	Uranium-236	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
13994-20-2	Neptunium-237	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
141-78-6	Acetic acid ethyl ester	6.11E-05	(µg/g DW plant)/(µg/g air)	[1]
14119-32-5	Plutonium-241	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14119-33-6	Plutonium-240	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14133-76-7	Technetium-99	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14158-29-3	Uranium-232	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14234-35-6	Antimony-125	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14265-44-2	Phosphate			
14331-85-2	Protactinium-231	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14336-70-0	Nickel-59	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14391-16-3	Europium-155	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
145-73-3	Endothall	3.85E+08	(µg/g DW plant)/(µg/g air)	[1]
14596-10-2	Americium-241	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14683-23-9	Europium-152	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14762-75-5	Carbon-14			
14797-55-8	Nitrate			
14797-65-0	Nitrite			
14808-79-8	Sulfate			
14952-40-0	Actinium-227	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
14993-75-0	Americium-243	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15046-84-1	Iodine-129			
15117-48-3	Plutonium-239	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15117-96-1	Uranium-235	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15262-20-1	Radium-228	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15510-73-3	Curium-242	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15585-10-1	Europium-154	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15594-54-4	Thorium-229	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
156-59-2	cis-1,2-Dichloroethene	1.44E-03	(µg/g DW plant)/(µg/g air)	[3]
156-60-5	1,2-trans-Dichloroethene	1.03E-03	(µg/g DW plant)/(µg/g air)	[3]
15715-94-3	Samarium-151	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15751-77-6	Zirconium-93	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15757-87-6	Curium-243	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15758-45-9	Selenium-79	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
15832-50-5	Tin-126	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
1634-04-4	Methyl tert-butyl ether	2.34E-05	(µg/g DW plant)/(µg/g air)	[1]
16887-00-6	Chloride			
16984-48-8	Fluoride			
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	6.55E+04	(µg/g DW plant)/(µg/g air)	[3]
189-55-9	Dibenzo[a,i]pyrene	2.25E+08	(µg/g DW plant)/(µg/g air)	[1]
189-64-0	Dibenzo[a,h]pyrene	2.25E+08	(µg/g DW plant)/(µg/g air)	[1]
191-24-2	Benzo(g,h,i)perylene	4.76E+04	(µg/g DW plant)/(µg/g air)	[1]
191-30-0	Dibenzo(a,l)pyrene	6.45E+08	(µg/g DW plant)/(µg/g air)	[1]
192-65-4	Dibenzo[a,e]pyrene	2.25E+08	(µg/g DW plant)/(µg/g air)	[1]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
192-97-2	Benzo(e)pyrene	1.35E+06	(µg/g DW plant)/(µg/g air)	[1]
193-39-5	Indeno(1,2,3-cd)pyrene	3.73E+05	(µg/g DW plant)/(µg/g air)	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	5.20E+05	(µg/g DW plant)/(µg/g air)	[3]
205-82-3	Benzo[j]fluoranthene	8.85E+05	(µg/g DW plant)/(µg/g air)	[1]
205-99-2	Benzo(b)fluoranthene	1.68E+03	(µg/g DW plant)/(µg/g air)	[3]
206-44-0	Fluoranthene	7.38E+02	(µg/g DW plant)/(µg/g air)	[3]
207-08-9	Benzo(k)fluoranthene	2.11E+05	(µg/g DW plant)/(µg/g air)	[3]
208-96-8	Acenaphthylene	1.72E-01	(µg/g DW plant)/(µg/g air)	[1]
218-01-9	Chrysene	6.92E+02	(µg/g DW plant)/(µg/g air)	[3]
224-42-0	Dibenz[a,j]acridine	3.12E+07	(µg/g DW plant)/(µg/g air)	[8]
2245-38-7	2,3,5-Trimethylnaphthalene			
226-36-8	Dibenz[a,h]acridine	3.12E+07	(µg/g DW plant)/(µg/g air)	[8]
22967-92-6	Methyl mercury	0.00E+00	(µg/g DW plant)/(µg/g air)	[3]
23950-58-5	Pronamide	2.57E+04	(µg/g DW plant)/(µg/g air)	[3]
24959-67-9	Bromide			
27154-33-2	Trichlorofluoroethane	2.65E-04	(µg/g DW plant)/(µg/g air)	[9]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	7.43E+03	(µg/g DW plant)/(µg/g air)	[1]
319-84-6	alpha-BHC	5.66E+01	(µg/g DW plant)/(µg/g air)	[3]
319-85-7	beta-BHC	8.42E+02	(µg/g DW plant)/(µg/g air)	[3]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	6.84E+04	(µg/g DW plant)/(µg/g air)	[1]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	1.15E+03	(µg/g DW plant)/(µg/g air)	[1]
3268-87-9	Octachlorodibenzo(p)dioxin	2.36E+06	(µg/g DW plant)/(µg/g air)	[3]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	6.36E+04	(µg/g DW plant)/(µg/g air)	[1]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	9.10E+05	(µg/g DW plant)/(µg/g air)	[3]
3697-24-3	5-Methylchrysene	6.92E+02	(µg/g DW plant)/(µg/g air)	[7]
378253-40-8	Barium-137m	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
378253-44-2	Cadmium-113m	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
378782-82-2	Niobium-93m	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	4.85E+04	(µg/g DW plant)/(µg/g air)	[1]
39001-02-0	Octachlorodibenzofuran	2.28E+06	(µg/g DW plant)/(µg/g air)	[3]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	5.20E+05	(µg/g DW plant)/(µg/g air)	[3]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	7.08E+05	(µg/g DW plant)/(µg/g air)	[1]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	2.39E+05	(µg/g DW plant)/(µg/g air)	[3]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	2.52E-02	(µg/g DW plant)/(µg/g air)	[1]
41851-50-7	Chlorocyclopentadiene	2.36E-05	(µg/g DW plant)/(µg/g air)	[1]
460-19-5	Cyanogen (oxalonitrile)	3.08E-07	(µg/g DW plant)/(µg/g air)	[1]
4786-20-3	2-Butenenitrile			
50-00-0	Formaldehyde	3.92E-01	(µg/g DW plant)/(µg/g air)	[3]
50-32-8	Benzo(a)pyrene	1.25E+05	(µg/g DW plant)/(µg/g air)	[3]
506-68-3	Cyanogen bromide (bromocyanide)	2.74E-08	(µg/g DW plant)/(µg/g air)	[1]
506-77-4	Cyanogen chloride	2.77E-07	(µg/g DW plant)/(µg/g air)	[1]
51-28-5	2,4-Dinitrophenol	5.51E+00	(µg/g DW plant)/(µg/g air)	[3]
51-79-6	Ethyl carbamate (urethane)	6.02E-01	(µg/g DW plant)/(µg/g air)	[1]
510-15-6	Chlorobenzilate	3.40E+04	(µg/g DW plant)/(µg/g air)	[3]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	4.57E+04	(µg/g DW plant)/(µg/g air)	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	7.93E+04	(µg/g DW plant)/(µg/g air)	[1]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	2.34E-01	(µg/g DW plant)/(µg/g air)	[1]
53-70-3	Dibenz[a,h]anthracene	3.12E+07	(µg/g DW plant)/(µg/g air)	[3]
532-27-4	2-Chloroacetophenone	4.50E-02	(µg/g DW plant)/(µg/g air)	[1]
534-52-1	4,6-Dinitro-o-cresol	1.77E-01	(µg/g DW plant)/(µg/g air)	[1]
5385-75-1	Dibenzo(a,e)fluoranthene	1.58E+07	(µg/g DW plant)/(µg/g air)	[1]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	5.63E-05	(µg/g DW plant)/(µg/g air)	[1]
540-73-8	1,2-Dimethylhydrazine	5.24E-03	(µg/g DW plant)/(µg/g air)	[1]
540-84-1	2,2,4-Trimethylpentane	3.88E-04	(µg/g DW plant)/(µg/g air)	[1]
541-73-1	1,3-Dichlorobenzene	1.23E-01	(µg/g DW plant)/(µg/g air)	[3]
542-75-6	1,3-Dichloropropene	1.57E-04	(µg/g DW plant)/(µg/g air)	[3]
542-88-1	Bis(chloromethyl)ether	2.75E-05	(µg/g DW plant)/(µg/g air)	[1]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	8.30E+05	(µg/g DW plant)/(µg/g air)	[3]
56-23-5	Carbon tetrachloride	1.79E-03	(µg/g DW plant)/(µg/g air)	[3]
56-49-5	3-Methylcholanthrene	7.34E+04	(µg/g DW plant)/(µg/g air)	[1]
56-55-3	Benzo(a)anthracene	1.93E+04	(µg/g DW plant)/(µg/g air)	[3]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
57-12-5	Cyanide	4.29E-07	(µg/g DW plant)/(µg/g air)	[3]
57-24-9	Strychnine	8.40E+07	(µg/g DW plant)/(µg/g air)	[3]
57-74-9	Chlordane	8.22E+02	(µg/g DW plant)/(µg/g air)	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	9.75E+04	(µg/g DW plant)/(µg/g air)	[3]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	9.75E+04	(µg/g DW plant)/(µg/g air)	[3]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.62E+05	(µg/g DW plant)/(µg/g air)	[3]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	1.64E+04	(µg/g DW plant)/(µg/g air)	[1]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	5.20E+05	(µg/g DW plant)/(µg/g air)	[3]
58-89-9	gamma-BHC (Lindane)	6.83E+00	(µg/g DW plant)/(µg/g air)	[1]
58-90-2	2,3,4,6-Tetrachlorophenol	6.99E+02	(µg/g DW plant)/(µg/g air)	[3]
581-42-0	2,6-Dimethylnaphthalene			
584-84-9	2,4-Toluene diisocyanate	7.75E+01	(µg/g DW plant)/(µg/g air)	[4]
589-38-8	3-Hexanone	9.36E-03	(µg/g DW plant)/(µg/g air)	[1]
59-50-7	4-Chloro-3-methylphenol	4.57E+01	(µg/g DW plant)/(µg/g air)	[3]
59-89-2	N-Nitrosomorpholine	7.76E-01	(µg/g DW plant)/(µg/g air)	[1]
591-50-4	Benzene, iodo-			
591-78-6	2-Hexanone	4.33E-04	(µg/g DW plant)/(µg/g air)	[1]
593-60-2	Bromoethene (Vinyl bromide)	5.22E-06	(µg/g DW plant)/(µg/g air)	[1]
593-74-8	Dimethyl Mercury			
60-11-7	Dimethyl aminoazobenzene	1.05E+07	(µg/g DW plant)/(µg/g air)	[1]
60-29-7	Ethyl ether	9.86E-06	(µg/g DW plant)/(µg/g air)	[1]
60-35-5	Acetamide	5.77E-01	(µg/g DW plant)/(µg/g air)	[1]
602-87-9	5-Nitroacenaphthene	4.97E+00	(µg/g DW plant)/(µg/g air)	[5]
606-20-2	2,6-Dinitrotoluene	5.08E+00	(µg/g DW plant)/(µg/g air)	[3]
608-93-5	Pentachlorobenzene	2.52E+01	(µg/g DW plant)/(µg/g air)	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	1.62E+05	(µg/g DW plant)/(µg/g air)	[3]
61626-71-9	Dichloropentadiene	4.52E-03	(µg/g DW plant)/(µg/g air)	[1]
62-50-0	Ethyl methanesulfonate	1.18E-02	(µg/g DW plant)/(µg/g air)	[3]
62-53-3	Aniline	2.67E-01	(µg/g DW plant)/(µg/g air)	[3]
62-75-9	N-Nitroso-N,N-dimethylamine	1.86E-04	(µg/g DW plant)/(µg/g air)	[1]
621-64-7	N-Nitroso-di-n-propylamine	6.98E-01	(µg/g DW plant)/(µg/g air)	[3]
624-83-9	Methyl isocyanate	1.00E-03	(µg/g DW plant)/(µg/g air)	[6]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
628-73-9	Hexanenitrile	3.45E-02	(µg/g DW plant)/(µg/g air)	[1]
630-08-0	Carbon monoxide			
630-20-6	1,1,1,2-Tetrachloroethane	3.90E-02	(µg/g DW plant)/(µg/g air)	[3]
64-18-6	Formic acid (methanoic acid)	8.90E-02	(µg/g DW plant)/(µg/g air)	[3]
65-85-0	Benzoic acid	1.91E+00	(µg/g DW plant)/(µg/g air)	[3]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	1.64E+04	(µg/g DW plant)/(µg/g air)	[1]
67-56-1	Methyl alcohol	1.86E-03	(µg/g DW plant)/(µg/g air)	[3]
67-63-0	2-Propyl alcohol	1.91E-04	(µg/g DW plant)/(µg/g air)	[1]
67-64-1	2-Propanone (Acetone)	7.96E-04	(µg/g DW plant)/(µg/g air)	[3]
67-66-3	Chloroform	2.04E-03	(µg/g DW plant)/(µg/g air)	[3]
67-72-1	Hexachloroethane	2.20E-01	(µg/g DW plant)/(µg/g air)	[3]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	8.30E+05	(µg/g DW plant)/(µg/g air)	[3]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.06E+05	(µg/g DW plant)/(µg/g air)	[1]
70-30-4	Hexachlorophene	1.09E+13	(µg/g DW plant)/(µg/g air)	[3]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	2.53E+03	(µg/g DW plant)/(µg/g air)	[1]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1.62E+05	(µg/g DW plant)/(µg/g air)	[3]
71-36-3	n-Butyl alcohol	1.34E-03	(µg/g DW plant)/(µg/g air)	[1]
71-43-2	Benzene	1.72E-03	(µg/g DW plant)/(µg/g air)	[3]
71-55-6	1,1,1-Trichloroethane	1.51E-03	(µg/g DW plant)/(µg/g air)	[3]
72-43-5	Methoxychlor	4.52E+02	(µg/g DW plant)/(µg/g air)	[3]
72-55-9	4,4-DDE	3.13E+03	(µg/g DW plant)/(µg/g air)	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1.62E+05	(µg/g DW plant)/(µg/g air)	[3]
74-83-9	Bromomethane	1.66E-04	(µg/g DW plant)/(µg/g air)	[3]
74-87-3	Chloromethane	5.90E-05	(µg/g DW plant)/(µg/g air)	[3]
74-88-4	Iodomethane	4.31E-04	(µg/g DW plant)/(µg/g air)	[1]
74-95-3	Methylene bromide	2.76E-03	(µg/g DW plant)/(µg/g air)	[3]
74-97-5	Bromochloromethane	2.97E-05	(µg/g DW plant)/(µg/g air)	[1]
7429-90-5	Aluminum	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7439-89-6	Iron	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7439-92-1	Lead	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7439-93-2	Lithium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7439-95-4	Magnesium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
7439-96-5	Manganese	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7439-97-6	Mercury	0.00E+00	(µg/g DW plant)/(µg/g air)	[3]
7439-98-7	Molybdenum	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-02-0	Nickel	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-16-6	Rhodium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-22-4	Silver	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-23-5	Sodium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-24-6	Strontium (total)	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-25-7	Tantalum	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-28-0	Thallium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-29-1	Thorium-232	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-31-5	Tin	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-33-7	Tungsten	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-36-0	Antimony	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-38-2	Arsenic	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-39-3	Barium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-41-7	Beryllium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-43-9	Cadmium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-47-3	Chromium			
7440-48-4	Cobalt	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-50-8	Copper	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-61-1	Uranium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-61-1R	Uranium-238	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-62-2	Vanadium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-65-5	Yttrium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-66-6	Zinc	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7440-67-7	Zirconium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7446-09-5	Sulfur dioxide			
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	1.64E+04	(µg/g DW plant)/(µg/g air)	[1]
7487-94-7	Mercury (Hg^{+2})	1.80E+03	(µg/g DW plant)/(µg/g air)	[3]
75-00-3	Chloroethane	1.97E-04	(µg/g DW plant)/(µg/g air)	[3]
75-01-4	1-Chloroethene	6.41E-05	(µg/g DW plant)/(µg/g air)	[3]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
75-02-5	Fluoroethene (vinyl fluoride)	8.77E-06	(µg/g DW plant)/(µg/g air)	[1]
75-05-8	Acetonitrile	7.02E-04	(µg/g DW plant)/(µg/g air)	[3]
75-07-0	Acetaldehyde	4.13E-04	(µg/g DW plant)/(µg/g air)	[3]
75-09-2	Dichloromethane (Methylene Chloride)	6.16E-04	(µg/g DW plant)/(µg/g air)	[3]
75-15-0	Carbon disulfide	4.10E-04	(µg/g DW plant)/(µg/g air)	[3]
75-21-8	Ethylene oxide (Oxirane)	1.81E-04	(µg/g DW plant)/(µg/g air)	[3]
75-25-2	Bromoform	2.87E-06	(µg/g DW plant)/(µg/g air)	[3]
75-27-4	Bromodichloromethane	6.02E-03	(µg/g DW plant)/(µg/g air)	[3]
75-29-6	2-Chloropropane	8.25E-06	(µg/g DW plant)/(µg/g air)	[1]
75-34-3	1,1-Dichloroethane	8.25E-04	(µg/g DW plant)/(µg/g air)	[3]
75-35-4	1,1-Dichloroethene	3.71E-04	(µg/g DW plant)/(µg/g air)	[3]
75-44-5	Phosgene (hydrogen phosphide)	5.87E-07	(µg/g DW plant)/(µg/g air)	[1]
75-45-6	Chlorodifluoromethane	1.95E-05	(µg/g DW plant)/(µg/g air)	[3]
75-50-3	Trimethylamine	7.96E-04	(µg/g DW plant)/(µg/g air)	[1]
75-69-4	Trichlorofluoromethane	2.65E-04	(µg/g DW plant)/(µg/g air)	[3]
75-71-8	Dichlorodifluoromethane	3.25E-05	(µg/g DW plant)/(µg/g air)	[3]
76-01-7	Pentachloroethane	7.74E-02	(µg/g DW plant)/(µg/g air)	[1]
76-13-1	1,2,2-Trichlorotrifluoroethane	6.03E-06	(µg/g DW plant)/(µg/g air)	[1]
76-44-8	Heptachlor	1.42E-03	(µg/g DW plant)/(µg/g air)	[3]
764-41-0	1,4-Dichloro-2-butene	9.44E-05	(µg/g DW plant)/(µg/g air)	[1]
7647-01-0	Hydrogen chloride			
765-34-4	Glycidylaldehyde	1.30E-03	(µg/g DW plant)/(µg/g air)	[1]
7664-39-3	Hydrogen Fluoride			
7664-41-7	Ammonia/Ammonium			
77-47-4	Hexachlorocyclopentadiene	4.83E-01	(µg/g DW plant)/(µg/g air)	[3]
77-78-1	Dimethyl sulfate	5.05E-04	(µg/g DW plant)/(µg/g air)	[1]
7704-34-9	Total Sulfur (thermodynamically stable)			
7723-14-0	Phosphorus			
7782-41-4	Fluorine gas (F_2)			
7782-49-2	Selenium	0.00E+00	(µg/g DW plant)/(µg/g air)	[2]
7782-50-5	Chlorine			
78-83-1	2-Methylpropyl alcohol	9.01E-04	(µg/g DW plant)/(µg/g air)	[1]
78-87-5	1,2-Dichloropropane	2.69E-03	(µg/g DW plant)/(µg/g air)	[3]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
78-93-3	2-Butanone	2.03E-03	(µg/g DW plant)/(µg/g air)	[3]
79-00-5	1,1,2-Trichloroethane	8.29E-03	(µg/g DW plant)/(µg/g air)	[3]
79-01-6	1,1,2-Trichloroethylene	2.01E-03	(µg/g DW plant)/(µg/g air)	[3]
79-10-7	2-Propenoic acid	8.73E-03	(µg/g DW plant)/(µg/g air)	[1]
79-34-5	1,1,2,2-Tetrachloroethane	5.91E-02	(µg/g DW plant)/(µg/g air)	[3]
79-46-9	2-Nitropropane	1.12E-04	(µg/g DW plant)/(µg/g air)	[1]
80-62-6	Methyl methacrylate	1.19E-04	(µg/g DW plant)/(µg/g air)	[1]
82-68-8	Pentachloronitrobenzene (PCNB)	1.29E+01	(µg/g DW plant)/(µg/g air)	[3]
822-06-0	Hexamethylene-1,5-diisocyanate	7.30E-02	(µg/g DW plant)/(µg/g air)	[1]
823-40-5	Toluene-2,6-diamine	2.13E+00	(µg/g DW plant)/(µg/g air)	[1]
83-32-9	Acenaphthene	4.97E+00	(µg/g DW plant)/(µg/g air)	[3]
832-69-9	1-Methylphenanthrene			
84-66-2	Diethyl phthalate	5.71E+01	(µg/g DW plant)/(µg/g air)	[3]
84-74-2	Di-n-butylphthalate	3.15E+03	(µg/g DW plant)/(µg/g air)	[3]
85-01-8	Phenanthrene	1.51E+02	(µg/g DW plant)/(µg/g air)	[3]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	7.50E-01	(µg/g DW plant)/(µg/g air)	[3]
85-68-7	Butylbenzylphthalate	7.11E+03	(µg/g DW plant)/(µg/g air)	[3]
86-73-7	Fluorene	2.60E+01	(µg/g DW plant)/(µg/g air)	[3]
87-61-6	1,2,3-Trichlorobenzene	9.20E-01	(µg/g DW plant)/(µg/g air)	[3]
87-68-3	Hexachlorobutadiene	8.93E-01	(µg/g DW plant)/(µg/g air)	[3]
87-86-5	Pentachlorophenol	6.29E+05	(µg/g DW plant)/(µg/g air)	[3]
88-06-2	2,4,6-Trichlorophenol	6.25E+01	(µg/g DW plant)/(µg/g air)	[3]
88-74-4	o-Nitroaniline (2-nitroaniline)	4.79E+01	(µg/g DW plant)/(µg/g air)	[3]
88-75-5	2-Nitrophenol	4.76E-01	(µg/g DW plant)/(µg/g air)	[3]
90-04-0	o-Anisidine	1.09E+00	(µg/g DW plant)/(µg/g air)	[1]
90-12-0	1-Methylnaphthalene	3.52E-02	(µg/g DW plant)/(µg/g air)	[1]
91-20-3	Naphthalene	3.81E-01	(µg/g DW plant)/(µg/g air)	[3]
91-22-5	Quinoline	1.19E-01	(µg/g DW plant)/(µg/g air)	[1]
91-57-6	2-Methylnaphthalene	3.40E-02	(µg/g DW plant)/(µg/g air)	[1]
91-58-7	2-Chloronaphthalene	7.08E-01	(µg/g DW plant)/(µg/g air)	[3]
91-94-1	3,3'-Dichlorobenzidine	7.65E+04	(µg/g DW plant)/(µg/g air)	[3]
92-52-4	1,1`-Biphenyl	7.69E-02	(µg/g DW plant)/(µg/g air)	[1]

Table 3-5 Air-to-Plant Biotransfer Factors for Aboveground Produce

CAS Registry Number	Analyte Name	Air-to-Plant Biotransfer for Aboveground Produce (Bv_{ag})	Units for Air-To-Plant Biotransfer for Aboveground Produce	Reference
924-16-3	N-Nitroso-di-n-Buetylamine	1.96E-02	(µg/g DW plant)/(µg/g air)	[3]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	2.05E+00	(µg/g DW plant)/(µg/g air)	[3]
94-75-7	2,4-D	3.79E+01	(µg/g DW plant)/(µg/g air)	[1]
95-48-7	o-Cresol	5.56E+00	(µg/g DW plant)/(µg/g air)	[3]
95-49-8	o-Chlorotoluene	1.68E-03	(µg/g DW plant)/(µg/g air)	[1]
95-50-1	1,2-Dichlorobenzene	1.17E-01	(µg/g DW plant)/(µg/g air)	[3]
95-53-4	o-Toluidine	5.23E-01	(µg/g DW plant)/(µg/g air)	[3]
95-57-8	2-Chlorophenol	2.79E-02	(µg/g DW plant)/(µg/g air)	[3]
95-63-6	1,2,4-Trimethyl benzene	1.63E-03	(µg/g DW plant)/(µg/g air)	[1]
95-94-3	1,2,4,5-Tetrachlorobenzene	2.78E+00	(µg/g DW plant)/(µg/g air)	[3]
95-95-4	2,4,5-Trichlorophenol	1.18E+02	(µg/g DW plant)/(µg/g air)	[3]
96-12-8	1,2-Dibromo-3-chloropropane	1.05E-01	(µg/g DW plant)/(µg/g air)	[3]
96-18-4	1,2,3-Trichloropropane	1.84E-02	(µg/g DW plant)/(µg/g air)	[3]
96-45-7	Ethylene thiourea	8.09E-04	(µg/g DW plant)/(µg/g air)	[1]
97-63-2	Ethyl methacrylate	7.73E-03	(µg/g DW plant)/(µg/g air)	[3]
98-01-1	Furfural	1.11E-03	(µg/g DW plant)/(µg/g air)	[1]
98-06-6	tert-Butyl benzene	1.01E-01	(µg/g DW plant)/(µg/g air)	[1]
98-07-7	Benzotrichloride	7.51E-02	(µg/g DW plant)/(µg/g air)	[1]
98-82-8	Cumene	4.06E-04	(µg/g DW plant)/(µg/g air)	[3]
98-83-9	Methyl styrene (mixed isomers)	2.73E-03	(µg/g DW plant)/(µg/g air)	[1]
98-86-2	Acetophenone	2.52E-01	(µg/g DW plant)/(µg/g air)	[3]
98-95-3	Nitrobenzene	2.17E-01	(µg/g DW plant)/(µg/g air)	[3]
99-35-4	1,3,5-Trinitrobenzene	3.21E+03	(µg/g DW plant)/(µg/g air)	[3]
99-65-0	1,3-Dinitrobenzene	9.62E+00	(µg/g DW plant)/(µg/g air)	[3]
99-87-6	p-Cymene	1.18E-01	(µg/g DW plant)/(µg/g air)	[1]

Reference **Reference (source) for Air-To-Plant Biotransfer for Aboveground Produce**

[1] Calculated value per Eq. A-2-19 and A-2-20 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

[2] Default value from Section A2-2.12-4 of EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Air-To-Plant Biotransfer for Aboveground Produce
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Contents

4 Animal Biotransfer and Bioconcentration Factors for Human Health Risk Assessment 4-1

Tables

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork 4-1
Table 4-2 Biotransfer Factors for Chicken and Eggs 4-19
Table 4-3 Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors 4-33
Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish 4-35
Table 4-5 Biota-Sediment Accumulation Factor for Fish 4-51

4 Animal Biotransfer and Bioconcentration Factors for Human Health Risk Assessment

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
100-02-7	p-Nitrophenol	2.52E-03	day/kg FW	[2]	5.30E-04	day/kg FW	[2]	3.05E-03	day/kg FW	[2]
100-21-0	Phthalic acid	1.30E-06	day/kg FW	[3]	4.00E-07	day/kg FW	[3]	3.51E-03	day/kg FW	[1]
100-25-4	1,4-Dinitrobenzene	7.90E-07	day/kg FW	[3]	2.50E-07	day/kg FW	[3]	1.42E-03	day/kg FW	[1]
100-40-3	4-Ethenylcyclohexene	2.48E-02	day/kg FW	[1]	5.23E-03	day/kg FW	[1]	3.00E-02	day/kg FW	[1]
100-41-4	Ethyl benzene	1.21E-02	day/kg FW	[2]	2.56E-03	day/kg FW	[2]	1.47E-02	day/kg FW	[2]
100-42-5	Styrene	1.09E-02	day/kg FW	[2]	2.30E-03	day/kg FW	[2]	1.32E-02	day/kg FW	[2]
100-44-7	Benzyl chloride	4.53E-03	day/kg FW	[2]	9.54E-04	day/kg FW	[2]	5.48E-03	day/kg FW	[2]
100-47-0	Benzonitrile	1.40E-03	day/kg FW	[2]	2.95E-04	day/kg FW	[2]	1.70E-03	day/kg FW	[2]
100-51-6	Benzyl alcohol	5.97E-04	day/kg FW	[2]	1.26E-04	day/kg FW	[2]	7.23E-04	day/kg FW	[2]
100-52-7	Benzaldehyde	1.22E-03	day/kg FW	[2]	2.56E-04	day/kg FW	[2]	1.47E-03	day/kg FW	[2]
10028-15-6	Ozone									
10028-17-8	Tritium				1.50E-02	day/kg FW	[3]			
10045-97-3	Cesium-137	5.00E-02	day/kg FW	[3]	8.40E-03	day/kg FW	[3]			
10061-01-5	cis-1,3-Dichloropropene	2.48E-03	day/kg FW	[12]	5.22E-04	day/kg FW	[12]	3.00E-03	day/kg FW	[10]
10061-02-6	trans-1,3-Dichloropropene	3.04E-03	day/kg FW	[1]	6.40E-04	day/kg FW	[1]	3.68E-03	day/kg FW	[1]
10098-91-6	Yttrium-90	1.00E-03	day/kg FW	[3]	2.00E-05	day/kg FW	[3]			
10098-97-2	Strontium-90	9.00E-03	day/kg FW	[3]	2.80E-03	day/kg FW	[3]			
101-55-3	4-Bromophenylphenyl ether	4.05E-02	day/kg FW	[2]	8.52E-03	day/kg FW	[2]	4.90E-02	day/kg FW	[2]
101-77-9	4,4-Methylenedianiline	1.00E-06	day/kg FW	[3]	3.10E-07	day/kg FW	[3]	1.79E-03	day/kg FW	[1]
10102-44-0	Nitrogen dioxide									
10198-40-0	Cobalt-60	1.00E-04	day/kg FW	[3]	7.00E-05	day/kg FW	[3]			
103-33-3	Azobenzene	1.60E-04	day/kg FW	[3]	5.00E-05	day/kg FW	[3]	2.78E-02	day/kg FW	[1]
103-65-1	n-Propyl benzene (Isocumene)	2.08E-02	day/kg FW	[1]	4.39E-03	day/kg FW	[1]	2.52E-02	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
104-51-8	n-Butylbenzene	3.21E-02	day/kg FW	[1]	6.75E-03	day/kg FW	[1]	3.88E-02	day/kg FW	[1]
104-76-7	2-Ethyl-1-hexanol	7.98E-03	day/kg FW	[1]	1.68E-03	day/kg FW	[1]	9.66E-03	day/kg FW	[1]
105-67-9	2,4-Dimethylphenol	4.53E-03	day/kg FW	[2]	9.53E-04	day/kg FW	[2]	5.48E-03	day/kg FW	[2]
10595-95-6	n-Nitrosomethyl-ethylamine	2.70E-08	day/kg FW	[3]	8.70E-09	day/kg FW	[3]	6.99E-05	day/kg FW	[1]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	1.53E-02	day/kg FW	[1]	3.22E-03	day/kg FW	[1]	1.85E-02	day/kg FW	[1]
106-44-5	p-Cresol (4-methyl phenol)	2.48E-03	day/kg FW	[2]	5.22E-04	day/kg FW	[2]	3.00E-03	day/kg FW	[2]
106-46-7	1,4-Dichlorobenzene	1.78E-02	day/kg FW	[2]	3.75E-03	day/kg FW	[2]	2.16E-02	day/kg FW	[2]
106-47-8	p-Chloroaniline	5.62E-05	day/kg FW	[2]	1.18E-05	day/kg FW	[2]	6.81E-05	day/kg FW	[2]
106-49-0	p-Toluidine	2.50E-06	day/kg FW	[3]	7.90E-07	day/kg FW	[3]	1.25E-03	day/kg FW	[1]
106-51-4	Quinone	8.49E-05	day/kg FW	[1]	1.79E-05	day/kg FW	[1]	1.03E-04	day/kg FW	[1]
106-88-7	1,2-Epoxybutane	6.90E-07	day/kg FW	[3]	2.20E-07	day/kg FW	[3]	4.45E-04	day/kg FW	[1]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	3.09E-05	day/kg FW	[2]	6.50E-06	day/kg FW	[2]	3.74E-05	day/kg FW	[2]
106-93-4	Ethylene dibromide	2.90E-03	day/kg FW	[2]	6.11E-04	day/kg FW	[2]	3.51E-03	day/kg FW	[2]
106-99-0	1,3-Butadiene	2.50E-06	day/kg FW	[3]	7.90E-07	day/kg FW	[3]	3.46E-03	day/kg FW	[1]
107-02-8	Acrolein	5.11E-05	day/kg FW	[2]	1.07E-05	day/kg FW	[2]	6.18E-05	day/kg FW	[2]
107-05-1	3-Chloropropene	6.30E-07	day/kg FW	[3]	2.00E-07	day/kg FW	[3]	3.15E-03	day/kg FW	[1]
107-06-2	1,2-Dichloroethane	1.26E-03	day/kg FW	[2]	2.66E-04	day/kg FW	[2]	1.53E-03	day/kg FW	[2]
107-12-0	Propionitrile	7.72E-05	day/kg FW	[1]	1.62E-05	day/kg FW	[1]	9.34E-05	day/kg FW	[1]
107-13-1	Acrylonitrile	9.55E-05	day/kg FW	[2]	2.01E-05	day/kg FW	[2]	1.16E-04	day/kg FW	[2]
107-19-7	Propargyl alcohol	1.00E-08	day/kg FW	[3]	3.30E-09	day/kg FW	[3]	2.40E-05	day/kg FW	[1]
107-21-1	Ethylene glycol (1,2-ethanediol)	3.10E-10	day/kg FW	[3]	9.90E-11	day/kg FW	[3]	1.10E-05	day/kg FW	[1]
107-98-2	Propylene glycol monomethyl ether	1.70E-08	day/kg FW	[3]	5.20E-09	day/kg FW	[3]	1.79E-05	day/kg FW	[1]
108-05-4	Acetic acid vinyl ester	2.80E-04	day/kg FW	[2]	5.89E-05	day/kg FW	[2]	3.39E-04	day/kg FW	[2]
108-10-1	4-Methyl-2-pentanone	7.25E-04	day/kg FW	[2]	1.53E-04	day/kg FW	[2]	8.77E-04	day/kg FW	[2]
108-39-4	m-Cresol	2.73E-03	day/kg FW	[2]	5.74E-04	day/kg FW	[2]	3.30E-03	day/kg FW	[2]
108-60-1	Bis(2-chloroisopropyl) ether	9.50E-06	day/kg FW	[3]	3.00E-06	day/kg FW	[3]	7.02E-03	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
108-67-8	1,3,5-Trimethylbenzene	1.66E-02	day/kg FW	[2]	3.50E-03	day/kg FW	[2]	2.01E-02	day/kg FW	[2]
108-86-1	Bromobenzene (Phenyl bromide)	1.08E-02	day/kg FW	[1]	2.27E-03	day/kg FW	[1]	1.31E-02	day/kg FW	[1]
108-87-2	Methylcyclohexane	1.80E-05	day/kg FW	[3]	5.70E-06	day/kg FW	[3]	2.37E-02	day/kg FW	[1]
108-88-3	Toluene	7.69E-03	day/kg FW	[2]	1.62E-03	day/kg FW	[2]	9.31E-03	day/kg FW	[2]
108-90-7	Chlorobenzene	8.68E-03	day/kg FW	[2]	1.83E-03	day/kg FW	[2]	1.05E-02	day/kg FW	[2]
108-94-1	Cyclohexanone	1.60E-07	day/kg FW	[3]	5.10E-08	day/kg FW	[3]	4.01E-04	day/kg FW	[1]
108-95-2	Phenol	1.26E-03	day/kg FW	[2]	2.65E-04	day/kg FW	[2]	1.52E-03	day/kg FW	[2]
109-74-0	n-Butanenitrile	1.81E-04	day/kg FW	[1]	3.81E-05	day/kg FW	[1]	2.19E-04	day/kg FW	[1]
109-75-1	3-Butenenitrile									
109-77-3	Malononitrile	2.70E-08	day/kg FW	[3]	8.70E-09	day/kg FW	[3]	1.33E-05	day/kg FW	[1]
109-86-4	2-Methoxyethanol	4.20E-09	day/kg FW	[3]	1.30E-09	day/kg FW	[3]	1.10E-05	day/kg FW	[1]
109-99-9	Tetrahydrofuran	1.55E-04	day/kg FW	[2]	3.26E-05	day/kg FW	[2]	1.87E-04	day/kg FW	[2]
110-00-9	Furan	5.00E-07	day/kg FW	[3]	1.60E-07	day/kg FW	[3]	1.14E-03	day/kg FW	[1]
110-54-3	n-Hexane	2.00E-04	day/kg FW	[3]	6.30E-05	day/kg FW	[3]	2.94E-02	day/kg FW	[1]
110-59-8	Pentanenitrile	6.21E-04	day/kg FW	[1]	1.31E-04	day/kg FW	[1]	7.52E-04	day/kg FW	[1]
110-80-5	2-Ethoxyethanol	2.00E-08	day/kg FW	[3]	6.30E-09	day/kg FW	[3]	2.81E-05	day/kg FW	[1]
110-82-7	Cyclohexane	1.69E-02	day/kg FW	[1]	3.56E-03	day/kg FW	[1]	2.05E-02	day/kg FW	[1]
110-83-8	Cyclohexene	9.31E-03	day/kg FW	[1]	1.96E-03	day/kg FW	[1]	1.13E-02	day/kg FW	[1]
110-86-1	Pyridine	2.36E-04	day/kg FW	[2]	4.96E-05	day/kg FW	[2]	2.85E-04	day/kg FW	[2]
111-15-9	Ethylene glycol monoethyl ether acetate	1.10E-07	day/kg FW	[3]	3.50E-08	day/kg FW	[3]	2.50E-04	day/kg FW	[1]
111-44-4	Bis(2-chloroethyl)ether	8.60E-04	day/kg FW	[2]	1.81E-04	day/kg FW	[2]	1.04E-03	day/kg FW	[2]
111-65-9	n-Octane	4.03E-02	day/kg FW	[1]	8.48E-03	day/kg FW	[1]	4.87E-02	day/kg FW	[1]
111-76-2	2-Butoxyethanol	1.70E-07	day/kg FW	[3]	5.30E-08	day/kg FW	[3]	4.18E-04	day/kg FW	[1]
111-84-2	n-Nonane	4.02E-02	day/kg FW	[1]	8.46E-03	day/kg FW	[1]	4.86E-02	day/kg FW	[1]
111-91-1	Bis(2-chloroethoxy) methane	5.00E-07	day/kg FW	[3]	1.60E-07	day/kg FW	[3]	1.06E-03	day/kg FW	[1]
112-30-1	1-Decanol	3.48E-02	day/kg FW	[1]	7.32E-03	day/kg FW	[1]	4.21E-02	day/kg FW	[1]
112-31-2	Decanal									
112-40-3	Dodecane									

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
1120-21-4	Undecane									
1120-71-4	1,3-Propane sultone	2.58E-05	day/kg FW	[1]	5.43E-06	day/kg FW	[1]	3.12E-05	day/kg FW	[1]
117-81-7	Bis(2-ethylhexyl) phthalate	3.99E-02	day/kg FW	[2]	8.40E-03	day/kg FW	[2]	4.83E-02	day/kg FW	[2]
117-84-0	Di-n-octylphthalate	7.77E-03	day/kg FW	[2]	1.64E-03	day/kg FW	[2]	9.40E-03	day/kg FW	[2]
118-74-1	Hexachlorobenzene	4.06E-02	day/kg FW	[2]	8.55E-03	day/kg FW	[2]	4.92E-02	day/kg FW	[2]
119-90-4	3,3'-Dimethoxybenzidine	2.14E-03	day/kg FW	[2]	4.51E-04	day/kg FW	[2]	2.59E-03	day/kg FW	[2]
120-12-7	Anthracene	3.38E-02	day/kg FW	[2]	7.12E-03	day/kg FW	[2]	4.09E-02	day/kg FW	[2]
120-82-1	1,2,4-Trichlorobenzene	2.60E-02	day/kg FW	[2]	5.47E-03	day/kg FW	[2]	3.15E-02	day/kg FW	[2]
120-83-2	2,4-Dichlorophenol	5.71E-03	day/kg FW	[2]	1.20E-03	day/kg FW	[2]	6.92E-03	day/kg FW	[2]
121-14-2	2,4-Dinitrotoluene	2.81E-03	day/kg FW	[2]	5.92E-04	day/kg FW	[2]	3.41E-03	day/kg FW	[2]
122-39-4	N,N-Diphenylamine	7.90E-05	day/kg FW	[3]	2.50E-05	day/kg FW	[3]	2.16E-02	day/kg FW	[1]
122-66-7	1,2-Diphenylhydrazine	9.75E-03	day/kg FW	[2]	2.05E-03	day/kg FW	[2]	1.18E-02	day/kg FW	[2]
123-33-1	Maleic hydrazide	1.00E-08	day/kg FW	[3]	3.10E-09	day/kg FW	[3]	1.10E-05	day/kg FW	[1]
123-38-6	Propionaldehyde	2.07E-04	day/kg FW	[1]	4.35E-05	day/kg FW	[1]	2.50E-04	day/kg FW	[1]
123-72-8	Butanal	3.83E-04	day/kg FW	[1]	8.07E-05	day/kg FW	[1]	4.64E-04	day/kg FW	[1]
123-91-1	1,4-Dioxan	2.65E-05	day/kg FW	[2]	5.57E-06	day/kg FW	[2]	3.20E-05	day/kg FW	[2]
124-18-5	Decane									
124-38-9	Carbon dioxide									
124-48-1	Chlorodibromomethane	4.10E-03	day/kg FW	[2]	8.63E-04	day/kg FW	[2]	4.96E-03	day/kg FW	[2]
126-73-8	Tributyl phosphate	2.60E-02	day/kg FW	[1]	5.47E-03	day/kg FW	[1]	3.15E-02	day/kg FW	[1]
126-98-7	2-Methyl-2-propenenitrile	1.85E-04	day/kg FW	[2]	3.90E-05	day/kg FW	[2]	2.24E-04	day/kg FW	[2]
127-18-4	1,1,2,2-Tetrachloroethene	1.63E-02	day/kg FW	[2]	3.43E-03	day/kg FW	[2]	1.97E-02	day/kg FW	[2]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	3.99E-02	day/kg FW	[1]	8.40E-03	day/kg FW	[1]	4.83E-02	day/kg FW	[1]
129-00-0	Pyrene	3.84E-02	day/kg FW	[2]	8.09E-03	day/kg FW	[2]	4.65E-02	day/kg FW	[2]
131-11-3	Dimethyl Phthalate	1.40E-03	day/kg FW	[2]	2.95E-04	day/kg FW	[2]	1.70E-03	day/kg FW	[2]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	5.00E-11	day/kg FW	[3]	1.60E-11	day/kg FW	[3]	3.39E-02	day/kg FW	[1]
132-64-9	Dibenzofuran	3.30E-04	day/kg FW	[3]	1.00E-04	day/kg FW	[3]	3.39E-02	day/kg FW	[1]
133-06-2	Captan	5.00E-06	day/kg FW	[3]	1.60E-06	day/kg FW	[3]	1.05E-02	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
1330-20-7	Xylenes (mixed isomers)	5.00E-05	day/kg FW	[3]	1.60E-05	day/kg FW	[3]	1.50E-02	day/kg FW	[1]
1336-36-3	Polychlorinated biphenyls	2.50E-02	day/kg FW	[3]	7.90E-03	day/kg FW	[3]	4.12E-02	day/kg FW	[1]
134-32-7	alpha-Naphthylamine	4.22E-03	day/kg FW	[1]	8.88E-04	day/kg FW	[1]	5.11E-03	day/kg FW	[1]
135-98-8	sec-Butylbenzene	3.48E-02	day/kg FW	[1]	7.32E-03	day/kg FW	[1]	4.21E-02	day/kg FW	[1]
13966-29-5	Uranium-234	3.00E-04	day/kg FW	[3]	4.00E-04	day/kg FW	[3]			
13967-48-1	Ruthenium-106	5.30E-02	day/kg FW	[3]	1.00E-02	day/kg FW	[3]			
13967-70-9	Cesium-134	5.00E-02	day/kg FW	[3]	7.90E-03	day/kg FW	[3]			
13968-55-3	Uranium-233	3.00E-04	day/kg FW	[3]	4.00E-04	day/kg FW	[3]			
13981-15-2	Curium-244	2.00E-05	day/kg FW	[3]	4.00E-07	day/kg FW	[3]			
13981-16-3	Plutonium-238	1.00E-05	day/kg FW	[3]	1.10E-06	day/kg FW	[3]			
13981-37-8	Nickel-63	5.00E-03	day/kg FW	[3]	1.60E-02	day/kg FW	[3]			
13982-10-0	Plutonium-242	1.00E-05	day/kg FW	[3]	1.10E-06	day/kg FW	[3]			
13982-63-3	Radium-226	1.20E-02	day/kg FW	[3]	2.80E-03	day/kg FW	[3]			
13982-70-2	Uranium-236	3.00E-04	day/kg FW	[3]	4.00E-04	day/kg FW	[3]			
13994-20-2	Neptunium-237	1.00E-03	day/kg FW	[3]	1.00E-05	day/kg FW	[3]			
141-78-6	Acetic acid ethyl ester	1.60E-07	day/kg FW	[3]	5.10E-08	day/kg FW	[3]	3.39E-04	day/kg FW	[1]
14119-32-5	Plutonium-241	1.00E-05	day/kg FW	[3]	1.10E-06	day/kg FW	[3]			
14119-33-6	Plutonium-240	1.00E-05	day/kg FW	[3]	1.10E-06	day/kg FW	[3]			
14133-76-7	Technetium-99	1.00E-04	day/kg FW	[3]	1.40E-04	day/kg FW	[3]			
14158-29-3	Uranium-232	3.00E-04	day/kg FW	[3]	4.00E-04	day/kg FW	[3]			
14234-35-6	Antimony-125	7.00E-03	day/kg FW	[3]	4.80E-04	day/kg FW	[3]			
14265-44-2	Phosphate									
14331-85-2	Protactinium-231	1.00E-05	day/kg FW	[3]	5.00E-06	day/kg FW	[3]			
14336-70-0	Nickel-59	5.00E-03	day/kg FW	[3]	1.60E-02	day/kg FW	[3]			
14391-16-3	Europium-155	2.00E-03	day/kg FW	[3]	6.00E-05	day/kg FW	[3]			
145-73-3	Endothall	2.00E-06	day/kg FW	[3]	6.40E-07	day/kg FW	[3]	3.05E-03	day/kg FW	[1]
14596-10-2	Americium-241	4.00E-05	day/kg FW	[3]	1.50E-06	day/kg FW	[3]			
14683-23-9	Europium-152	2.00E-03	day/kg FW	[3]	6.00E-05	day/kg FW	[3]			
14762-75-5	Carbon-14									
14797-55-8	Nitrate									
14797-65-0	Nitrite									

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
14808-79-8	Sulfate									
14952-40-0	Actinium-227	4.80E-02	day/kg FW	[3]	2.30E-02	day/kg FW	[3]			
14993-75-0	Americium-243	1.00E-03	day/kg FW	[3]	6.50E-06	day/kg FW	[3]			
15046-84-1	Iodine-129	4.00E-02	day/kg FW	[3]	1.00E-02	day/kg FW	[3]			
15117-48-3	Plutonium-239	1.00E-05	day/kg FW	[3]	1.10E-06	day/kg FW	[3]			
15117-96-1	Uranium-235	4.00E-04	day/kg FW	[3]	4.10E-04	day/kg FW	[3]			
15262-20-1	Radium-228	9.30E-04	day/kg FW	[3]	1.30E-03	day/kg FW	[3]			
15510-73-3	Curium-242	2.00E-05	day/kg FW	[3]	4.00E-07	day/kg FW	[3]			
15585-10-1	Europium-154	2.00E-03	day/kg FW	[3]	6.00E-05	day/kg FW	[3]			
15594-54-4	Thorium-229	2.00E-02	day/kg FW	[3]	3.30E-02	day/kg FW	[3]			
156-59-2	cis-1,2-Dichloroethene	2.48E-03	day/kg FW	[2]	5.22E-04	day/kg FW	[2]	3.00E-03	day/kg FW	[2]
156-60-5	1,2-trans-Dichloroethene	3.38E-03	day/kg FW	[2]	7.12E-04	day/kg FW	[2]	4.09E-03	day/kg FW	[2]
15715-94-3	Samarium-151	5.00E-03	day/kg FW	[3]	2.00E-05	day/kg FW	[3]			
15751-77-6	Zirconium-93	1.00E-06	day/kg FW	[3]	5.50E-07	day/kg FW	[3]			
15757-87-6	Curium-243	2.00E-05	day/kg FW	[3]	4.00E-07	day/kg FW	[3]			
15758-45-9	Selenium-79	1.00E-01	day/kg FW	[3]	1.00E-02	day/kg FW	[3]			
15832-50-5	Tin-126	1.00E-02	day/kg FW	[3]	1.00E-03	day/kg FW	[3]			
1634-04-4	Methyl tert-butyl ether	2.20E-07	day/kg FW	[3]	6.90E-08	day/kg FW	[3]	5.25E-04	day/kg FW	[1]
16887-00-6	Chloride									
16984-48-8	Fluoride									
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	2.61E-02	day/kg FW	[2]	5.50E-03	day/kg FW	[2]	3.16E-02	day/kg FW	[2]
189-55-9	Dibenzo[a,i]pyrene	1.83E-02	day/kg FW	[1]	3.84E-03	day/kg FW	[1]	2.21E-02	day/kg FW	[1]
189-64-0	Dibenzo[a,h]pyrene	1.83E-02	day/kg FW	[1]	3.84E-03	day/kg FW	[1]	2.21E-02	day/kg FW	[1]
191-24-2	Benzo(g,h,i)perylene	1.00E-01	day/kg FW	[3]	3.10E-02	day/kg FW	[3]	3.50E-02	day/kg FW	[1]
191-30-0	Dibenzo(a,l)pyrene	1.21E-02	day/kg FW	[1]	2.55E-03	day/kg FW	[1]	1.47E-02	day/kg FW	[1]
192-65-4	Dibenzo[a,e]pyrene	1.83E-02	day/kg FW	[1]	3.84E-03	day/kg FW	[1]	2.21E-02	day/kg FW	[1]
192-97-2	Benzo(e)pyrene	3.19E-02	day/kg FW	[1]	6.71E-03	day/kg FW	[1]	3.86E-02	day/kg FW	[1]
193-39-5	Indeno(1,2,3-cd)pyrene	2.94E-02	day/kg FW	[2]	6.19E-03	day/kg FW	[2]	3.56E-02	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	1.79E-02	day/kg FW	[2]	3.78E-03	day/kg FW	[2]	2.17E-02	day/kg FW	[2]
205-82-3	Benzo[j]fluoranthene	3.64E-02	day/kg FW	[1]	7.65E-03	day/kg FW	[1]	4.40E-02	day/kg FW	[1]
205-99-2	Benzo(b)fluoranthene	3.62E-02	day/kg FW	[2]	7.62E-03	day/kg FW	[2]	4.38E-02	day/kg FW	[2]
206-44-0	Fluoranthene	3.92E-02	day/kg FW	[2]	8.26E-03	day/kg FW	[2]	4.75E-02	day/kg FW	[2]
207-08-9	Benzo(k)fluoranthene	3.65E-02	day/kg FW	[2]	7.68E-03	day/kg FW	[2]	4.42E-02	day/kg FW	[2]
208-96-8	Acenaphthylene	1.30E-04	day/kg FW	[3]	4.00E-05	day/kg FW	[3]	3.02E-02	day/kg FW	[1]
218-01-9	Chrysene	3.99E-02	day/kg FW	[2]	8.41E-03	day/kg FW	[2]	4.83E-02	day/kg FW	[2]
224-42-0	Dibenz[a,j]acridine	3.10E-02	day/kg FW	[10]	6.52E-03	day/kg FW	[10]	3.75E-02	day/kg FW	[8]
2245-38-7	2,3,5-Trimethylnaphthalene									
226-36-8	Dibenz[a,h]acridine	3.10E-02	day/kg FW	[10]	6.52E-03	day/kg FW	[10]	3.75E-02	day/kg FW	[8]
22967-92-6	Methyl mercury	7.80E-04	day/kg FW	[2]	3.38E-04	day/kg FW	[2]	5.07E-06	day/kg FW	[2]
23950-58-5	Pronamide	1.68E-02	day/kg FW	[2]	3.53E-03	day/kg FW	[2]	2.03E-02	day/kg FW	[2]
24959-67-9	Bromide									
27154-33-2	Trichlorofluoroethane	5.96E-03	day/kg FW	[11]	1.25E-03	day/kg FW	[11]	7.21E-03	day/kg FW	[9]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	2.08E-02	day/kg FW	[1]	4.38E-03	day/kg FW	[1]	2.52E-02	day/kg FW	[1]
319-84-6	alpha-BHC	2.27E-02	day/kg FW	[2]	4.77E-03	day/kg FW	[2]	2.74E-02	day/kg FW	[2]
319-85-7	beta-BHC	2.27E-02	day/kg FW	[2]	4.77E-03	day/kg FW	[2]	2.74E-02	day/kg FW	[2]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	2.89E-02	day/kg FW	[1]	6.09E-03	day/kg FW	[1]	3.50E-02	day/kg FW	[1]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	2.63E-02	day/kg FW	[1]	5.53E-03	day/kg FW	[1]	3.18E-02	day/kg FW	[1]
3268-87-9	Octachlorodibenzo (p)dioxin	6.85E-03	day/kg FW	[2]	1.44E-03	day/kg FW	[2]	8.30E-03	day/kg FW	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	1.63E-02	day/kg FW	[1]	3.43E-03	day/kg FW	[1]	1.97E-02	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	8.77E-03	day/kg FW	[2]	1.85E-03	day/kg FW	[2]	1.06E-02	day/kg FW	[2]
3697-24-3	5-Methylchrysene	3.99E-02	day/kg FW	[9]	8.41E-03	day/kg FW	[9]	4.83E-02	day/kg FW	[7]
378253-40-8	Barium-137m	2.00E-04	day/kg FW	[3]	4.80E-04	day/kg FW	[3]			
378253-44-2	Cadmium-113m	4.00E-04	day/kg FW	[3]	1.00E-03	day/kg FW	[3]			
378782-82-2	Niobium-93m	3.00E-07	day/kg FW	[3]	4.10E-07	day/kg FW	[3]			
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.36E-02	day/kg FW	[1]	2.86E-03	day/kg FW	[1]	1.64E-02	day/kg FW	[1]
39001-02-0	Octachlorodibenzofuran	8.77E-03	day/kg FW	[2]	1.85E-03	day/kg FW	[2]	1.06E-02	day/kg FW	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	1.10E-02	day/kg FW	[2]	2.32E-03	day/kg FW	[2]	1.33E-02	day/kg FW	[2]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	6.85E-03	day/kg FW	[1]	1.44E-03	day/kg FW	[1]	8.30E-03	day/kg FW	[1]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	2.88E-02	day/kg FW	[2]	6.05E-03	day/kg FW	[2]	3.48E-02	day/kg FW	[2]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	2.11E-04	day/kg FW	[1]	4.45E-05	day/kg FW	[1]	2.56E-04	day/kg FW	[1]
41851-50-7	Chlorocyclopentadiene	6.70E-06	day/kg FW	[3]	2.10E-06	day/kg FW	[3]	6.57E-03	day/kg FW	[1]
460-19-5	Cyanogen (Oxalonitrile)	2.90E-08	day/kg FW	[3]	9.30E-09	day/kg FW	[3]	7.52E-05	day/kg FW	[1]
4786-20-3	2-Butenenitrile									
50-00-0	Formaldehyde	1.21E-04	day/kg FW	[2]	2.54E-05	day/kg FW	[2]	1.46E-04	day/kg FW	[2]
50-32-8	Benzo(a)pyrene	3.76E-02	day/kg FW	[2]	7.91E-03	day/kg FW	[2]	4.55E-02	day/kg FW	[2]
506-68-3	Cyanogen bromide (Bromocyanide)	2.51E-05	day/kg FW	[1]	5.29E-06	day/kg FW	[1]	3.04E-05	day/kg FW	[1]
506-77-4	Cyanogen chloride	4.00E-08	day/kg FW	[3]	1.30E-08	day/kg FW	[3]	2.40E-05	day/kg FW	[1]
51-28-5	2,4-Dinitrophenol	5.56E-05	day/kg FW	[2]	1.17E-05	day/kg FW	[2]	6.74E-05	day/kg FW	[2]
51-79-6	Ethyl carbamate (Urethane)	3.60E-05	day/kg FW	[1]	7.57E-06	day/kg FW	[1]	4.36E-05	day/kg FW	[1]
510-15-6	Chlorobenzilate	3.18E-02	day/kg FW	[2]	6.69E-03	day/kg FW	[2]	3.85E-02	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	3.65E-02	day/kg FW	[2]	7.68E-03	day/kg FW	[2]	4.42E-02	day/kg FW	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.50E-02	day/kg FW	[1]	3.15E-03	day/kg FW	[1]	1.81E-02	day/kg FW	[1]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	1.00E-06	day/kg FW	[3]	3.10E-07	day/kg FW	[3]	2.12E-03	day/kg FW	[1]
53-70-3	Dibenz[a,h]anthracene	3.10E-02	day/kg FW	[2]	6.52E-03	day/kg FW	[2]	3.75E-02	day/kg FW	[2]
532-27-4	2-Chloroacetophenone	3.10E-06	day/kg FW	[3]	9.70E-07	day/kg FW	[3]	3.15E-03	day/kg FW	[1]
534-52-1	4,6-Dinitro-o-cresol	1.30E-05	day/kg FW	[3]	4.00E-06	day/kg FW	[3]	4.22E-03	day/kg FW	[1]
5385-75-1	Dibenzo(a,e)fluoranthene	2.45E-02	day/kg FW	[1]	5.15E-03	day/kg FW	[1]	2.96E-02	day/kg FW	[1]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	7.50E-08	day/kg FW	[3]	2.40E-08	day/kg FW	[3]	4.03E-03	day/kg FW	[1]
540-73-8	1,2-Dimethylhydrazine	1.29E-05	day/kg FW	[1]	2.73E-06	day/kg FW	[1]	1.57E-05	day/kg FW	[1]
540-84-1	2,2,4-Trimethylpentane	2.70E-02	day/kg FW	[1]	5.68E-03	day/kg FW	[1]	3.27E-02	day/kg FW	[1]
541-73-1	1,3-Dichlorobenzene	1.94E-02	day/kg FW	[2]	4.08E-03	day/kg FW	[2]	2.35E-02	day/kg FW	[2]
542-75-6	1,3-Dichloropropene	1.50E-03	day/kg FW	[2]	3.17E-04	day/kg FW	[2]	1.82E-03	day/kg FW	[2]
542-88-1	Bis(chloromethyl)ether	6.00E-08	day/kg FW	[3]	1.90E-08	day/kg FW	[3]	2.45E-04	day/kg FW	[1]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.64E-02	day/kg FW	[2]	3.46E-03	day/kg FW	[2]	1.99E-02	day/kg FW	[2]
56-23-5	Carbon tetrachloride	8.68E-03	day/kg FW	[2]	1.83E-03	day/kg FW	[2]	1.05E-02	day/kg FW	[2]
56-49-5	3-Methylcholanthrene	3.22E-02	day/kg FW	[1]	6.78E-03	day/kg FW	[1]	3.90E-02	day/kg FW	[1]
56-55-3	Benzo(a)anthracene	3.99E-02	day/kg FW	[2]	8.41E-03	day/kg FW	[2]	4.83E-02	day/kg FW	[2]
57-12-5	Cyanide	9.07E-06	day/kg FW	[2]	1.91E-06	day/kg FW	[2]	1.10E-05	day/kg FW	[2]
57-24-9	Strychnine	2.60E-03	day/kg FW	[2]	5.48E-04	day/kg FW	[2]	3.15E-03	day/kg FW	[2]
57-74-9	Chlordane	4.06E-02	day/kg FW	[2]	8.56E-03	day/kg FW	[2]	4.92E-02	day/kg FW	[2]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	3.10E-02	day/kg FW	[2]	6.52E-03	day/kg FW	[2]	3.75E-02	day/kg FW	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	2.63E-02	day/kg FW	[2]	5.53E-03	day/kg FW	[2]	3.18E-02	day/kg FW	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	2.28E-02	day/kg FW	[2]	4.80E-03	day/kg FW	[2]	2.76E-02	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	2.31E-02	day/kg FW	[1]	4.87E-03	day/kg FW	[1]	2.80E-02	day/kg FW	[1]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo (p)dioxin	1.79E-02	day/kg FW	[2]	3.78E-03	day/kg FW	[2]	2.17E-02	day/kg FW	[2]
58-89-9	gamma-BHC (Lindane)	1.30E-04	day/kg FW	[3]	4.00E-05	day/kg FW	[3]	3.43E-02	day/kg FW	[1]
58-90-2	2,3,4,6-Tetrachlorophenol	7.33E-05	day/kg FW	[2]	1.54E-05	day/kg FW	[2]	8.87E-05	day/kg FW	[2]
581-42-0	2,6-Dimethylnaphthalene									
584-84-9	2,4-Toluene diisocyanate	2.81E-03	day/kg FW	[5]	5.92E-04	day/kg FW	[5]	3.41E-03	day/kg FW	[4]
589-38-8	3-Hexanone	7.82E-04	day/kg FW	[1]	1.65E-04	day/kg FW	[1]	9.47E-04	day/kg FW	[1]
59-50-7	4-Chloro-3-methylphenol	1.21E-02	day/kg FW	[2]	2.56E-03	day/kg FW	[2]	1.47E-02	day/kg FW	[2]
59-89-2	N-Nitrosomorpholine	1.69E-05	day/kg FW	[1]	3.57E-06	day/kg FW	[1]	2.05E-05	day/kg FW	[1]
591-50-4	Benzene, iodo-									
591-78-6	2-Hexanone	6.30E-07	day/kg FW	[3]	2.00E-07	day/kg FW	[3]	1.23E-03	day/kg FW	[1]
593-60-2	Bromoethene (Vinyl bromide)	1.00E-06	day/kg FW	[3]	3.10E-07	day/kg FW	[3]	1.73E-03	day/kg FW	[1]
593-74-8	Dimethyl Mercury									
60-11-7	Dimethyl aminoazobenzene	3.49E-02	day/kg FW	[1]	7.35E-03	day/kg FW	[1]	4.22E-02	day/kg FW	[1]
60-29-7	Ethyl ether	1.90E-07	day/kg FW	[3]	6.10E-08	day/kg FW	[3]	4.74E-04	day/kg FW	[1]
60-35-5	Acetamide	9.07E-06	day/kg FW	[1]	1.91E-06	day/kg FW	[1]	1.10E-05	day/kg FW	[1]
602-87-9	5-Nitroacenaphthene	2.43E-02	day/kg FW	[6]	5.12E-03	day/kg FW	[6]	2.94E-02	day/kg FW	[5]
606-20-2	2,6-Dinitrotoluene	1.85E-03	day/kg FW	[2]	3.89E-04	day/kg FW	[2]	2.23E-03	day/kg FW	[2]
608-93-5	Pentachlorobenzene	4.02E-02	day/kg FW	[2]	8.47E-03	day/kg FW	[2]	4.87E-02	day/kg FW	[2]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2.28E-02	day/kg FW	[2]	4.80E-03	day/kg FW	[2]	2.76E-02	day/kg FW	[2]
61626-71-9	Dichloropentadiene	6.70E-06	day/kg FW	[8]	2.10E-06	day/kg FW	[8]	1.61E-02	day/kg FW	[1]
62-50-0	Ethyl methanesulfonate	5.93E-05	day/kg FW	[2]	1.25E-05	day/kg FW	[2]	7.18E-05	day/kg FW	[2]
62-53-3	Aniline	4.00E-04	day/kg FW	[2]	8.41E-05	day/kg FW	[2]	4.84E-04	day/kg FW	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	6.70E-09	day/kg FW	[3]	2.10E-09	day/kg FW	[3]	1.44E-05	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
621-64-7	N-Nitroso-di-n-propylamine	9.79E-04	day/kg FW	[2]	2.06E-04	day/kg FW	[2]	1.19E-03	day/kg FW	[2]
624-83-9	Methyl isocyanate	9.55E-05	day/kg FW	[7]	2.01E-05	day/kg FW	[7]	1.16E-04	day/kg FW	[6]
628-73-9	Hexanenitrile	1.67E-03	day/kg FW	[1]	3.51E-04	day/kg FW	[1]	2.02E-03	day/kg FW	[1]
630-08-0	Carbon monoxide									
630-20-6	1,1,1,2-Tetrachloroethane	1.13E-02	day/kg FW	[2]	2.37E-03	day/kg FW	[2]	1.36E-02	day/kg FW	[2]
64-18-6	Formic acid (Methanoic acid)	5.13E-05	day/kg FW	[2]	1.08E-05	day/kg FW	[2]	6.20E-05	day/kg FW	[2]
65-85-0	Benzoic acid	5.65E-05	day/kg FW	[2]	1.19E-05	day/kg FW	[2]	6.84E-05	day/kg FW	[2]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	2.31E-02	day/kg FW	[1]	4.87E-03	day/kg FW	[1]	2.80E-02	day/kg FW	[1]
67-56-1	Methyl alcohol	9.07E-06	day/kg FW	[2]	1.91E-06	day/kg FW	[2]	1.10E-05	day/kg FW	[2]
67-63-0	2-Propyl alcohol	2.80E-08	day/kg FW	[3]	8.80E-09	day/kg FW	[3]	7.16E-05	day/kg FW	[1]
67-64-1	2-Propanone (Acetone)	2.86E-05	day/kg FW	[2]	6.02E-06	day/kg FW	[2]	3.46E-05	day/kg FW	[2]
67-66-3	Chloroform	2.90E-03	day/kg FW	[2]	6.11E-04	day/kg FW	[2]	3.51E-03	day/kg FW	[2]
67-72-1	Hexachloroethane	2.48E-02	day/kg FW	[2]	5.23E-03	day/kg FW	[2]	3.00E-02	day/kg FW	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.64E-02	day/kg FW	[2]	3.46E-03	day/kg FW	[2]	1.99E-02	day/kg FW	[2]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	1.33E-02	day/kg FW	[1]	2.80E-03	day/kg FW	[1]	1.61E-02	day/kg FW	[1]
70-30-4	Hexachlorophene	1.44E-02	day/kg FW	[2]	3.03E-03	day/kg FW	[2]	1.74E-02	day/kg FW	[2]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	3.34E-02	day/kg FW	[1]	7.02E-03	day/kg FW	[1]	4.04E-02	day/kg FW	[1]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	2.28E-02	day/kg FW	[2]	4.80E-03	day/kg FW	[2]	2.76E-02	day/kg FW	[2]
71-36-3	n-Butyl alcohol	1.10E-07	day/kg FW	[3]	3.50E-08	day/kg FW	[3]	4.64E-04	day/kg FW	[1]
71-43-2	Benzene	3.38E-03	day/kg FW	[2]	7.12E-04	day/kg FW	[2]	4.09E-03	day/kg FW	[2]
71-55-6	1,1,1-Trichloroethane	5.96E-03	day/kg FW	[2]	1.25E-03	day/kg FW	[2]	7.21E-03	day/kg FW	[2]
72-43-5	Methoxychlor	3.75E-02	day/kg FW	[2]	7.89E-03	day/kg FW	[2]	4.54E-02	day/kg FW	[2]
72-55-9	4,4-DDE	3.99E-02	day/kg FW	[2]	8.41E-03	day/kg FW	[2]	4.83E-02	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	2.28E-02	day/kg FW	[2]	4.80E-03	day/kg FW	[2]	2.76E-02	day/kg FW	[2]
74-83-9	Bromomethane	7.11E-04	day/kg FW	[2]	1.50E-04	day/kg FW	[2]	8.61E-04	day/kg FW	[2]
74-87-3	Chloromethane	4.08E-04	day/kg FW	[2]	8.59E-05	day/kg FW	[2]	4.94E-04	day/kg FW	[2]
74-88-4	Iodomethane	1.28E-03	day/kg FW	[1]	2.70E-04	day/kg FW	[1]	1.55E-03	day/kg FW	[1]
74-95-3	Methylene bromide	1.33E-03	day/kg FW	[2]	2.80E-04	day/kg FW	[2]	1.61E-03	day/kg FW	[2]
74-97-5	Bromochloromethane	6.30E-07	day/kg FW	[3]	2.00E-07	day/kg FW	[3]	1.30E-03	day/kg FW	[1]
7429-90-5	Aluminum	1.50E-03	day/kg FW	[3]	2.00E-04	day/kg FW	[3]			
7439-89-6	Iron	2.00E-02	day/kg FW	[3]	3.00E-05	day/kg FW	[3]	2.60E-02	day/kg FW	[3]
7439-92-1	Lead	3.00E-04	day/kg FW	[2]	2.50E-04	day/kg FW	[2]			
7439-93-2	Lithium	1.00E-02	day/kg FW	[3]	2.00E-02	day/kg FW	[3]			
7439-95-4	Magnesium	5.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]			
7439-96-5	Manganese	5.00E-04	day/kg FW	[3]	3.00E-05	day/kg FW	[3]	3.60E-03	day/kg FW	[3]
7439-97-6	Mercury	0.00E+00	day/kg FW	[2]	0.00E+00	day/kg FW	[2]	0.00E+00	day/kg FW	[2]
7439-98-7	Molybdenum	1.00E-03	day/kg FW	[3]	1.70E-03	day/kg FW	[3]			
7440-02-0	Nickel	6.00E-03	day/kg FW	[2]	1.00E-03	day/kg FW	[2]			
7440-16-6	Rhodium	2.00E-03	day/kg FW	[4]	1.00E-02	day/kg FW	[4]			
7440-22-4	Silver	3.00E-03	day/kg FW	[2]	2.00E-02	day/kg FW	[2]			
7440-23-5	Sodium	8.00E-02	day/kg FW	[3]	1.60E-02	day/kg FW	[3]			
7440-24-6	Strontium (total)	8.00E-03	day/kg FW	[3]	2.80E-03	day/kg FW	[3]			
7440-25-7	Tantalum	3.00E-07	day/kg FW	[4]	4.10E-07	day/kg FW	[4]			
7440-28-0	Thallium	4.00E-02	day/kg FW	[2]	2.00E-03	day/kg FW	[2]			
7440-29-1	Thorium-232	1.00E-04	day/kg FW	[3]	5.00E-06	day/kg FW	[3]			
7440-31-5	Tin	1.00E-02	day/kg FW	[3]	1.00E-03	day/kg FW	[3]			
7440-33-7	Tungsten	4.00E-02	day/kg FW	[4]	3.00E-04	day/kg FW	[4]			
7440-36-0	Antimony	1.00E-03	day/kg FW	[2]	1.00E-04	day/kg FW	[2]			
7440-38-2	Arsenic	2.00E-03	day/kg FW	[2]	6.00E-05	day/kg FW	[2]			
7440-39-3	Barium	1.50E-04	day/kg FW	[2]	3.50E-04	day/kg FW	[2]			
7440-41-7	Beryllium	1.00E-03	day/kg FW	[2]	9.00E-07	day/kg FW	[2]			
7440-43-9	Cadmium	1.20E-04	day/kg FW	[2]	6.50E-06	day/kg FW	[2]	1.91E-04	day/kg FW	[2]
7440-47-3	Chromium	5.50E-03	day/kg FW	[2]	1.50E-03	day/kg FW	[2]			

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
7440-48-4	Cobalt	1.00E-04	day/kg FW	[3]	7.00E-05	day/kg FW	[3]	1.70E-01	day/kg FW	[3]
7440-50-8	Copper	9.00E-03	day/kg FW	[3]	1.50E-03	day/kg FW	[3]	2.20E-02	day/kg FW	[3]
7440-61-1	Uranium	3.00E-04	day/kg FW	[3]	4.00E-04	day/kg FW	[3]	4.00E-02	day/kg FW	[3]
7440-61-1R	Uranium-238	4.20E-04	day/kg FW	[3]	4.20E-04	day/kg FW	[3]			
7440-62-2	Vanadium	2.50E-03	day/kg FW	[3]	2.00E-05	day/kg FW	[3]			
7440-65-5	Yttrium	1.00E-03	day/kg FW	[4]	2.00E-05	day/kg FW	[4]			
7440-66-6	Zinc	9.00E-05	day/kg FW	[2]	3.25E-05	day/kg FW	[2]	1.28E-04	day/kg FW	[2]
7440-67-7	Zirconium	1.00E-06	day/kg FW	[3]	5.50E-07	day/kg FW	[3]			
7446-09-5	Sulfur dioxide									
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	2.31E-02	day/kg FW	[1]	4.87E-03	day/kg FW	[1]	2.80E-02	day/kg FW	[1]
7487-94-7	Mercury (Hg^{+2})	5.22E-03	day/kg FW	[2]	2.26E-03	day/kg FW	[2]	3.39E-05	day/kg FW	[2]
75-00-3	Chloroethane	1.05E-03	day/kg FW	[2]	2.22E-04	day/kg FW	[2]	1.28E-03	day/kg FW	[2]
75-01-4	1-Chloroethene	1.05E-03	day/kg FW	[2]	2.22E-04	day/kg FW	[2]	1.28E-03	day/kg FW	[2]
75-02-5	Fluoroethene (Vinyl fluoride)	7.11E-04	day/kg FW	[1]	1.50E-04	day/kg FW	[1]	8.61E-04	day/kg FW	[1]
75-05-8	Acetonitrile	2.21E-05	day/kg FW	[2]	4.64E-06	day/kg FW	[2]	2.67E-05	day/kg FW	[2]
75-07-0	Acetaldehyde	3.01E-05	day/kg FW	[2]	6.34E-06	day/kg FW	[2]	3.64E-05	day/kg FW	[2]
75-09-2	Dichloromethane (Methylene Chloride)	8.76E-04	day/kg FW	[2]	1.84E-04	day/kg FW	[2]	1.06E-03	day/kg FW	[2]
75-15-0	Carbon disulfide	3.92E-03	day/kg FW	[2]	8.26E-04	day/kg FW	[2]	4.75E-03	day/kg FW	[2]
75-21-8	Ethylene oxide (Oxirane)	2.45E-05	day/kg FW	[2]	5.15E-06	day/kg FW	[2]	2.96E-05	day/kg FW	[2]
75-25-2	Bromoform	5.00E-03	day/kg FW	[2]	1.05E-03	day/kg FW	[2]	6.05E-03	day/kg FW	[2]
75-27-4	Bromodichloromethane	3.38E-03	day/kg FW	[2]	7.12E-04	day/kg FW	[2]	4.09E-03	day/kg FW	[2]
75-29-6	2-Chloropropane	2.00E-06	day/kg FW	[3]	6.30E-07	day/kg FW	[3]	3.00E-03	day/kg FW	[1]
75-34-3	1,1-Dichloroethane	2.11E-03	day/kg FW	[2]	4.44E-04	day/kg FW	[2]	2.55E-03	day/kg FW	[2]
75-35-4	1,1-Dichloroethene	3.38E-03	day/kg FW	[2]	7.12E-04	day/kg FW	[2]	4.09E-03	day/kg FW	[2]
75-44-5	Phosgene (Hydrogen phosphide)	9.07E-06	day/kg FW	[1]	1.91E-06	day/kg FW	[1]	1.10E-05	day/kg FW	[1]
75-45-6	Chlorodifluoromethane	5.74E-04	day/kg FW	[2]	1.21E-04	day/kg FW	[2]	6.95E-04	day/kg FW	[2]
75-50-3	Trimethylamine	7.72E-05	day/kg FW	[1]	1.62E-05	day/kg FW	[1]	9.34E-05	day/kg FW	[1]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
75-69-4	Trichlorofluoromethane	5.96E-03	day/kg FW	[2]	1.25E-03	day/kg FW	[2]	7.21E-03	day/kg FW	[2]
75-71-8	Dichlorodifluoromethane	3.70E-03	day/kg FW	[2]	7.79E-04	day/kg FW	[2]	4.48E-03	day/kg FW	[2]
76-01-7	Pentachloroethane	1.37E-02	day/kg FW	[1]	2.89E-03	day/kg FW	[1]	1.66E-02	day/kg FW	[1]
76-13-1	1,2,2-Trichlorotrifluoroethane	1.00E-05	day/kg FW	[3]	3.10E-06	day/kg FW	[3]	1.56E-02	day/kg FW	[1]
76-44-8	Heptachlor	3.08E-02	day/kg FW	[2]	6.49E-03	day/kg FW	[2]	3.73E-02	day/kg FW	[2]
764-41-0	1,4-Dichloro-2-butene	1.90E-07	day/kg FW	[3]	5.90E-08	day/kg FW	[3]	8.21E-03	day/kg FW	[1]
7647-01-0	Hydrogen chloride	5.23E-05	day/kg FW	[2]	1.10E-05	day/kg FW	[2]	6.33E-05	day/kg FW	[2]
765-34-4	Glycidylaldehyde	4.70E-09	day/kg FW	[3]	1.50E-09	day/kg FW	[3]	4.70E-05	day/kg FW	[1]
7664-39-3	Hydrogen Fluoride									
7664-41-7	Ammonia/Ammonium	2.50E-08	day/kg FW	[3]	7.90E-09	day/kg FW	[3]			
77-47-4	Hexachlorocyclo-pentadiene	3.95E-02	day/kg FW	[2]	8.32E-03	day/kg FW	[2]	4.78E-02	day/kg FW	[2]
77-78-1	Dimethyl sulfate	4.00E-07	day/kg FW	[3]	1.30E-07	day/kg FW	[3]	9.34E-05	day/kg FW	[1]
7704-34-9	Total Sulfur (thermodynamically stable)									
7723-14-0	Phosphorus	5.00E-02	day/kg FW	[4]	1.60E-02	day/kg FW	[4]			
7782-41-4	Fluorine gas (F_2)				1.00E-03	day/kg FW	[3]			
7782-49-2	Selenium	2.27E-03	day/kg FW	[2]	5.86E-03	day/kg FW	[2]	1.88E-01	day/kg FW	[2]
7782-50-5	Chlorine	3.60E-04	day/kg FW	[2]	7.59E-05	day/kg FW	[2]	4.36E-04	day/kg FW	[2]
78-83-1	2-Methylpropyl alcohol	1.70E-07	day/kg FW	[3]	5.30E-08	day/kg FW	[3]	3.61E-04	day/kg FW	[1]
78-87-5	1,2-Dichloropropane	2.90E-03	day/kg FW	[2]	6.11E-04	day/kg FW	[2]	3.51E-03	day/kg FW	[2]
78-93-3	2-Butanone	1.05E-04	day/kg FW	[2]	2.21E-05	day/kg FW	[2]	1.27E-04	day/kg FW	[2]
79-00-5	1,1,2-Trichloroethane	2.90E-03	day/kg FW	[2]	6.11E-04	day/kg FW	[2]	3.51E-03	day/kg FW	[2]
79-01-6	1,1,2-Trichloroethylene	5.21E-03	day/kg FW	[2]	1.10E-03	day/kg FW	[2]	6.30E-03	day/kg FW	[2]
79-10-7	2-Propenoic acid	3.60E-08	day/kg FW	[3]	1.10E-08	day/kg FW	[3]	1.46E-04	day/kg FW	[1]
79-34-5	1,1,2,2-Tetrachloroethane	5.21E-03	day/kg FW	[2]	1.10E-03	day/kg FW	[2]	6.30E-03	day/kg FW	[2]
79-46-9	2-Nitropropane	8.90E-08	day/kg FW	[3]	2.80E-08	day/kg FW	[3]	5.14E-04	day/kg FW	[1]
80-62-6	Methyl methacrylate	5.00E-07	day/kg FW	[3]	1.60E-07	day/kg FW	[3]	1.23E-03	day/kg FW	[1]
82-68-8	Pentachloronitrobenzene (PCNB)	3.57E-02	day/kg FW	[2]	7.51E-03	day/kg FW	[2]	4.32E-02	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
822-06-0	Hexamethylene-1,5-diisocyanate	4.70E-07	day/kg FW	[3]	1.50E-07	day/kg FW	[3]	1.63E-02	day/kg FW	[1]
823-40-5	Toluene-2,6-diamine	7.10E-07	day/kg FW	[3]	2.30E-07	day/kg FW	[3]	9.34E-05	day/kg FW	[1]
83-32-9	Acenaphthene	2.43E-02	day/kg FW	[2]	5.12E-03	day/kg FW	[2]	2.94E-02	day/kg FW	[2]
832-69-9	1-Methylphenanthrene									
84-66-2	Diethyl phthalate	5.96E-03	day/kg FW	[2]	1.25E-03	day/kg FW	[2]	7.21E-03	day/kg FW	[2]
84-74-2	Di-n-butylphthalate	3.64E-02	day/kg FW	[2]	7.66E-03	day/kg FW	[2]	4.40E-02	day/kg FW	[2]
85-01-8	Phenanthrene	3.38E-02	day/kg FW	[2]	7.12E-03	day/kg FW	[2]	4.09E-02	day/kg FW	[2]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	1.04E-05	day/kg FW	[2]	2.19E-06	day/kg FW	[2]	1.26E-05	day/kg FW	[2]
85-68-7	Butylbenzylphthalate	3.84E-02	day/kg FW	[2]	8.09E-03	day/kg FW	[2]	4.65E-02	day/kg FW	[2]
86-73-7	Fluorene	2.93E-02	day/kg FW	[2]	6.16E-03	day/kg FW	[2]	3.54E-02	day/kg FW	[2]
87-61-6	1,2,3-Trichlorobenzene	2.68E-02	day/kg FW	[2]	5.65E-03	day/kg FW	[2]	3.25E-02	day/kg FW	[2]
87-68-3	Hexachlorobutadiene	3.75E-02	day/kg FW	[2]	7.89E-03	day/kg FW	[2]	4.54E-02	day/kg FW	[2]
87-86-5	Pentachlorophenol	6.62E-05	day/kg FW	[2]	1.39E-05	day/kg FW	[2]	8.02E-05	day/kg FW	[2]
88-06-2	2,4,6-Trichlorophenol	1.29E-04	day/kg FW	[2]	2.72E-05	day/kg FW	[2]	1.56E-04	day/kg FW	[2]
88-74-4	o-Nitroaniline (2-nitroaniline)	2.29E-03	day/kg FW	[2]	4.82E-04	day/kg FW	[2]	2.77E-03	day/kg FW	[2]
88-75-5	2-Nitrophenol	2.07E-03	day/kg FW	[2]	4.37E-04	day/kg FW	[2]	2.51E-03	day/kg FW	[2]
90-04-0	o-Anisidine	6.97E-04	day/kg FW	[1]	1.47E-04	day/kg FW	[1]	8.44E-04	day/kg FW	[1]
90-12-0	1-Methylnaphthalene	1.90E-04	day/kg FW	[3]	5.90E-05	day/kg FW	[3]	2.88E-02	day/kg FW	[1]
91-20-3	Naphthalene	1.48E-02	day/kg FW	[2]	3.13E-03	day/kg FW	[2]	1.80E-02	day/kg FW	[2]
91-22-5	Quinoline	3.10E-06	day/kg FW	[3]	9.90E-07	day/kg FW	[3]	3.68E-03	day/kg FW	[1]
91-57-6	2-Methylnaphthalene	2.00E-04	day/kg FW	[3]	6.30E-05	day/kg FW	[3]	2.86E-02	day/kg FW	[1]
91-58-7	2-Chloronaphthalene	1.60E-02	day/kg FW	[2]	3.37E-03	day/kg FW	[2]	1.94E-02	day/kg FW	[2]
91-94-1	3,3'-Dichlorobenzidine	1.80E-02	day/kg FW	[2]	3.79E-03	day/kg FW	[2]	2.18E-02	day/kg FW	[2]
92-52-4	1,1`-Biphenyl	3.10E-04	day/kg FW	[3]	9.90E-05	day/kg FW	[3]	3.11E-02	day/kg FW	[1]
924-16-3	N-Nitroso-di-n-Buetylamine	2.56E-03	day/kg FW	[2]	5.39E-04	day/kg FW	[2]	3.10E-03	day/kg FW	[2]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	7.32E-03	day/kg FW	[2]	1.54E-03	day/kg FW	[2]	8.86E-03	day/kg FW	[2]

Table 4-1 Biotransfer Factors for Beef, Game, Milk, and Pork

CAS Registry Number	Analyte Name	Biotransfer Factor in Beef (Ba_{beef}) and Game (Ba_{game})	Units for Biotransfer Factor in Beef and Game	Reference	Biotransfer Factor in Milk (Ba_{milk})	Units for Biotransfer Factor in Milk	Reference	Biotransfer Factor in Pork (Ba_{pork})	Units for Biotransfer Factor in Pork	Reference
94-75-7	2,4-D	7.90E-06	day/kg FW	[3]	2.50E-06	day/kg FW	[3]	1.06E-02	day/kg FW	[1]
95-48-7	o-Cresol	2.68E-03	day/kg FW	[2]	5.64E-04	day/kg FW	[2]	3.24E-03	day/kg FW	[2]
95-49-8	o-Chlorotoluene	6.30E-05	day/kg FW	[3]	2.00E-05	day/kg FW	[3]	2.01E-02	day/kg FW	[1]
95-50-1	1,2-Dichlorobenzene	1.60E-02	day/kg FW	[2]	3.37E-03	day/kg FW	[2]	1.94E-02	day/kg FW	[2]
95-53-4	o-Toluidine	9.09E-04	day/kg FW	[2]	1.91E-04	day/kg FW	[2]	1.10E-03	day/kg FW	[2]
95-57-8	2-Chlorophenol	3.35E-03	day/kg FW	[2]	7.05E-04	day/kg FW	[2]	4.05E-03	day/kg FW	[2]
95-63-6	1,2,4-Trimethyl benzene	1.50E-04	day/kg FW	[3]	4.80E-05	day/kg FW	[3]	2.41E-02	day/kg FW	[1]
95-94-3	1,2,4,5-Tetrachlorobenzene	3.75E-02	day/kg FW	[2]	7.89E-03	day/kg FW	[2]	4.54E-02	day/kg FW	[2]
95-95-4	2,4,5-Trichlorophenol	1.98E-03	day/kg FW	[2]	4.17E-04	day/kg FW	[2]	2.40E-03	day/kg FW	[2]
96-12-8	1,2-Dibromo-3-chloropropane	4.53E-03	day/kg FW	[2]	9.54E-04	day/kg FW	[2]	5.48E-03	day/kg FW	[2]
96-18-4	1,2,3-Trichloropropane	2.90E-03	day/kg FW	[2]	6.11E-04	day/kg FW	[2]	3.51E-03	day/kg FW	[2]
96-45-7	Ethylene thiourea	5.50E-09	day/kg FW	[3]	1.70E-09	day/kg FW	[3]	1.13E-05	day/kg FW	[1]
97-63-2	Ethyl methacrylate	2.64E-03	day/kg FW	[2]	5.56E-04	day/kg FW	[2]	3.20E-03	day/kg FW	[2]
98-01-1	Furfural	7.90E-05	day/kg FW	[3]	2.50E-05	day/kg FW	[3]	1.67E-04	day/kg FW	[1]
98-06-6	tert-Butyl benzene	2.78E-02	day/kg FW	[1]	5.85E-03	day/kg FW	[1]	3.37E-02	day/kg FW	[1]
98-07-7	Benzotrichloride	2.00E-05	day/kg FW	[3]	6.30E-06	day/kg FW	[3]	2.94E-02	day/kg FW	[1]
98-82-8	Cumene	2.10E-02	day/kg FW	[2]	4.42E-03	day/kg FW	[2]	2.54E-02	day/kg FW	[2]
98-83-9	Methyl styrene (mixed isomers)	5.60E-05	day/kg FW	[3]	1.80E-05	day/kg FW	[3]	2.12E-02	day/kg FW	[1]
98-86-2	Acetophenone	1.45E-03	day/kg FW	[2]	3.06E-04	day/kg FW	[2]	1.76E-03	day/kg FW	[2]
98-95-3	Nitrobenzene	2.29E-03	day/kg FW	[2]	4.82E-04	day/kg FW	[2]	2.77E-03	day/kg FW	[2]
99-35-4	1,3,5-Trinitrobenzene	7.25E-04	day/kg FW	[2]	1.53E-04	day/kg FW	[2]	8.77E-04	day/kg FW	[2]
99-65-0	1,3-Dinitrobenzene	1.26E-03	day/kg FW	[2]	2.66E-04	day/kg FW	[2]	1.53E-03	day/kg FW	[2]
99-87-6	p-Cymene	2.76E-02	day/kg FW	[1]	5.82E-03	day/kg FW	[1]	3.35E-02	day/kg FW	[1]

Reference	Reference (source) for Biotransfer Factor in Beef and Game
[1]	Calculated value per Eqs. A-2-21 and A-2-23 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Biotransfer Factor in Beef and Game
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[4]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chlorocyclopentadiene.
[9]	Surrogate value from Chrysene.
[10]	Surrogate value from Dibenz[a,h]anthracene.
[11]	Surrogate value from Trichlorofluoromethane.
[12]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Biotransfer Factor in Milk
[1]	Calculated value per Eqs. A-2-21 and A-2-22 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[4]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	Surrogate value from Acenaphthene.
[7]	Surrogate value from Acrylonitrile.
[8]	Surrogate value from Chlorocyclopentadiene.
[9]	Surrogate value from Chrysene.
[10]	Surrogate value from Dibenz[a,h]anthracene.
[11]	Surrogate value from Trichlorofluoromethane.
[12]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Biotransfer Factor in Pork
[1]	Calculated value per Eqs. A-2-21 and A-2-26 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Biotransfer Factor in Pork
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	Ng CY, Colsher CS, and Thompson SE. 1982. *Transfer Coefficients for Assessing the Dose from Radionuclides in Meat and Eggs.* NUREG/CR-2976, UCID-19464, Lawrence Livermore National Laboratory, Livermore, California.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
100-02-7	p-Nitrophenol	1.86E-03	day/kg FW	[2]	1.06E-03	day/kg FW	[2]
100-21-0	Phthalic acid	2.14E-03	day/kg FW	[1]	1.22E-03	day/kg FW	[1]
100-25-4	1,4-Dinitrobenzene	8.66E-04	day/kg FW	[1]	4.95E-04	day/kg FW	[1]
100-40-3	4-Ethenylcyclohexene	1.83E-02	day/kg FW	[1]	1.05E-02	day/kg FW	[1]
100-41-4	Ethyl benzene	8.95E-03	day/kg FW	[2]	5.11E-03	day/kg FW	[2]
100-42-5	Styrene	8.04E-03	day/kg FW	[2]	4.59E-03	day/kg FW	[2]
100-44-7	Benzyl chloride	3.34E-03	day/kg FW	[2]	1.91E-03	day/kg FW	[2]
100-47-0	Benzonitrile	1.03E-03	day/kg FW	[2]	5.91E-04	day/kg FW	[2]
100-51-6	Benzyl alcohol	4.40E-04	day/kg FW	[2]	2.51E-04	day/kg FW	[2]
100-52-7	Benzaldehyde	8.97E-04	day/kg FW	[2]	5.13E-04	day/kg FW	[2]
10028-15-6	Ozone						
10028-17-8	Tritium						
10045-97-3	Cesium-137	3.00E+00	day/kg FW	[3]	4.00E-01	day/kg FW	[3]
10061-01-5	cis-1,3-Dichloropropene	1.83E-03	day/kg FW	[10]	1.04E-03	day/kg FW	[10]
10061-02-6	trans-1,3-Dichloropropene	2.24E-03	day/kg FW	[1]	1.28E-03	day/kg FW	[1]
10098-91-6	Yttrium-90	1.00E-02	day/kg FW	[3]	2.00E-03	day/kg FW	[3]
10098-97-2	Strontium-90	8.00E-02	day/kg FW	[3]	2.00E-01	day/kg FW	[3]
101-55-3	4-Bromophenylphenyl ether	2.98E-02	day/kg FW	[2]	1.70E-02	day/kg FW	[2]
101-77-9	4,4-Methylenedianiline	1.09E-03	day/kg FW	[1]	6.22E-04	day/kg FW	[1]
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	2.00E+00	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
103-33-3	Azobenzene	1.69E-02	day/kg FW	[1]	9.68E-03	day/kg FW	[1]
103-65-1	n-Propyl benzene (Isocumene)	1.54E-02	day/kg FW	[1]	8.78E-03	day/kg FW	[1]
104-51-8	n-Butylbenzene	2.36E-02	day/kg FW	[1]	1.35E-02	day/kg FW	[1]
104-76-7	2-Ethyl-1-hexanol	5.88E-03	day/kg FW	[1]	3.36E-03	day/kg FW	[1]
105-67-9	2,4-Dimethylphenol	3.33E-03	day/kg FW	[2]	1.91E-03	day/kg FW	[2]
10595-95-6	n-Nitrosomethylethylamine	4.25E-05	day/kg FW	[1]	2.43E-05	day/kg FW	[1]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	1.13E-02	day/kg FW	[1]	6.43E-03	day/kg FW	[1]
106-44-5	p-Cresol (4-methyl phenol)	1.83E-03	day/kg FW	[2]	1.04E-03	day/kg FW	[2]
106-46-7	1,4-Dichlorobenzene	1.31E-02	day/kg FW	[2]	7.50E-03	day/kg FW	[2]
106-47-8	p-Chloroaniline	4.14E-05	day/kg FW	[2]	2.37E-05	day/kg FW	[2]
106-49-0	p-Toluidine	7.62E-04	day/kg FW	[1]	4.36E-04	day/kg FW	[1]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
106-51-4	Quinone	6.25E-05	day/kg FW	[1]	3.57E-05	day/kg FW	[1]
106-88-7	1,2-Epoxybutane	2.71E-04	day/kg FW	[1]	1.55E-04	day/kg FW	[1]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	2.28E-05	day/kg FW	[2]	1.30E-05	day/kg FW	[2]
106-93-4	Ethylene dibromide	2.14E-03	day/kg FW	[2]	1.22E-03	day/kg FW	[2]
106-99-0	1,3-Butadiene	2.11E-03	day/kg FW	[1]	1.20E-03	day/kg FW	[1]
107-02-8	Acrolein	3.76E-05	day/kg FW	[2]	2.15E-05	day/kg FW	[2]
107-05-1	3-Chloropropene	1.92E-03	day/kg FW	[1]	1.10E-03	day/kg FW	[1]
107-06-2	1,2-Dichloroethane	9.30E-04	day/kg FW	[2]	5.31E-04	day/kg FW	[2]
107-12-0	Propionitrile	5.69E-05	day/kg FW	[1]	3.25E-05	day/kg FW	[1]
107-13-1	Acrylonitrile	7.04E-05	day/kg FW	[2]	4.02E-05	day/kg FW	[2]
107-19-7	Propargyl alcohol	1.46E-05	day/kg FW	[1]	8.36E-06	day/kg FW	[1]
107-21-1	Ethylene glycol (1,2-ethanediol)	6.68E-06	day/kg FW	[1]	3.82E-06	day/kg FW	[1]
107-98-2	Propylene glycol monomethyl ether	1.09E-05	day/kg FW	[1]	6.24E-06	day/kg FW	[1]
108-05-4	Acetic acid vinyl ester	2.06E-04	day/kg FW	[2]	1.18E-04	day/kg FW	[2]
108-10-1	4-Methyl-2-pentanone	5.34E-04	day/kg FW	[2]	3.05E-04	day/kg FW	[2]
108-39-4	m-Cresol	2.01E-03	day/kg FW	[2]	1.15E-03	day/kg FW	[2]
108-60-1	bis (2-Chloroisopropyl)ether	4.27E-03	day/kg FW	[1]	2.44E-03	day/kg FW	[1]
108-67-8	1,3,5-Trimethylbenzene	1.22E-02	day/kg FW	[2]	6.99E-03	day/kg FW	[2]
108-86-1	Bromobenzene (Phenyl bromide)	7.95E-03	day/kg FW	[1]	4.54E-03	day/kg FW	[1]
108-87-2	Methylcyclohexane	1.44E-02	day/kg FW	[1]	8.23E-03	day/kg FW	[1]
108-88-3	Toluene	5.67E-03	day/kg FW	[2]	3.24E-03	day/kg FW	[2]
108-90-7	Chlorobenzene	6.40E-03	day/kg FW	[2]	3.66E-03	day/kg FW	[2]
108-94-1	Cyclohexanone	2.44E-04	day/kg FW	[1]	1.40E-04	day/kg FW	[1]
108-95-2	Phenol	9.28E-04	day/kg FW	[2]	5.30E-04	day/kg FW	[2]
109-74-0	n-Butanenitrile	1.33E-04	day/kg FW	[1]	7.63E-05	day/kg FW	[1]
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile	8.10E-06	day/kg FW	[1]	4.63E-06	day/kg FW	[1]
109-86-4	2-Methoxyethanol	6.68E-06	day/kg FW	[1]	3.82E-06	day/kg FW	[1]
109-99-9	Tetrahydrofuran	1.14E-04	day/kg FW	[2]	6.52E-05	day/kg FW	[2]
110-00-9	Furan	6.95E-04	day/kg FW	[1]	3.97E-04	day/kg FW	[1]
110-54-3	n-Hexane	1.79E-02	day/kg FW	[1]	1.02E-02	day/kg FW	[1]
110-59-8	Pentanenitrile	4.57E-04	day/kg FW	[1]	2.61E-04	day/kg FW	[1]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
110-80-5	2-Ethoxyethanol	1.71E-05	day/kg FW	[1]	9.78E-06	day/kg FW	[1]
110-82-7	Cyclohexane	1.25E-02	day/kg FW	[1]	7.12E-03	day/kg FW	[1]
110-83-8	Cyclohexene	6.86E-03	day/kg FW	[1]	3.92E-03	day/kg FW	[1]
110-86-1	Pyridine	1.74E-04	day/kg FW	[2]	9.93E-05	day/kg FW	[2]
111-15-9	Ethylene glycol monoethyl ether acetate	1.52E-04	day/kg FW	[1]	8.71E-05	day/kg FW	[1]
111-44-4	Bis(2-chloroethyl)ether	6.33E-04	day/kg FW	[2]	3.62E-04	day/kg FW	[2]
111-65-9	n-Octane	2.97E-02	day/kg FW	[1]	1.70E-02	day/kg FW	[1]
111-76-2	2-Butoxyethanol	2.55E-04	day/kg FW	[1]	1.46E-04	day/kg FW	[1]
111-84-2	n-Nonane	2.96E-02	day/kg FW	[1]	1.69E-02	day/kg FW	[1]
111-91-1	Bis(2-chloroethoxy)methane	6.45E-04	day/kg FW	[1]	3.69E-04	day/kg FW	[1]
112-30-1	1-Decanol	2.56E-02	day/kg FW	[1]	1.46E-02	day/kg FW	[1]
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone	1.90E-05	day/kg FW	[1]	1.09E-05	day/kg FW	[1]
117-81-7	Bis(2-ethylhexyl) phthalate	2.94E-02	day/kg FW	[2]	1.68E-02	day/kg FW	[2]
117-84-0	Di-n-octylphthalate	5.72E-03	day/kg FW	[2]	3.27E-03	day/kg FW	[2]
118-74-1	Hexachlorobenzene	2.99E-02	day/kg FW	[2]	1.71E-02	day/kg FW	[2]
119-90-4	3,3'-Dimethoxybenzidine	1.58E-03	day/kg FW	[2]	9.03E-04	day/kg FW	[2]
120-12-7	Anthracene	2.49E-02	day/kg FW	[2]	1.42E-02	day/kg FW	[2]
120-82-1	1,2,4-Trichlorobenzene	1.91E-02	day/kg FW	[2]	1.09E-02	day/kg FW	[2]
120-83-2	2,4-Dichlorophenol	4.21E-03	day/kg FW	[2]	2.41E-03	day/kg FW	[2]
121-14-2	2,4-Dinitrotoluene	2.07E-03	day/kg FW	[2]	1.18E-03	day/kg FW	[2]
122-39-4	N,N-Diphenylamine	1.31E-02	day/kg FW	[1]	7.50E-03	day/kg FW	[1]
122-66-7	1,2-Diphenylhydrazine	7.19E-03	day/kg FW	[2]	4.11E-03	day/kg FW	[2]
123-33-1	Maleic hydrazide	6.68E-06	day/kg FW	[1]	3.82E-06	day/kg FW	[1]
123-38-6	Propionaldehyde	1.52E-04	day/kg FW	[1]	8.71E-05	day/kg FW	[1]
123-72-8	Butanal	2.83E-04	day/kg FW	[1]	1.61E-04	day/kg FW	[1]
123-91-1	1,4-Dioxan	1.95E-05	day/kg FW	[2]	1.11E-05	day/kg FW	[2]
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	3.02E-03	day/kg FW	[2]	1.73E-03	day/kg FW	[2]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
126-73-8	Tributyl phosphate	1.91E-02	day/kg FW	[1]	1.09E-02	day/kg FW	[1]
126-98-7	2-Methyl-2-propenenitrile	1.36E-04	day/kg FW	[2]	7.80E-05	day/kg FW	[2]
127-18-4	1,1,2,2-Tetrachloroethene	1.20E-02	day/kg FW	[2]	6.87E-03	day/kg FW	[2]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	2.94E-02	day/kg FW	[1]	1.68E-02	day/kg FW	[1]
129-00-0	Pyrene	2.83E-02	day/kg FW	[2]	1.62E-02	day/kg FW	[2]
131-11-3	Dimethyl Phthalate	1.03E-03	day/kg FW	[2]	5.91E-04	day/kg FW	[2]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	2.06E-02	day/kg FW	[1]	1.18E-02	day/kg FW	[1]
132-64-9	Dibenzofuran	2.06E-02	day/kg FW	[1]	1.18E-02	day/kg FW	[1]
133-06-2	Captan	6.40E-03	day/kg FW	[1]	3.66E-03	day/kg FW	[1]
1330-20-7	Xylenes (mixed isomers)	9.14E-03	day/kg FW	[1]	5.22E-03	day/kg FW	[1]
1336-36-3	Polychlorinated biphenyls	2.51E-02	day/kg FW	[1]	1.43E-02	day/kg FW	[1]
134-32-7	alpha-Naphthylamine	3.11E-03	day/kg FW	[1]	1.78E-03	day/kg FW	[1]
135-98-8	sec-Butylbenzene	2.56E-02	day/kg FW	[1]	1.46E-02	day/kg FW	[1]
13966-29-5	Uranium-234	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
13967-48-1	Ruthenium-106	7.00E-03	day/kg FW	[3]	5.00E-03	day/kg FW	[3]
13967-70-9	Cesium-134	3.00E+00	day/kg FW	[3]	4.00E-01	day/kg FW	[3]
13968-55-3	Uranium-233	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
13981-15-2	Curium-244	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
13981-16-3	Plutonium-238	3.00E-03	day/kg FW	[3]	5.00E-04	day/kg FW	[3]
13981-37-8	Nickel-63	1.00E-03	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
13982-10-0	Plutonium-242	3.00E-03	day/kg FW	[3]	5.00E-04	day/kg FW	[3]
13982-63-3	Radium-226	3.00E-02	day/kg FW	[3]	3.10E-01	day/kg FW	[3]
13982-70-2	Uranium-236	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
13994-20-2	Neptunium-237	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
141-78-6	Acetic acid ethyl ester	2.06E-04	day/kg FW	[1]	1.18E-04	day/kg FW	[1]
14119-32-5	Plutonium-241	3.00E-03	day/kg FW	[3]	5.00E-04	day/kg FW	[3]
14119-33-6	Plutonium-240	3.00E-03	day/kg FW	[3]	5.00E-04	day/kg FW	[3]
14133-76-7	Technetium-99	3.00E-02	day/kg FW	[3]	3.00E+00	day/kg FW	[3]
14158-29-3	Uranium-232	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
14234-35-6	Antimony-125	6.00E-03	day/kg FW	[3]	7.00E-02	day/kg FW	[3]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
14336-70-0	Nickel-59	1.00E-03	day/kg FW	[3]	1.00E-01	day/kg FW	[3]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
14391-16-3	Europium-155	2.00E-03	day/kg FW	[3]	4.00E-05	day/kg FW	[3]
145-73-3	Endothall	1.86E-03	day/kg FW	[1]	1.06E-03	day/kg FW	[1]
14596-10-2	Americium-241	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
14683-23-9	Europium-152	2.00E-03	day/kg FW	[3]	4.00E-05	day/kg FW	[3]
14762-75-5	Carbon-14						
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
14993-75-0	Americium-243	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
15046-84-1	Iodine-129	5.00E-02	day/kg FW	[3]	4.40E+00	day/kg FW	[3]
15117-48-3	Plutonium-239	3.00E-03	day/kg FW	[3]	5.00E-04	day/kg FW	[3]
15117-96-1	Uranium-235	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
15262-20-1	Radium-228	3.00E-02	day/kg FW	[3]	3.10E-01	day/kg FW	[3]
15510-73-3	Curium-242	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
15585-10-1	Europium-154	2.00E-03	day/kg FW	[3]	4.00E-05	day/kg FW	[3]
15594-54-4	Thorium-229	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
156-59-2	cis-1,2-Dichloroethene	1.83E-03	day/kg FW	[2]	1.04E-03	day/kg FW	[2]
156-60-5	1,2-trans-Dichloroethene	2.49E-03	day/kg FW	[2]	1.42E-03	day/kg FW	[2]
15715-94-3	Samarium-151	2.00E-03	day/kg FW	[3]	4.00E-05	day/kg FW	[3]
15751-77-6	Zirconium-93	6.00E-05	day/kg FW	[3]	2.00E-04	day/kg FW	[3]
15757-87-6	Curium-243	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
15758-45-9	Selenium-79	9.00E+00	day/kg FW	[3]	9.00E+00	day/kg FW	[3]
15832-50-5	Tin-126	8.00E-01	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
1634-04-4	Methyl tert-butyl ether	3.19E-04	day/kg FW	[1]	1.83E-04	day/kg FW	[1]
16887-00-6	Chloride						
16984-48-8	Fluoride						
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	1.92E-02	day/kg FW	[2]	1.10E-02	day/kg FW	[2]
189-55-9	Dibenzo[a,i]pyrene	1.35E-02	day/kg FW	[1]	7.69E-03	day/kg FW	[1]
189-64-0	Dibenzo[a,h]pyrene	1.35E-02	day/kg FW	[1]	7.69E-03	day/kg FW	[1]
191-24-2	Benzo(g,h,i)perylene	2.13E-02	day/kg FW	[1]	1.22E-02	day/kg FW	[1]
191-30-0	Dibenzo(a,l)pyrene	8.93E-03	day/kg FW	[1]	5.10E-03	day/kg FW	[1]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
192-65-4	Dibenzo[a,e]pyrene	1.35E-02	day/kg FW	[1]	7.69E-03	day/kg FW	[1]
192-97-2	Benzo(e)pyrene	2.35E-02	day/kg FW	[1]	1.34E-02	day/kg FW	[1]
193-39-5	Indeno(1,2,3-cd)pyrene	2.17E-02	day/kg FW	[2]	1.24E-02	day/kg FW	[2]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	1.32E-02	day/kg FW	[2]	7.56E-03	day/kg FW	[2]
205-82-3	Benzo[j]fluoranthene	2.68E-02	day/kg FW	[1]	1.53E-02	day/kg FW	[1]
205-99-2	Benzo(b)fluoranthene	2.67E-02	day/kg FW	[2]	1.52E-02	day/kg FW	[2]
206-44-0	Fluoranthene	2.89E-02	day/kg FW	[2]	1.65E-02	day/kg FW	[2]
207-08-9	Benzo(k)fluoranthene	2.69E-02	day/kg FW	[2]	1.54E-02	day/kg FW	[2]
208-96-8	Acenaphthylene	1.84E-02	day/kg FW	[1]	1.05E-02	day/kg FW	[1]
218-01-9	Chrysene	2.94E-02	day/kg FW	[2]	1.68E-02	day/kg FW	[2]
224-42-0	Dibenz[a,j]acridine	2.28E-02	day/kg FW	[8]	1.30E-02	day/kg FW	[8]
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine	2.28E-02	day/kg FW	[8]	1.30E-02	day/kg FW	[8]
22967-92-6	Methyl mercury	3.58E-03	day/kg FW	[2]	3.58E-03	day/kg FW	[2]
23950-58-5	Pronamide	1.23E-02	day/kg FW	[2]	7.05E-03	day/kg FW	[2]
24959-67-9	Bromide	-	-	-	-	-	-
27154-33-2	Trichlorofluoroethane	4.39E-03	day/kg FW	[9]	2.51E-03	day/kg FW	[9]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	1.53E-02	day/kg FW	[1]	8.76E-03	day/kg FW	[1]
319-84-6	alpha-BHC	1.67E-02	day/kg FW	[2]	9.54E-03	day/kg FW	[2]
319-85-7	beta-BHC	1.67E-02	day/kg FW	[2]	9.54E-03	day/kg FW	[2]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	2.13E-02	day/kg FW	[1]	1.22E-02	day/kg FW	[1]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	1.94E-02	day/kg FW	[1]	1.11E-02	day/kg FW	[1]
3268-87-9	Octachlorodibenzo(p)dioxin	5.05E-03	day/kg FW	[2]	2.89E-03	day/kg FW	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	1.20E-02	day/kg FW	[1]	6.85E-03	day/kg FW	[1]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	6.46E-03	day/kg FW	[2]	3.69E-03	day/kg FW	[2]
3697-24-3	5-Methylchrysene	2.94E-02	day/kg FW	[7]	1.68E-02	day/kg FW	[7]
378253-40-8	Barium-137m	9.00E-03	day/kg FW	[3]	9.00E-01	day/kg FW	[3]
378253-44-2	Cadmium-113m	8.00E-01	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
378782-82-2	Niobium-93m	3.00E-04	day/kg FW	[3]	1.00E-03	day/kg FW	[3]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	1.00E-02	day/kg FW	[1]	5.71E-03	day/kg FW	[1]
39001-02-0	Octachlorodibenzofuran	6.46E-03	day/kg FW	[2]	3.69E-03	day/kg FW	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	8.11E-03	day/kg FW	[2]	4.63E-03	day/kg FW	[2]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	5.05E-03	day/kg FW	[1]	2.89E-03	day/kg FW	[1]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	2.12E-02	day/kg FW	[2]	1.21E-02	day/kg FW	[2]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	1.56E-04	day/kg FW	[1]	8.90E-05	day/kg FW	[1]
41851-50-7	Chlorocyclopentadiene	4.00E-03	day/kg FW	[1]	2.28E-03	day/kg FW	[1]
460-19-5	Cyanogen (Oxalonitrile)	4.58E-05	day/kg FW	[1]	2.62E-05	day/kg FW	[1]
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	8.88E-05	day/kg FW	[2]	5.08E-05	day/kg FW	[2]
50-32-8	Benzo(a)pyrene	2.77E-02	day/kg FW	[2]	1.58E-02	day/kg FW	[2]
506-68-3	Cyanogen bromide (Bromocyanide)	1.85E-05	day/kg FW	[1]	1.06E-05	day/kg FW	[1]
506-77-4	Cyanogen chloride	1.46E-05	day/kg FW	[1]	8.36E-06	day/kg FW	[1]
51-28-5	2,4-Dinitrophenol	4.10E-05	day/kg FW	[2]	2.34E-05	day/kg FW	[2]
51-79-6	Ethyl carbamate (Urethane)	2.65E-05	day/kg FW	[1]	1.51E-05	day/kg FW	[1]
510-15-6	Chlorobenzilate	2.34E-02	day/kg FW	[2]	1.34E-02	day/kg FW	[2]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	2.69E-02	day/kg FW	[2]	1.54E-02	day/kg FW	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	1.10E-02	day/kg FW	[1]	6.30E-03	day/kg FW	[1]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	1.29E-03	day/kg FW	[1]	7.39E-04	day/kg FW	[1]
53-70-3	Dibenz[a,h]anthracene	2.28E-02	day/kg FW	[2]	1.30E-02	day/kg FW	[2]
532-27-4	2-Chloroacetophenone	1.92E-03	day/kg FW	[1]	1.10E-03	day/kg FW	[1]
534-52-1	4,6-Dinitro-o-cresol	2.57E-03	day/kg FW	[1]	1.47E-03	day/kg FW	[1]
5385-75-1	Dibenzo(a,e)fluoranthene	1.80E-02	day/kg FW	[1]	1.03E-02	day/kg FW	[1]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	2.45E-03	day/kg FW	[1]	1.40E-03	day/kg FW	[1]
540-73-8	1,2-Dimethylhydrazine	9.54E-06	day/kg FW	[1]	5.45E-06	day/kg FW	[1]
540-84-1	2,2,4-Trimethylpentane	1.99E-02	day/kg FW	[1]	1.14E-02	day/kg FW	[1]
541-73-1	1,3-Dichlorobenzene	1.43E-02	day/kg FW	[2]	8.17E-03	day/kg FW	[2]
542-75-6	1,3-Dichloropropene	1.11E-03	day/kg FW	[2]	6.33E-04	day/kg FW	[2]
542-88-1	Bis(chloromethyl)ether	1.49E-04	day/kg FW	[1]	8.52E-05	day/kg FW	[1]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.21E-02	day/kg FW	[2]	6.92E-03	day/kg FW	[2]
56-23-5	Carbon tetrachloride	6.40E-03	day/kg FW	[2]	3.66E-03	day/kg FW	[2]
56-49-5	3-Methylcholanthrene	2.37E-02	day/kg FW	[1]	1.36E-02	day/kg FW	[1]
56-55-3	Benzo(a)anthracene	2.94E-02	day/kg FW	[2]	1.68E-02	day/kg FW	[2]
57-12-5	Cyanide	6.68E-06	day/kg FW	[2]	3.82E-06	day/kg FW	[2]
57-24-9	Strychnine	1.92E-03	day/kg FW	[2]	1.10E-03	day/kg FW	[2]
57-74-9	Chlordane	2.99E-02	day/kg FW	[2]	1.71E-02	day/kg FW	[2]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2.28E-02	day/kg FW	[2]	1.30E-02	day/kg FW	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.94E-02	day/kg FW	[2]	1.11E-02	day/kg FW	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.68E-02	day/kg FW	[2]	9.60E-03	day/kg FW	[2]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	1.70E-02	day/kg FW	[1]	9.74E-03	day/kg FW	[1]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	1.32E-02	day/kg FW	[2]	7.56E-03	day/kg FW	[2]
58-89-9	gamma-BHC (Lindane)	2.09E-02	day/kg FW	[1]	1.19E-02	day/kg FW	[1]
58-90-2	2,3,4,6-Tetrachlorophenol	5.40E-05	day/kg FW	[2]	3.08E-05	day/kg FW	[2]
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate	2.07E-03	day/kg FW	[4]	1.18E-03	day/kg FW	[4]
589-38-8	3-Hexanone	5.76E-04	day/kg FW	[1]	3.29E-04	day/kg FW	[1]
59-50-7	4-Chloro-3-methylphenol	8.95E-03	day/kg FW	[2]	5.11E-03	day/kg FW	[2]
59-89-2	N-Nitrosomorpholine	1.25E-05	day/kg FW	[1]	7.13E-06	day/kg FW	[1]
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone	7.49E-04	day/kg FW	[1]	4.28E-04	day/kg FW	[1]
593-60-2	Bromoethene (Vinyl bromide)	1.05E-03	day/kg FW	[1]	6.01E-04	day/kg FW	[1]
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene	2.57E-02	day/kg FW	[1]	1.47E-02	day/kg FW	[1]
60-29-7	Ethyl ether	2.88E-04	day/kg FW	[1]	1.65E-04	day/kg FW	[1]
60-35-5	Acetamide	6.68E-06	day/kg FW	[1]	3.82E-06	day/kg FW	[1]
602-87-9	5-Nitroacenaphthene	1.79E-02	day/kg FW	[5]	1.02E-02	day/kg FW	[5]
606-20-2	2,6-Dinitrotoluene	1.36E-03	day/kg FW	[2]	7.77E-04	day/kg FW	[2]
608-93-5	Pentachlorobenzene	2.96E-02	day/kg FW	[2]	1.69E-02	day/kg FW	[2]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	1.68E-02	day/kg FW	[2]	9.60E-03	day/kg FW	[2]
61626-71-9	Dichloropentadiene	9.82E-03	day/kg FW	[1]	5.61E-03	day/kg FW	[1]
62-50-0	Ethyl methanesulfonate	4.37E-05	day/kg FW	[2]	2.50E-05	day/kg FW	[2]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
62-53-3	Aniline	2.94E-04	day/kg FW	[2]	1.68E-04	day/kg FW	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	8.79E-06	day/kg FW	[1]	5.02E-06	day/kg FW	[1]
621-64-7	N-Nitroso-di-n-propylamine	7.21E-04	day/kg FW	[2]	4.12E-04	day/kg FW	[2]
624-83-9	Methyl isocyanate	7.04E-05	day/kg FW	[6]	4.02E-05	day/kg FW	[6]
628-73-9	Hexanenitrile	1.23E-03	day/kg FW	[1]	7.02E-04	day/kg FW	[1]
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane	8.30E-03	day/kg FW	[2]	4.75E-03	day/kg FW	[2]
64-18-6	Formic acid (methanoic acid)	3.78E-05	day/kg FW	[2]	2.16E-05	day/kg FW	[2]
65-85-0	Benzoic acid	4.16E-05	day/kg FW	[2]	2.38E-05	day/kg FW	[2]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	1.70E-02	day/kg FW	[1]	9.74E-03	day/kg FW	[1]
67-56-1	Methyl alcohol	6.68E-06	day/kg FW	[2]	3.82E-06	day/kg FW	[2]
67-63-0	2-Propyl alcohol	4.36E-05	day/kg FW	[1]	2.49E-05	day/kg FW	[1]
67-64-1	2-Propanone (Acetone)	2.11E-05	day/kg FW	[2]	1.20E-05	day/kg FW	[2]
67-66-3	Chloroform	2.14E-03	day/kg FW	[2]	1.22E-03	day/kg FW	[2]
67-72-1	Hexachloroethane	1.83E-02	day/kg FW	[2]	1.05E-02	day/kg FW	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.21E-02	day/kg FW	[2]	6.92E-03	day/kg FW	[2]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	9.80E-03	day/kg FW	[1]	5.60E-03	day/kg FW	[1]
70-30-4	Hexachlorophene	1.06E-02	day/kg FW	[2]	6.06E-03	day/kg FW	[2]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	2.46E-02	day/kg FW	[1]	1.40E-02	day/kg FW	[1]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1.68E-02	day/kg FW	[2]	9.60E-03	day/kg FW	[2]
71-36-3	n-Butyl alcohol	2.83E-04	day/kg FW	[1]	1.61E-04	day/kg FW	[1]
71-43-2	Benzene	2.49E-03	day/kg FW	[2]	1.42E-03	day/kg FW	[2]
71-55-6	1,1,1-Trichloroethane	4.39E-03	day/kg FW	[2]	2.51E-03	day/kg FW	[2]
72-43-5	Methoxychlor	2.76E-02	day/kg FW	[2]	1.58E-02	day/kg FW	[2]
72-55-9	4,4-DDE	2.94E-02	day/kg FW	[2]	1.68E-02	day/kg FW	[2]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1.68E-02	day/kg FW	[2]	9.60E-03	day/kg FW	[2]
74-83-9	Bromomethane	5.24E-04	day/kg FW	[2]	2.99E-04	day/kg FW	[2]
74-87-3	Chloromethane	3.01E-04	day/kg FW	[2]	1.72E-04	day/kg FW	[2]
74-88-4	Iodomethane	9.46E-04	day/kg FW	[1]	5.41E-04	day/kg FW	[1]
74-95-3	Methylene bromide	9.79E-04	day/kg FW	[2]	5.59E-04	day/kg FW	[2]
74-97-5	Bromochloromethane	7.91E-04	day/kg FW	[1]	4.52E-04	day/kg FW	[1]
7429-90-5	Aluminum						

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
7439-89-6	Iron	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7439-92-1	Lead	8.00E-01	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7439-93-2	Lithium						
7439-95-4	Magnesium	3.00E-02	day/kg FW	[3]	2.00E+00	day/kg FW	[3]
7439-96-5	Manganese	5.00E-02	day/kg FW	[3]	6.00E-02	day/kg FW	[3]
7439-97-6	Mercury	0.00E+00	day/kg FW	[2]	0.00E+00	day/kg FW	[2]
7439-98-7	Molybdenum	1.80E-01	day/kg FW	[3]	9.00E-01	day/kg FW	[3]
7440-02-0	Nickel	1.00E-03	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
7440-16-6	Rhodium	2.00E+00	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
7440-22-4	Silver	2.00E+00	day/kg FW	[3]	5.00E-01	day/kg FW	[3]
7440-23-5	Sodium	1.00E-02	day/kg FW	[3]	6.00E+00	day/kg FW	[3]
7440-24-6	Strontium (total)	8.00E-02	day/kg FW	[3]	2.00E-01	day/kg FW	[3]
7440-25-7	Tantalum	3.00E-04	day/kg FW	[3]	1.00E-03	day/kg FW	[3]
7440-28-0	Thallium	8.00E-01	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7440-29-1	Thorium-232	6.00E-03	day/kg FW	[3]	4.00E-03	day/kg FW	[3]
7440-31-5	Tin	8.00E-01	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7440-33-7	Tungsten	2.00E-01	day/kg FW	[3]	9.00E-01	day/kg FW	[3]
7440-36-0	Antimony	6.00E-03	day/kg FW	[3]	7.00E-02	day/kg FW	[3]
7440-38-2	Arsenic	8.30E-01	day/kg FW	[3]	2.60E-01	day/kg FW	[3]
7440-39-3	Barium	9.00E-03	day/kg FW	[3]	9.00E-01	day/kg FW	[3]
7440-41-7	Beryllium						
7440-43-9	Cadmium	1.06E-01	day/kg FW	[2]	2.50E-03	day/kg FW	[2]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.00E+00	day/kg FW	[3]	1.00E-01	day/kg FW	[3]
7440-50-8	Copper	5.00E-01	day/kg FW	[3]	5.00E-01	day/kg FW	[3]
7440-61-1	Uranium	1.00E+00	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7440-61-1R	Uranium-238						
7440-62-2	Vanadium						
7440-65-5	Yttrium	1.00E-02	day/kg FW	[3]	2.00E-03	day/kg FW	[3]
7440-66-6	Zinc	8.75E-03	day/kg FW	[2]	8.75E-03	day/kg FW	[2]
7440-67-7	Zirconium	6.00E-05	day/kg FW	[3]	2.00E-04	day/kg FW	[3]
7446-09-5	Sulfur dioxide						

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	1.70E-02	day/kg FW	[1]	9.74E-03	day/kg FW	[1]
7487-94-7	Mercury (Hg^{+2})	2.39E-02	day/kg FW	[2]	2.39E-02	day/kg FW	[2]
75-00-3	Chloroethane	7.76E-04	day/kg FW	[2]	4.44E-04	day/kg FW	[2]
75-01-4	1-Chloroethene	7.76E-04	day/kg FW	[2]	4.44E-04	day/kg FW	[2]
75-02-5	Fluoroethene (vinyl fluoride)	5.24E-04	day/kg FW	[1]	2.99E-04	day/kg FW	[1]
75-05-8	Acetonitrile	1.63E-05	day/kg FW	[2]	9.29E-06	day/kg FW	[2]
75-07-0	Acetaldehyde	2.22E-05	day/kg FW	[2]	1.27E-05	day/kg FW	[2]
75-09-2	Dichloromethane (Methylene chloride)	6.45E-04	day/kg FW	[2]	3.69E-04	day/kg FW	[2]
75-15-0	Carbon disulfide	2.89E-03	day/kg FW	[2]	1.65E-03	day/kg FW	[2]
75-21-8	Ethylene oxide (Oxirane)	1.80E-05	day/kg FW	[2]	1.03E-05	day/kg FW	[2]
75-25-2	Bromoform	3.68E-03	day/kg FW	[2]	2.10E-03	day/kg FW	[2]
75-27-4	Bromodichloromethane	2.49E-03	day/kg FW	[2]	1.42E-03	day/kg FW	[2]
75-29-6	2-Chloropropane	1.83E-03	day/kg FW	[1]	1.04E-03	day/kg FW	[1]
75-34-3	1,1-Dichloroethane	1.55E-03	day/kg FW	[2]	8.88E-04	day/kg FW	[2]
75-35-4	1,1-Dichloroethene	2.49E-03	day/kg FW	[2]	1.42E-03	day/kg FW	[2]
75-44-5	Phosgene (hydrogen phosphide)	6.68E-06	day/kg FW	[1]	3.82E-06	day/kg FW	[1]
75-45-6	Chlorodifluoromethane	4.23E-04	day/kg FW	[2]	2.42E-04	day/kg FW	[2]
75-50-3	Trimethylamine	5.69E-05	day/kg FW	[1]	3.25E-05	day/kg FW	[1]
75-69-4	Trichlorofluoromethane	4.39E-03	day/kg FW	[2]	2.51E-03	day/kg FW	[2]
75-71-8	Dichlorodifluoromethane	2.73E-03	day/kg FW	[2]	1.56E-03	day/kg FW	[2]
76-01-7	Pentachloroethane	1.01E-02	day/kg FW	[1]	5.78E-03	day/kg FW	[1]
76-13-1	1,2,2-Trichlorotrifluoroethane	9.52E-03	day/kg FW	[1]	5.44E-03	day/kg FW	[1]
76-44-8	Heptachlor	2.27E-02	day/kg FW	[2]	1.30E-02	day/kg FW	[2]
764-41-0	1,4-Dichloro-2-butene	5.00E-03	day/kg FW	[1]	2.86E-03	day/kg FW	[1]
7647-01-0	Hydrogen chloride	3.86E-05	day/kg FW	[2]	2.20E-05	day/kg FW	[2]
765-34-4	Glycidylaldehyde	2.86E-05	day/kg FW	[1]	1.63E-05	day/kg FW	[1]
7664-39-3	Hydrogen Fluoride						
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene	2.91E-02	day/kg FW	[2]	1.66E-02	day/kg FW	[2]
77-78-1	Dimethyl sulfate	5.69E-05	day/kg FW	[1]	3.25E-05	day/kg FW	[1]
7704-34-9	Total Sulfur (thermodynamically stable)						

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
7723-14-0	Phosphorus	1.90E-01	day/kg FW	[3]	1.00E+00	day/kg FW	[3]
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	1.13E+00	day/kg FW	[2]	1.13E+00	day/kg FW	[2]
7782-50-5	Chlorine	2.66E-04	day/kg FW	[2]	1.52E-04	day/kg FW	[2]
78-83-1	2-Methylpropyl alcohol	2.20E-04	day/kg FW	[1]	1.26E-04	day/kg FW	[1]
78-87-5	1,2-Dichloropropane	2.14E-03	day/kg FW	[2]	1.22E-03	day/kg FW	[2]
78-93-3	2-Butanone	7.73E-05	day/kg FW	[2]	4.42E-05	day/kg FW	[2]
79-00-5	1,1,2-Trichloroethane	2.14E-03	day/kg FW	[2]	1.22E-03	day/kg FW	[2]
79-01-6	1,1,2-Trichloroethylene	3.84E-03	day/kg FW	[2]	2.19E-03	day/kg FW	[2]
79-10-7	2-Propenoic acid	8.88E-05	day/kg FW	[1]	5.08E-05	day/kg FW	[1]
79-34-5	1,1,2,2-Tetrachloroethane	3.84E-03	day/kg FW	[2]	2.19E-03	day/kg FW	[2]
79-46-9	2-Nitropropane	3.13E-04	day/kg FW	[1]	1.79E-04	day/kg FW	[1]
80-62-6	Methyl methacrylate	7.49E-04	day/kg FW	[1]	4.28E-04	day/kg FW	[1]
82-68-8	Pentachloronitrobenzene (PCNB)	2.63E-02	day/kg FW	[2]	1.50E-02	day/kg FW	[2]
822-06-0	Hexamethylene-1,5-diisocyanate	9.92E-03	day/kg FW	[1]	5.67E-03	day/kg FW	[1]
823-40-5	Toluene-2,6-diamine	5.69E-05	day/kg FW	[1]	3.25E-05	day/kg FW	[1]
83-32-9	Acenaphthene	1.79E-02	day/kg FW	[2]	1.02E-02	day/kg FW	[2]
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	4.39E-03	day/kg FW	[2]	2.51E-03	day/kg FW	[2]
84-74-2	Di-n-butylphthalate	2.68E-02	day/kg FW	[2]	1.53E-02	day/kg FW	[2]
85-01-8	Phenanthrene	2.49E-02	day/kg FW	[2]	1.42E-02	day/kg FW	[2]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	7.67E-06	day/kg FW	[2]	4.38E-06	day/kg FW	[2]
85-68-7	Butylbenzylphthalate	2.83E-02	day/kg FW	[2]	1.62E-02	day/kg FW	[2]
86-73-7	Fluorene	2.16E-02	day/kg FW	[2]	1.23E-02	day/kg FW	[2]
87-61-6	1,2,3-Trichlorobenzene	1.98E-02	day/kg FW	[2]	1.13E-02	day/kg FW	[2]
87-68-3	Hexachlorobutadiene	2.76E-02	day/kg FW	[2]	1.58E-02	day/kg FW	[2]
87-86-5	Pentachlorophenol	4.88E-05	day/kg FW	[2]	2.79E-05	day/kg FW	[2]
88-06-2	2,4,6-Trichlorophenol	9.51E-05	day/kg FW	[2]	5.44E-05	day/kg FW	[2]
88-74-4	o-Nitroaniline (2-nitroaniline)	1.69E-03	day/kg FW	[2]	9.63E-04	day/kg FW	[2]
88-75-5	2-Nitrophenol	1.53E-03	day/kg FW	[2]	8.73E-04	day/kg FW	[2]
90-04-0	o-Anisidine	5.14E-04	day/kg FW	[1]	2.94E-04	day/kg FW	[1]
90-12-0	1-Methylnaphthalene	1.76E-02	day/kg FW	[1]	1.00E-02	day/kg FW	[1]

Table 4-2 Biotransfer Factors for Chicken and Eggs

CAS Registry Number	Analyte Name	Biotransfer Factor in Chicken ($Ba_{chicken}$)	Units for Biotransfer Factor in Chicken	Reference	Biotransfer Factor in Eggs (Ba_{eggs})	Units for Biotransfer Factor in Eggs	Reference
91-20-3	Naphthalene	1.09E-02	day/kg FW	[2]	6.25E-03	day/kg FW	[2]
91-22-5	Quinoline	2.24E-03	day/kg FW	[1]	1.28E-03	day/kg FW	[1]
91-57-6	2-Methylnaphthalene	1.74E-02	day/kg FW	[1]	9.96E-03	day/kg FW	[1]
91-58-7	2-Chloronaphthalene	1.18E-02	day/kg FW	[2]	6.74E-03	day/kg FW	[2]
91-94-1	3,3'-Dichlorobenzidine	1.32E-02	day/kg FW	[2]	7.57E-03	day/kg FW	[2]
92-52-4	1,1`-Biphenyl	1.89E-02	day/kg FW	[1]	1.08E-02	day/kg FW	[1]
924-16-3	N-Nitroso-di-n-Buetylamine	1.89E-03	day/kg FW	[2]	1.08E-03	day/kg FW	[2]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	5.39E-03	day/kg FW	[2]	3.08E-03	day/kg FW	[2]
94-75-7	2,4-D	6.47E-03	day/kg FW	[1]	3.70E-03	day/kg FW	[1]
95-48-7	o-Cresol	1.97E-03	day/kg FW	[2]	1.13E-03	day/kg FW	[2]
95-49-8	o-Chlorotoluene	1.22E-02	day/kg FW	[1]	6.99E-03	day/kg FW	[1]
95-50-1	1,2-Dichlorobenzene	1.18E-02	day/kg FW	[2]	6.74E-03	day/kg FW	[2]
95-53-4	o-Toluidine	6.70E-04	day/kg FW	[2]	3.83E-04	day/kg FW	[2]
95-57-8	2-Chlorophenol	2.47E-03	day/kg FW	[2]	1.41E-03	day/kg FW	[2]
95-63-6	1,2,4-Trimethyl benzene	1.46E-02	day/kg FW	[1]	8.37E-03	day/kg FW	[1]
95-94-3	1,2,4,5-Tetrachlorobenzene	2.76E-02	day/kg FW	[2]	1.58E-02	day/kg FW	[2]
95-95-4	2,4,5-Trichlorophenol	1.46E-03	day/kg FW	[2]	8.33E-04	day/kg FW	[2]
96-12-8	1,2-Dibromo-3-chloropropane	3.34E-03	day/kg FW	[2]	1.91E-03	day/kg FW	[2]
96-18-4	1,2,3-Trichloropropane	2.14E-03	day/kg FW	[2]	1.22E-03	day/kg FW	[2]
96-45-7	Ethylene thiourea	6.87E-06	day/kg FW	[1]	3.92E-06	day/kg FW	[1]
97-63-2	Ethyl methacrylate	1.95E-03	day/kg FW	[2]	1.11E-03	day/kg FW	[2]
98-01-1	Furfural	1.02E-04	day/kg FW	[1]	5.82E-05	day/kg FW	[1]
98-06-6	tert-Butyl benzene	2.05E-02	day/kg FW	[1]	1.17E-02	day/kg FW	[1]
98-07-7	Benzotrichloride	1.79E-02	day/kg FW	[1]	1.02E-02	day/kg FW	[1]
98-82-8	Cumene	1.55E-02	day/kg FW	[2]	8.85E-03	day/kg FW	[2]
98-83-9	Methyl styrene (mixed isomers)	1.29E-02	day/kg FW	[1]	7.37E-03	day/kg FW	[1]
98-86-2	Acetophenone	1.07E-03	day/kg FW	[2]	6.12E-04	day/kg FW	[2]
98-95-3	Nitrobenzene	1.69E-03	day/kg FW	[2]	9.63E-04	day/kg FW	[2]
99-35-4	1,3,5-Trinitrobenzene	5.34E-04	day/kg FW	[2]	3.05E-04	day/kg FW	[2]
99-65-0	1,3-Dinitrobenzene	9.30E-04	day/kg FW	[2]	5.31E-04	day/kg FW	[2]
99-87-6	p-Cymene	2.04E-02	day/kg FW	[1]	1.16E-02	day/kg FW	[1]

Reference	Reference (source) for Biotransfer Factor in Chicken
[1]	Calculated value per Eqs. A-2-21 and A-2-27 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for Biotransfer Factor in Eggs
[1]	Calculated value per Eqs. A-2-21 and A-2-28 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[3]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[4]	Surrogate value from 2,4-Dinitrotoluene.
[5]	Surrogate value from Acenaphthene.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Table 4-3 Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors

CAS Registry Number	Analyte Name	Toxicity Equivalence Factor Group	Value of Toxicity Equivalence Factor (*TEF*)	Reference	Bioaccumulation Equivalency Factor (*BEF*)	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	TCDD	1	[3]	1	[1]
189-55-9	Dibenzo[a,i]pyrene	PAH	10	[1]		
189-64-0	Dibenzo[a,h]pyrene	PAH	10	[1]		
191-30-0	Dibenzo(a,l)pyrene	PAH	10	[1]		
192-65-4	Dibenzo[a,e]pyrene	PAH	1	[1]		
193-39-5	Indeno(1,2,3-cd)pyrene	PAH	0.1	[1]		
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	TCDD	0.1	[3]	0.14	[1]
205-82-3	Benzo[j]fluoranthene	PAH	0.1	[1]		
205-99-2	Benzo(b)fluoranthene	PAH	0.1	[1]		
207-08-9	Benzo(k)fluoranthene	PAH	0.1	[1]		
218-01-9	Chrysene	PAH	0.01	[1]		
224-42-0	Dibenz[a,j]acridine	PAH	0.1	[1]		
226-36-8	Dibenz[a,h]acridine	PAH	0.1	[1]		
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	PCB	0.0001	[2]		
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	PCB	0.0001	[2]		
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	PCB	0.0001	[2]		
3268-87-9	Octachlorodibenzo(p)dioxin	TCDD	0.0003	[3]	0.012	[1]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	PCB	0.01	[2]		
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	TCDD	0.01	[3]	0.051	[1]
3697-24-3	5-Methylchrysene	PAH	1	[1]		
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	PCB	0.0005	[2]		
39001-02-0	Octachlorodibenzofuran	TCDD	0.0003	[3]	0.016	[1]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	TCDD	0.1	[3]	0.31	[1]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	PCB	0.0001	[2]		
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	TCDD	1	[3]	0.92	[1]
50-32-8	Benzo(a)pyrene	PAH	1	[1]		
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	TCDD	0.1	[3]	0.8	[1]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	PCB	0.00001	[2]		
53-70-3	Dibenz[a,h]anthracene	PAH	0.1	[1]		

Table 4-3 Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors

CAS Registry Number	Analyte Name	Toxicity Equivalence Factor Group	Value of Toxicity Equivalence Factor (*TEF*)	Reference	Bioaccumulation Equivalency Factor (*BEF*)	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	TCDD	0.01	[3]	0.39	[1]
56-49-5	3-Methylcholanthrene	PAH	1	[1]		
56-55-3	Benzo(a)anthracene	PAH	0.1	[1]		
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	TCDD	0.3	[3]	1.6	[1]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	TCDD	0.03	[3]	0.22	[1]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	TCDD	0.1	[3]	0.19	[1]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	PCB	0.1	[2]		
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	TCDD	0.1	[3]	0.12	[1]
602-87-9	5-Nitroacenaphthene	PAH	0.01	[1]		
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	TCDD	0.1	[3]	0.67	[1]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	PCB	0.0001	[2]		
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	TCDD	0.01	[3]	0.011	[1]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	PCB	0.0005	[2]		
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	PCB	0.0001	[2]		
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	TCDD	0.1	[3]	0.076	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	TCDD	0.1	[3]	0.63	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	PCB	0.0005	[2]		

Reference	Reference (source) for Toxicity Equivalence Factor
[1]	Ecology. 2006. *Proposed Amendments to the MTCA Cleanup Regulation Addressing Policies and Procedures for Certain Types of Chemical Mixtures*. Washington State Department of Ecology, Olympia, Washington. June 2006. (http://www.ecy.wa.gov/programs/tcp/regs/amendment_2006/MTCA%20Rule%20Revisions%20Overview%206-22-06.pdf)
[2]	EPA. 2003. *Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds*, NAS Review Draft, EPA/600/P-00/001 Bg (Part 3, Table 1-3), Exposure Assessment and Risk Characterization Group National Center for Environmental Assessment - Washington Office, Office of Research and Development, Washington, DC. (www.epa.gov/ncea/dioxin)
[3]	WAC 173-340-900. Tables, Washington Administrative Code, effective 15 August 2001.

Reference	Reference (source) for Bioaccumulation Equivalency Factor
[1]	EPA. 2003. *Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds*, NAS Review Draft, EPA/600/P-00/001 Cb (Part 1, Vol. 2, Table 2-10), Exposure Assessment and Risk Characterization Group National Center for Environmental Assessment - Washington Office, Office of Research and Development, Washington, DC. (www.epa.gov/ncea/dioxin)

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
100-02-7	p-Nitrophenol	5.90E+00	L/kg	[6]	5.90E+00	L/kg	[2]
100-21-0	Phthalic acid	3.16E+00	L/kg	[5]	3.20E+00	L/kg	[2]
100-25-4	1,4-Dinitrobenzene	2.66E+00	L/kg	[3]	2.70E+00	L/kg	[2]
100-40-3	4-Ethenylcyclohexene	1.51E+02	L/kg	[7]			
100-41-4	Ethyl benzene	4.86E+01	L/kg	[6]	5.30E+01	L/kg	[2]
100-42-5	Styrene	4.07E+01	L/kg	[6]	3.70E+01	L/kg	[2]
100-44-7	Benzyl chloride	1.18E+01	L/kg	[6]	1.20E+01	L/kg	[2]
100-47-0	Benzonitrile	3.17E+00	L/kg	[6]			
100-51-6	Benzyl alcohol	3.14E-01	L/kg	[6]	3.10E-01	L/kg	[2]
100-52-7	Benzaldehyde	2.75E+00	L/kg	[6]	2.80E+00	L/kg	[2]
10028-15-6	Ozone	3.16E+00	L/kg	[2]			
10028-17-8	Tritium				1.00E+00	L/kg	[2]
10045-97-3	Cesium-137	2.00E+03	L/kg	[9]	2.00E+03	L/kg	[2]
10061-01-5	cis-1,3-Dichloropropene	5.79E+00	L/kg	[17]	8.10E+00	L/kg	[10]
10061-02-6	trans-1,3-Dichloropropene	7.30E+00	L/kg	[3]			
10098-91-6	Yttrium-90	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
10098-97-2	Strontium-90	6.00E+01	L/kg	[9]	9.00E+01	L/kg	[2]
101-55-3	4-Bromophenylphenyl ether	2.17E+03	L/kg	[6]	1.04E+04	L/kg	[1]
101-77-9	4,4-Methylenedianiline	6.92E+00	L/kg	[7]	3.30E+00	L/kg	[2]
10102-44-0	Nitrogen dioxide				1.50E+05	L/kg	[2]
10198-40-0	Cobalt-60	3.00E+02	L/kg	[9]	3.00E+02	L/kg	[2]
103-33-3	Azobenzene	1.74E+02	L/kg	[3]	1.00E+01	L/kg	[2]
103-65-1	n-Propyl benzene (Isocumene)	1.38E+02	L/kg	[3]			
104-51-8	n-Butylbenzene	4.71E+02	L/kg	[3]			
104-76-7	2-Ethyl-1-hexanol	2.52E+01	L/kg	[3]			
105-67-9	2,4-Dimethylphenol	1.18E+01	L/kg	[6]	1.20E+01	L/kg	[2]
10595-95-6	n-Nitrosomethylethylamine	3.16E+00	L/kg	[5]	3.20E+00	L/kg	[2]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	3.80E+01	L/kg	[7]			
106-44-5	p-Cresol (4-methyl phenol)	5.79E+00	L/kg	[6]	6.20E+00	L/kg	[2]
106-46-7	1,4-Dichlorobenzene	9.89E+01	L/kg	[6]	8.90E+01	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
106-47-8	p-Chloroaniline	5.12E+00	L/kg	[6]	5.10E+00	L/kg	[2]
106-49-0	p-Toluidine	2.35E+00	L/kg	[3]	2.30E+00	L/kg	[2]
106-51-4	Quinone	3.16E+00	L/kg	[2]			
106-88-7	1,2-Epoxybutane	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
106-93-4	Ethylene dibromide	6.92E+00	L/kg	[6]	6.40E+00	L/kg	[2]
106-99-0	1,3-Butadiene	6.80E+00	L/kg	[3]	6.80E+00	L/kg	[2]
107-02-8	Acrolein	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
107-05-1	3-Chloropropene	2.69E+00	L/kg	[7]	6.10E+00	L/kg	[2]
107-06-2	1,2-Dichloroethane	2.85E+00	L/kg	[6]	2.80E+00	L/kg	[2]
107-12-0	Propionitrile	3.16E+00	L/kg	[2]			
107-13-1	Acrylonitrile	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
107-19-7	Propargyl alcohol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
107-21-1	Ethylene glycol (1,2-ethanediol)	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
107-98-2	Propylene glycol monomethyl ether	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
108-05-4	Acetic acid vinyl ester	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
108-10-1	4-Methyl-2-pentanone	1.67E+00	L/kg	[6]	2.00E+00	L/kg	[2]
108-39-4	m-Cresol	6.44E+00	L/kg	[6]	6.40E+00	L/kg	[2]
108-60-1	bis (2-Chloroisopropyl)ether	6.92E+00	L/kg	[7]	1.60E+01	L/kg	[2]
108-67-8	1,3,5-Trimethylbenzene	8.58E+01	L/kg	[6]	8.60E+01	L/kg	[2]
108-86-1	Bromobenzene (Phenyl bromide)	4.79E+01	L/kg	[7]	4.00E+01	L/kg	[2]
108-87-2	Methylcyclohexane	1.78E+02	L/kg	[7]	1.20E+02	L/kg	[2]
108-88-3	Toluene	2.39E+01	L/kg	[6]	2.50E+01	L/kg	[2]
108-90-7	Chlorobenzene	2.86E+01	L/kg	[6]	3.10E+01	L/kg	[2]
108-94-1	Cyclohexanone	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
108-95-2	Phenol	2.85E+00	L/kg	[6]	2.70E+00	L/kg	[2]
109-74-0	n-Butanenitrile	3.16E+00	L/kg	[2]			
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
109-86-4	2-Methoxyethanol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
109-99-9	Tetrahydrofuran	3.16E+00	L/kg	[6]			
110-00-9	Furan	2.15E+00	L/kg	[3]	2.10E+00	L/kg	[2]
110-54-3	n-Hexane	2.01E+02	L/kg	[3]	2.00E+02	L/kg	[2]
110-59-8	Pentanenitrile	1.45E+00	L/kg	[3]			
110-80-5	2-Ethoxyethanol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
110-82-7	Cyclohexane	6.92E+01	L/kg	[7]			
110-83-8	Cyclohexene	3.18E+01	L/kg	[3]			
110-86-1	Pyridine	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
111-15-9	Ethylene glycol monoethyl ether acetate	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
111-44-4	Bis(2-chloroethyl)ether	1.96E+00	L/kg	[6]	2.00E+00	L/kg	[2]
111-65-9	n-Octane	1.94E+03	L/kg	[3]			
111-76-2	2-Butoxyethanol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
111-84-2	n-Nonane	4.47E+03	L/kg	[3]			
111-91-1	Bis(2-chloroethoxy)methane	2.00E+00	L/kg	[3]	2.00E+00	L/kg	[2]
112-30-1	1-Decanol	6.59E+02	L/kg	[3]			
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone	3.16E+00	L/kg	[2]			
117-81-7	Bis(2-ethylhexyl)phthalate	5.33E+01	L/kg	[6]	1.94E+02	L/kg	[1]
117-84-0	Di-n-octylphthalate	6.35E+01	L/kg	[6]	4.62E+02	L/kg	[1]
118-74-1	Hexachlorobenzene	2.40E+03	L/kg	[6]	1.15E+04	L/kg	[1]
119-90-4	3,3'-Dimethoxybenzidine	4.94E+00	L/kg	[6]	4.90E+00	L/kg	[2]
120-12-7	Anthracene	5.82E+02	L/kg	[6]	1.03E+03	L/kg	[1]
120-82-1	1,2,4-Trichlorobenzene	2.40E+02	L/kg	[6]	2.50E+02	L/kg	[2]
120-83-2	2,4-Dichlorophenol	1.36E+01	L/kg	[6]	1.80E+01	L/kg	[2]
121-14-2	2,4-Dinitrotoluene	6.68E+00	L/kg	[6]	6.70E+00	L/kg	[2]
122-39-4	N,N-Diphenylamine	3.02E+01	L/kg	[7]	9.90E+01	L/kg	[2]
122-66-7	1,2-Diphenylhydrazine	3.41E+01	L/kg	[6]	3.70E+01	L/kg	[2]
123-33-1	Maleic hydrazide	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
123-38-6	Propionaldehyde	3.16E+00	L/kg	[2]			
123-72-8	Butanal	3.16E+00	L/kg	[2]			
123-91-1	1,4-Dioxan	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	1.04E+01	L/kg	[6]	9.20E+00	L/kg	[2]
126-73-8	Tributyl phosphate	2.69E+01	L/kg	[7]	4.00E+01	L/kg	[2]
126-98-7	2-Methyl-2-propenenitrile	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
127-18-4	1,1,2,2-Tetrachloroethene	8.28E+01	L/kg	[6]	8.30E+01	L/kg	[2]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	7.76E+02	L/kg	[7]			
129-00-0	Pyrene	1.18E+03	L/kg	[6]	3.29E+03	L/kg	[1]
131-11-3	Dimethyl Phthalate	3.17E+00	L/kg	[6]	3.40E+00	L/kg	[2]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	3.16E+00	L/kg	[5]	3.00E+02	L/kg	[2]
132-64-9	Dibenzofuran	1.35E+03	L/kg	[7]	3.00E+02	L/kg	[2]
133-06-2	Captan	2.86E+01	L/kg	[3]	2.90E+01	L/kg	[2]
1330-20-7	Xylenes (mixed isomers)	5.04E+01	L/kg	[3]	5.00E+01	L/kg	[2]
1336-36-3	Polychlorinated biphenyls	3.10E+04	L/kg	[8]	5.80E+04	L/kg	[2]
134-32-7	alpha-Naphthylamine	1.58E+01	L/kg	[7]			
135-98-8	sec-Butylbenzene	6.59E+02	L/kg	[3]			
13966-29-5	Uranium-234	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
13967-48-1	Ruthenium-106	1.00E+02	L/kg	[9]	2.00E+01	L/kg	[2]
13967-70-9	Cesium-134	2.00E+03	L/kg	[9]	2.00E+03	L/kg	[2]
13968-55-3	Uranium-233	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
13981-15-2	Curium-244	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
13981-16-3	Plutonium-238	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
13981-37-8	Nickel-63	1.00E+02	L/kg	[9]	1.00E+02	L/kg	[2]
13982-10-0	Plutonium-242	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
13982-63-3	Radium-226	5.00E+01	L/kg	[9]	4.60E+02	L/kg	[2]
13982-70-2	Uranium-236	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
13994-20-2	Neptunium-237	2.10E+01	L/kg	[9]	4.00E+01	L/kg	[2]
141-78-6	Acetic acid ethyl ester	3.16E+00	L/kg	[5]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
14119-32-5	Plutonium-241	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
14119-33-6	Plutonium-240	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
14133-76-7	Technetium-99	2.00E+01	L/kg	[9]	2.00E+01	L/kg	[2]
14158-29-3	Uranium-232	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
14234-35-6	Antimony-125	1.00E+02	L/kg	[9]	5.00E+02	L/kg	[2]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
14336-70-0	Nickel-59	1.00E+02	L/kg	[9]	1.00E+02	L/kg	[2]
14391-16-3	Europium-155	3.00E+01	L/kg	[9]	5.00E+01	L/kg	[2]
145-73-3	Endothall	5.90E+00	L/kg	[3]	3.20E+00	L/kg	[2]
14596-10-2	Americium-241	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
14683-23-9	Europium-152	3.00E+01	L/kg	[9]	5.00E+01	L/kg	[2]
14762-75-5	Carbon-14	5.00E+04	L/kg	[9]			
14797-55-8	Nitrate				1.50E+05	L/kg	[2]
14797-65-0	Nitrite				1.50E+05	L/kg	[2]
14808-79-8	Sulfate				1.00E+03	L/kg	[2]
14952-40-0	Actinium-227	2.50E+01	L/kg	[9]	4.90E+02	L/kg	[2]
14993-75-0	Americium-243	3.00E+01	L/kg	[9]	6.00E+01	L/kg	[2]
15046-84-1	Iodine-129	4.00E+01	L/kg	[9]	4.00E+01	L/kg	[2]
15117-48-3	Plutonium-239	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
15117-96-1	Uranium-235	1.00E+01	L/kg	[9]	1.10E+02	L/kg	[2]
15262-20-1	Radium-228	5.00E+01	L/kg	[9]	5.00E+01	L/kg	[2]
15510-73-3	Curium-242	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
15585-10-1	Europium-154	3.00E+01	L/kg	[9]	5.00E+01	L/kg	[2]
15594-54-4	Thorium-229	1.00E+02	L/kg	[9]	5.20E+02	L/kg	[2]
156-59-2	cis-1,2-Dichloroethene	5.79E+00	L/kg	[6]	8.10E+00	L/kg	[2]
156-60-5	1,2-trans-Dichloroethene	8.26E+00	L/kg	[6]	8.10E+00	L/kg	[2]
15715-94-3	Samarium-151	3.00E+01	L/kg	[9]			
15751-77-6	Zirconium-93	3.00E+02	L/kg	[9]	3.00E+02	L/kg	[2]
15757-87-6	Curium-243	3.00E+01	L/kg	[9]	3.00E+01	L/kg	[2]
15758-45-9	Selenium-79	1.70E+02	L/kg	[9]	5.70E+03	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
15832-50-5	Tin-126	3.00E+03	L/kg	[9]	3.00E+03	L/kg	[2]
1634-04-4	Methyl tert-butyl ether	1.51E+00	L/kg	[7]	3.20E+00	L/kg	[2]
16887-00-6	Chloride	3.16E+00	L/kg	[2]	1.00E+03	L/kg	[2]
16984-48-8	Fluoride						
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	3.44E+04	L/kg	[6]	3.40E+04	L/kg	[2]
189-55-9	Dibenzo[a,i]pyrene	2.63E+04	L/kg	[1]			
189-64-0	Dibenzo[a,h]pyrene	2.63E+04	L/kg	[15]			
191-24-2	Benzo(g,h,i)perylene	2.54E+04	L/kg	[1]	2.50E+04	L/kg	[2]
191-30-0	Dibenzo(a,l)pyrene	6.88E+03	L/kg	[4]			
192-65-4	Dibenzo[a,e]pyrene	6.88E+03	L/kg	[1]			
192-97-2	Benzo(e)pyrene	1.81E+04	L/kg	[3]			
193-39-5	Indeno(1,2,3-cd)pyrene	2.41E+04	L/kg	[6]	6.18E+05	L/kg	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	2.51E+04	L/kg	[6]	1.40E+03	L/kg	[2]
205-82-3	Benzo[j]fluoranthene	1.01E+04	L/kg	[1]			
205-99-2	Benzo(b)fluoranthene	1.04E+04	L/kg	[6]	2.06E+05	L/kg	[1]
206-44-0	Fluoranthene	1.41E+03	L/kg	[6]	4.49E+03	L/kg	[1]
207-08-9	Benzo(k)fluoranthene	9.93E+03	L/kg	[6]	1.77E+05	L/kg	[1]
208-96-8	Acenaphthylene	3.55E+02	L/kg	[7]	2.20E+02	L/kg	[2]
218-01-9	Chrysene	4.89E+03	L/kg	[6]	4.99E+04	L/kg	[1]
224-42-0	Dibenz[a,j]acridine	2.02E+04	L/kg	[14]	4.97E+05	L/kg	[8]
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine	1.00E+02	L/kg	[7]	4.97E+05	L/kg	[8]
22967-92-6	Methyl mercury				6.80E+06	L/kg	[1]
23950-58-5	Pronamide	8.73E+01	L/kg	[6]	8.70E+01	L/kg	[2]
24959-67-9	Bromide	3.16E+00	L/kg	[2]			
27154-33-2	Trichlorofluoroethane	1.68E+01	L/kg	[16]	1.80E+01	L/kg	[9]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	1.84E+05	L/kg	[1]			
319-84-6	alpha-BHC	1.68E+02	L/kg	[6]	3.10E+02	L/kg	[2]
319-85-7	beta-BHC	1.68E+02	L/kg	[6]	3.10E+02	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	3.89E+04	L/kg	[7]			
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	1.97E+05	L/kg	[1]			
3268-87-9	Octachlorodibenzo(p)dioxin	1.47E+03	L/kg	[6]	2.40E+01	L/kg	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	7.38E+04	L/kg	[1]			
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	2.75E+03	L/kg	[6]			
3697-24-3	5-Methylchrysene	4.89E+03	L/kg	[13]	4.99E+04	L/kg	[7]
378253-40-8	Barium-137m	4.00E+00	L/kg	[9]	4.00E+00	L/kg	[2]
378253-44-2	Cadmium-113m	2.00E+02	L/kg	[9]	2.00E+02	L/kg	[2]
378782-82-2	Niobium-93m	3.00E+02	L/kg	[9]	3.00E+02	L/kg	[2]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	3.76E+04	L/kg	[1]			
39001-02-0	Octachlorodibenzofuran	2.75E+03	L/kg	[6]	4.20E+02	L/kg	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	5.18E+03	L/kg	[6]			
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	4.92E+03	L/kg	[1]			
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	2.59E+04	L/kg	[6]			
4170-30-3	Crotonaldehyde (Propylene aldehyde)	3.16E+00	L/kg	[2]			
41851-50-7	Chlorocyclopentadiene	1.48E+01	L/kg	[3]	1.50E+01	L/kg	[2]
460-19-5	Cyanogen (Oxalonitrile)	3.16E+00	L/kg	[2]	1.50E+05	L/kg	[2]
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
50-32-8	Benzo(a)pyrene	8.32E+03	L/kg	[6]	1.33E+05	L/kg	[1]
506-68-3	Cyanogen bromide (Bromocyanide)	3.16E+00	L/kg	[2]	4.20E+02	L/kg	[2]
506-77-4	Cyanogen chloride	3.16E+00	L/kg	[2]	1.00E+03	L/kg	[2]
51-28-5	2,4-Dinitrophenol	3.06E+00	L/kg	[6]	3.90E+00	L/kg	[2]
51-79-6	Ethyl carbamate (Urethane)	3.16E+00	L/kg	[2]			
510-15-6	Chlorobenzilate	4.54E+02	L/kg	[6]	7.33E+02	L/kg	[1]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	9.93E+03	L/kg	[6]	2.10E+04	L/kg	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	3.76E+04	L/kg	[1]			
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	3.99E+00	L/kg	[3]	4.00E+00	L/kg	[2]
53-70-3	Dibenz[a,h]anthracene	2.02E+04	L/kg	[6]	4.97E+05	L/kg	[1]
532-27-4	2-Chloroacetophenone	6.11E+00	L/kg	[3]	8.80E-01	L/kg	[2]
534-52-1	4,6-Dinitro-o-cresol	1.45E+00	L/kg	[7]	8.60E+00	L/kg	[2]
5385-75-1	Dibenzo(a,e)fluoranthene	2.63E+04	L/kg	[1]			
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	2.00E+00	L/kg	[7]	8.10E+00	L/kg	[2]
540-73-8	1,2-Dimethylhydrazine	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
540-84-1	2,2,4-Trimethylpentane	2.67E+02	L/kg	[3]			
541-73-1	1,3-Dichlorobenzene	1.18E+02	L/kg	[6]	1.00E+02	L/kg	[2]
542-75-6	1,3-Dichloropropene	3.40E+00	L/kg	[6]	7.30E+00	L/kg	[2]
542-88-1	Bis(chloromethyl)ether	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.83E+04	L/kg	[6]			
56-23-5	Carbon tetrachloride	2.86E+01	L/kg	[6]	3.00E+01	L/kg	[2]
56-49-5	3-Methylcholanthrene	1.75E+04	L/kg	[1]			
56-55-3	Benzo(a)anthracene	4.89E+03	L/kg	[6]	4.99E+04	L/kg	[1]
57-12-5	Cyanide	3.16E+00	L/kg	[6]			
57-24-9	Strychnine	6.11E+00	L/kg	[6]	6.10E+00	L/kg	[2]
57-74-9	Chlordane	3.43E+03	L/kg	[6]	2.43E+04	L/kg	[1]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2.02E+04	L/kg	[6]	3.40E+04	L/kg	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	3.38E+04	L/kg	[6]	3.40E+04	L/kg	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	4.90E+04	L/kg	[6]			
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	1.97E+05	L/kg	[1]			
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	2.51E+04	L/kg	[6]			
58-89-9	gamma-BHC (Lindane)	4.68E+02	L/kg	[7]	3.10E+02	L/kg	[2]
58-90-2	2,3,4,6-Tetrachlorophenol	2.12E+02	L/kg	[6]	3.75E+02	L/kg	[1]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate	6.68E+00	L/kg	[10]	6.70E+00	L/kg	[3]
589-38-8	3-Hexanone	1.80E+00	L/kg	[3]			
59-50-7	4-Chloro-3-methylphenol	4.86E+01	L/kg	[6]	4.90E+01	L/kg	[2]
59-89-2	N-Nitrosomorpholine	3.16E+00	L/kg	[2]			
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone	2.30E+00	L/kg	[3]	2.30E+00	L/kg	[2]
593-60-2	Bromoethene (Vinyl bromide)	3.23E+00	L/kg	[3]	3.20E+00	L/kg	[2]
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene	6.71E+02	L/kg	[3]			
60-29-7	Ethyl ether	3.98E+00	L/kg	[7]	3.20E+00	L/kg	[2]
60-35-5	Acetamide	3.16E+00	L/kg	[2]			
602-87-9	5-Nitroacenaphthene	2.01E+02	L/kg	[11]	2.10E+02	L/kg	[4]
606-20-2	2,6-Dinitrotoluene	4.21E+00	L/kg	[6]	8.30E+00	L/kg	[2]
608-93-5	Pentachlorobenzene	1.91E+03	L/kg	[6]	8.00E+03	L/kg	[1]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	4.90E+04	L/kg	[6]			
61626-71-9	Dichloropentadiene	5.71E+01	L/kg	[3]	1.50E+01	L/kg	[6]
62-50-0	Ethyl methanesulfonate	3.16E+00	L/kg	[6]			
62-53-3	Aniline	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	2.60E-02	L/kg	[8]	3.20E+00	L/kg	[2]
621-64-7	N-Nitroso-di-n-propylamine	2.22E+00	L/kg	[6]	2.20E+00	L/kg	[2]
624-83-9	Methyl isocyanate	3.16E+00	L/kg	[12]	3.20E+00	L/kg	[5]
628-73-9	Hexanenitrile	3.79E+00	L/kg	[3]			
630-08-0	Carbon monoxide	4.68E+00	L/kg	[3]			
630-20-6	1,1,1,2-Tetrachloroethane	4.30E+01	L/kg	[6]	3.60E+01	L/kg	[2]
64-18-6	Formic acid (methanoic acid)	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
65-85-0	Benzoic acid	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	1.97E+05	L/kg	[1]			
67-56-1	Methyl alcohol	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
67-63-0	2-Propyl alcohol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
67-64-1	2-Propanone (Acetone)	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
67-66-3	Chloroform	6.92E+00	L/kg	[6]	6.60E+00	L/kg	[2]
67-72-1	Hexachloroethane	2.12E+02	L/kg	[6]	3.10E+02	L/kg	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.83E+04	L/kg	[6]			
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	9.13E+03	L/kg	[4]			
70-30-4	Hexachlorophene	4.68E+03	L/kg	[6]	7.84E+04	L/kg	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	1.52E+04	L/kg	[3]			
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	4.90E+04	L/kg	[6]			
71-36-3	n-Butyl alcohol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
71-43-2	Benzene	8.26E+00	L/kg	[6]	8.70E+00	L/kg	[2]
71-55-6	1,1,1-Trichloroethane	1.68E+01	L/kg	[6]	1.60E+01	L/kg	[2]
72-43-5	Methoxychlor	9.91E+02	L/kg	[6]	2.43E+03	L/kg	[1]
72-55-9	4,4-DDE	4.89E+03	L/kg	[6]	4.99E+04	L/kg	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	4.90E+04	L/kg	[6]			
74-83-9	Bromomethane	1.65E+00	L/kg	[6]	1.60E+00	L/kg	[2]
74-87-3	Chloromethane	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
74-88-4	Iodomethane	2.90E+00	L/kg	[3]			
74-95-3	Methylene bromide	3.00E+00	L/kg	[6]	4.10E+00	L/kg	[2]
74-97-5	Bromochloromethane	2.45E+00	L/kg	[7]	2.40E+00	L/kg	[2]
7429-90-5	Aluminum				5.00E+02	L/kg	[2]
7439-89-6	Iron	2.00E+02	L/kg	[9]	2.00E+02	L/kg	[2]
7439-92-1	Lead	9.00E-02	L/kg	[6]	3.00E+02	L/kg	[2]
7439-93-2	Lithium						
7439-95-4	Magnesium	5.00E+01	L/kg	[9]			
7439-96-5	Manganese	4.00E+02	L/kg	[9]	4.00E+02	L/kg	[2]
7439-97-6	Mercury	1.00E+03	L/kg	[9]	1.00E+03	L/kg	[2]
7439-98-7	Molybdenum	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
7440-02-0	Nickel	7.80E+01	L/kg	[6]	1.00E+02	L/kg	[2]
7440-16-6	Rhodium	1.00E+01	L/kg	[9]			

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
7440-22-4	Silver	8.77E+01	L/kg	[6]	5.00E+00	L/kg	[2]
7440-23-5	Sodium	2.00E+01	L/kg	[9]	2.00E+01	L/kg	[2]
7440-24-6	Strontium (total)	6.00E+01	L/kg	[9]	6.00E+01	L/kg	[2]
7440-25-7	Tantalum	3.00E+02	L/kg	[9]			
7440-28-0	Thallium	1.00E+04	L/kg	[6]	1.00E+04	L/kg	[2]
7440-29-1	Thorium-232	1.00E+02	L/kg	[9]	1.00E+02	L/kg	[2]
7440-31-5	Tin	3.00E+03	L/kg	[9]	3.00E+03	L/kg	[2]
7440-33-7	Tungsten	1.00E+01	L/kg	[9]	1.20E+03	L/kg	[2]
7440-36-0	Antimony	4.00E+01	L/kg	[6]	1.00E+02	L/kg	[2]
7440-38-2	Arsenic	1.14E+02	L/kg	[6]	3.00E+02	L/kg	[2]
7440-39-3	Barium	6.33E+02	L/kg	[6]	4.00E+00	L/kg	[2]
7440-41-7	Beryllium	6.20E+01	L/kg	[6]	1.00E+02	L/kg	[2]
7440-43-9	Cadmium	9.07E+02	L/kg	[6]	2.00E+02	L/kg	[2]
7440-47-3	Chromium	1.90E+01	L/kg	[6]			
7440-48-4	Cobalt	3.00E+02	L/kg	[9]	3.00E+02	L/kg	[2]
7440-50-8	Copper	2.00E+02	L/kg	[9]	2.00E+02	L/kg	[2]
7440-61-1	Uranium	1.00E+01	L/kg	[9]	1.00E+01	L/kg	[2]
7440-61-1R	Uranium-238				1.30E+02	L/kg	[2]
7440-62-2	Vanadium	1.00E+06	L/kg	[1]			
7440-65-5	Yttrium	3.00E+01	L/kg	[9]			
7440-66-6	Zinc	2.06E+03	L/kg	[6]	1.00E+03	L/kg	[2]
7440-67-7	Zirconium	3.00E+02	L/kg	[9]	3.00E+02	L/kg	[2]
7446-09-5	Sulfur dioxide	3.16E+00	L/kg	[2]			
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	1.97E+05	L/kg	[1]			
7487-94-7	Mercury (Hg^{+2})				0.00E+00	L/kg	[1]
75-00-3	Chloroethane	2.39E+00	L/kg	[6]	2.50E+00	L/kg	[2]
75-01-4	1-Chloroethene	2.39E+00	L/kg	[6]	3.50E+00	L/kg	[2]
75-02-5	Fluoroethene (vinyl fluoride)	1.65E+00	L/kg	[3]			
75-05-8	Acetonitrile	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
75-07-0	Acetaldehyde	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
75-09-2	Dichloromethane (Methylene chloride)	2.00E+00	L/kg	[6]	1.80E+00	L/kg	[2]
75-15-0	Carbon disulfide	9.86E+00	L/kg	[6]	6.20E+00	L/kg	[2]
75-21-8	Ethylene oxide (Oxirane)	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
75-25-2	Bromoform	1.33E+01	L/kg	[6]	1.40E+01	L/kg	[2]
75-27-4	Bromodichloromethane	8.26E+00	L/kg	[6]	6.90E+00	L/kg	[2]
75-29-6	2-Chloropropane	5.79E+00	L/kg	[3]	5.80E+00	L/kg	[2]
75-34-3	1,1-Dichloroethane	4.85E+00	L/kg	[6]	4.80E+00	L/kg	[2]
75-35-4	1,1-Dichloroethene	8.26E+00	L/kg	[6]	8.70E+00	L/kg	[2]
75-44-5	Phosgene (Hydrogen phosphide)	3.16E+00	L/kg	[2]			
75-45-6	Chlorodifluoromethane	1.35E+00	L/kg	[6]	1.40E+00	L/kg	[2]
75-50-3	Trimethylamine	3.16E+00	L/kg	[5]			
75-69-4	Trichlorofluoromethane	1.68E+01	L/kg	[6]	1.80E+01	L/kg	[2]
75-71-8	Dichlorodifluoromethane	9.19E+00	L/kg	[6]	9.20E+00	L/kg	[2]
76-01-7	Pentachloroethane	6.03E+01	L/kg	[7]			
76-13-1	1,2,2-Trichlorotrifluoroethane	3.47E+01	L/kg	[7]	5.40E+01	L/kg	[2]
76-44-8	Heptachlor	4.08E+02	L/kg	[6]	6.09E+02	L/kg	[1]
764-41-0	1,4-Dichloro-2-butene	2.00E+01	L/kg	[3]	2.00E+01	L/kg	[2]
7647-01-0	Hydrogen chloride	3.16E+00	L/kg	[6]	1.00E+03	L/kg	[2]
765-34-4	Glycidylaldehyde	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
7664-39-3	Hydrogen Fluoride	3.16E+00	L/kg	[2]			
7664-41-7	Ammonia/Ammonium	3.16E+00	L/kg	[2]			
77-47-4	Hexachlorocyclopentadiene	1.52E+03	L/kg	[6]	5.52E+03	L/kg	[1]
77-78-1	Dimethyl sulfate	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus	5.00E+04	L/kg	[9]	5.00E+04	L/kg	[2]
7782-41-4	Fluorine gas (F_2)				1.00E+01	L/kg	[2]
7782-49-2	Selenium	1.29E+02	L/kg	[6]	2.00E+02	L/kg	[2]
7782-50-5	Chlorine	3.16E+00	L/kg	[6]	1.00E+03	L/kg	[2]
78-83-1	2-Methylpropyl alcohol	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
78-87-5	1,2-Dichloropropane	6.92E+00	L/kg	[6]	6.70E+00	L/kg	[2]
78-93-3	2-Butanone	3.16E+00	L/kg	[6]	3.20E+00	L/kg	[2]
79-00-5	1,1,2-Trichloroethane	6.92E+00	L/kg	[6]	5.70E+00	L/kg	[2]
79-01-6	1,1,2-Trichloroethylene	1.41E+01	L/kg	[6]	1.50E+01	L/kg	[2]
79-10-7	2-Propenoic acid	3.16E+00	L/kg	[5]	3.20E+00	L/kg	[2]
79-34-5	1,1,2,2-Tetrachloroethane	1.41E+01	L/kg	[6]	1.40E+01	L/kg	[2]
79-46-9	2-Nitropropane	8.32E+00	L/kg	[7]	3.20E+00	L/kg	[2]
80-62-6	Methyl methacrylate	2.30E+00	L/kg	[3]	2.30E+00	L/kg	[2]
82-68-8	Pentachloronitrobenzene (PCNB)	7.46E+02	L/kg	[6]	1.62E+03	L/kg	[1]
822-06-0	Hexamethylene-1,5-diisocyanate	5.81E+01	L/kg	[3]	5.80E+01	L/kg	[2]
823-40-5	Toluene-2,6-diamine	3.16E+00	L/kg	[5]	3.20E+00	L/kg	[2]
83-32-9	Acenaphthene	2.01E+02	L/kg	[6]	2.10E+02	L/kg	[2]
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	1.68E+01	L/kg	[6]	1.50E+01	L/kg	[2]
84-74-2	Di-n-butylphthalate	8.30E+02	L/kg	[6]	1.80E+03	L/kg	[1]
85-01-8	Phenanthrene	5.82E+02	L/kg	[6]	1.03E+03	L/kg	[1]
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	3.16E+00	L/kg	[6]	3.40E+00	L/kg	[2]
85-68-7	Butylbenzylphthalate	1.18E+03	L/kg	[6]	3.29E+03	L/kg	[1]
86-73-7	Fluorene	3.42E+02	L/kg	[6]	4.72E+02	L/kg	[1]
87-61-6	1,2,3-Trichlorobenzene	2.62E+02	L/kg	[6]	3.45E+02	L/kg	[1]
87-68-3	Hexachlorobutadiene	9.91E+02	L/kg	[6]	2.43E+03	L/kg	[1]
87-86-5	Pentachlorophenol	6.71E+02	L/kg	[6]	2.45E+03	L/kg	[1]
88-06-2	2,4,6-Trichlorophenol	5.61E+01	L/kg	[6]	5.50E+01	L/kg	[2]
88-74-4	o-Nitroaniline (2-nitroaniline)	5.30E+00	L/kg	[6]	5.30E+00	L/kg	[2]
88-75-5	2-Nitrophenol	4.77E+00	L/kg	[6]			
90-04-0	o-Anisidine	1.62E+00	L/kg	[3]			
90-12-0	1-Methylnaphthalene	1.91E+02	L/kg	[3]	1.90E+02	L/kg	[2]
91-20-3	Naphthalene	6.93E+01	L/kg	[6]	6.90E+01	L/kg	[2]
91-22-5	Quinoline	7.94E+00	L/kg	[7]	7.30E+00	L/kg	[2]
91-57-6	2-Methylnaphthalene	1.91E+02	L/kg	[7]	1.90E+02	L/kg	[2]

Table 4-4 Bioconcentration and Bioaccumulation Factors for Fish

CAS Registry Number	Analyte Name	Bioconcentration Factor for fish (*BCF*)	Units for Bioconcentration Factor for fish	Reference	Bioaccumulation Factor for fish (*BAF*)	Units for Bioaccumulation Factor for fish	Reference
91-58-7	2-Chloronaphthalene	7.99E+01	L/kg	[6]	2.30E+02	L/kg	[2]
91-94-1	3,3'-Dichlorobenzidine	1.01E+02	L/kg	[6]	1.00E+02	L/kg	[2]
92-52-4	1,1`-Biphenyl	2.82E+02	L/kg	[7]	2.30E+02	L/kg	[2]
924-16-3	N-Nitroso-di-n-Buetylamine	6.00E+00	L/kg	[6]	2.10E+01	L/kg	[2]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	2.23E+01	L/kg	[6]			
94-75-7	2,4-D	2.91E+01	L/kg	[3]	3.20E+00	L/kg	[2]
95-48-7	o-Cresol	6.33E+00	L/kg	[6]	6.30E+00	L/kg	[2]
95-49-8	o-Chlorotoluene	4.79E+01	L/kg	[7]	8.60E+01	L/kg	[2]
95-50-1	1,2-Dichlorobenzene	7.99E+01	L/kg	[6]	8.70E+01	L/kg	[2]
95-53-4	o-Toluidine	2.07E+00	L/kg	[6]	2.10E+00	L/kg	[2]
95-57-8	2-Chlorophenol	9.03E+00	L/kg	[6]	9.00E+00	L/kg	[2]
95-63-6	1,2,4-Trimethyl benzene	8.13E+01	L/kg	[7]	1.20E+02	L/kg	[2]
95-94-3	1,2,4,5-Tetrachlorobenzene	9.91E+02	L/kg	[6]	2.43E+03	L/kg	[1]
95-95-4	2,4,5-Trichlorophenol	5.81E+01	L/kg	[6]	5.80E+01	L/kg	[2]
96-12-8	1,2-Dibromo-3-chloropropane	1.18E+01	L/kg	[6]	3.80E+01	L/kg	[2]
96-18-4	1,2,3-Trichloropropane	6.92E+00	L/kg	[6]	1.10E+01	L/kg	[2]
96-45-7	Ethylene thiourea	1.00E+01	L/kg	[7]	3.20E+00	L/kg	[2]
97-63-2	Ethyl methacrylate	6.22E+00	L/kg	[6]	6.20E+00	L/kg	[2]
98-01-1	Furfural	3.16E+00	L/kg	[2]	3.20E+00	L/kg	[2]
98-06-6	tert-Butyl benzene	2.92E+02	L/kg	[3]			
98-07-7	Benzotrichloride	2.01E+02	L/kg	[3]	2.00E+02	L/kg	[2]
98-82-8	Cumene	1.41E+02	L/kg	[6]	1.30E+02	L/kg	[2]
98-83-9	Methyl styrene (mixed isomers)	2.95E+01	L/kg	[7]	9.50E+01	L/kg	[2]
98-86-2	Acetophenone	4.75E-01	L/kg	[6]	4.70E-01	L/kg	[2]
98-95-3	Nitrobenzene	5.30E+00	L/kg	[6]	5.30E+00	L/kg	[2]
99-35-4	1,3,5-Trinitrobenzene	1.67E+00	L/kg	[6]	1.60E+00	L/kg	[2]
99-65-0	1,3-Dinitrobenzene	2.85E+00	L/kg	[6]	2.80E+00	L/kg	[2]
99-87-6	p-Cymene	2.86E+02	L/kg	[3]			

Reference	Reference (source) for bioconc. factor for analyte in fish
[1]	64 FR 687. 1999. *40 CFR Part 372: Persistent Bioaccumulative Toxic (PBT) Chemicals; Proposed Rule*, Federal Register, Vol 64, No. 2, January 5, 1999.
[2]	Calculated value per Eq. A-2-27 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value per Eq. A-2-28 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	Calculated value per Eq. A-2-29 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[5]	Calculated value per Eq. A-2-31 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[6]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[7]	EPA. 2000. *EPI Suite v.3.12, BCFWIN: Appendix A - Experimental Database Used for Method Derivation*, Office of Pollution Prevention Toxics and Syracuse Research Corporation, Washington, DC (http://www.epa.gov/oppt/exposure/docs/episuite.htm). (converted from log(BCF) to BCF)
[8]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[9]	Staven LH, Rhoads K, Napier BA, Strenge DL. 2003. *A Compendium of Transfer Factors for Agricultural and Animal Products.* PNNL-13421, Pacific Northwest National Laboratory, Richland, WA.
[10]	Surrogate value from 2,4-Dinitrotoluene.
[11]	Surrogate value from Acenaphthene.
[12]	Surrogate value from Acrylonitrile.
[13]	Surrogate value from Chrysene.
[14]	Surrogate value from Dibenz[a,h]anthracene.
[15]	Surrogate value from Dibenzo[a,i]pyrene.
[16]	Surrogate value from Trichlorofluoromethane.
[17]	Surrogate value from cis-1,2-Dichloroethene.

Reference	Reference (source) for bioaccum. factor for analyte in fish
[1]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[2]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[3]	Surrogate value from 2,4-Dinitrotoluene.
[4]	Surrogate value from Acenaphthene.

Reference	Reference (source) for bioaccum. factor for analyte in fish
[5]	Surrogate value from Acrylonitrile.
[6]	Surrogate value from Chlorocyclopentadiene.
[7]	Surrogate value from Chrysene.
[8]	Surrogate value from Dibenz[a,h]anthracene.
[9]	Surrogate value from Trichlorofluoromethane.
[10]	Surrogate value from cis-1,2-Dichloroethene.

Table 4-5 Biota-Sediment Accumulation Factor for Fish

CAS Registry Number	Analyte Name	Toxicity Equivalence Factor group	Biota-sediment accumulation factor (*BSAF*)	Units for Biota-sediment Accumulation factor	Reference
1336-36-3	Polychlorinated biphenyls	PCB	3.00E+01	L/kg	[2]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	TCDD	9.00E-02	L/kg	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	TCDD	4.00E-02	L/kg	[1]
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	PCB	1.90E+02	L/kg	[2]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	PCB	2.20E+01	L/kg	[2]
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	PCB	1.30E+02	L/kg	[2]
3268-87-9	Octachlorodibenzo(p)dioxin	TCDD	1.00E-04	L/kg	[1]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	PCB	3.90E+01	L/kg	[2]
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	TCDD	5.00E-03	L/kg	[1]
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	PCB	2.19E+02	L/kg	[2]
39001-02-0	Octachlorodibenzofuran	TCDD	1.00E-04	L/kg	[1]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	TCDD	4.00E-02	L/kg	[1]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	PCB	6.20E+01	L/kg	[2]
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	TCDD	9.00E-02	L/kg	[1]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	TCDD	9.00E-02	L/kg	[1]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	PCB	2.28E+02	L/kg	[2]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	TCDD	5.00E-03	L/kg	[1]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	TCDD	9.00E-02	L/kg	[1]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	TCDD	9.00E-02	L/kg	[1]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	TCDD	4.00E-02	L/kg	[1]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	PCB	7.10E+01	L/kg	[2]
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	TCDD	4.00E-02	L/kg	[1]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	TCDD	4.00E-02	L/kg	[1]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	PCB	2.83E+02	L/kg	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	TCDD	5.00E-03	L/kg	[1]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	PCB	1.67E+02	L/kg	[2]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	PCB	2.70E+01	L/kg	[2]
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	TCDD	4.00E-02	L/kg	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	TCDD	4.00E-02	L/kg	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	PCB	2.67E+02	L/kg	[2]

Reference	Reference (source) for biota-sediment accumulation factor
[1]	Default value from Section A2-2.13.4.3 of EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	U.S. Army Corps of Engineers BSAF database, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Environmental Laboratory (CEERD-EP-R), Vicksburg, MS (http://el.erdc.usace.army.mil/bsaf/bsaf.html). Accessed July 2006. (max BSAF value reported for congener).

Contents

5 Human Toxicological Data 5-1

Tables

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose 5-1
Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose 5-15
Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs 5-26
Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs 5-32
Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor 5-38
Table 5-6 Inhalation and Oral (Food Ingestion) Cancer Slope Factors for ROPCs 5-44
Table 5-7 Oral (Water and Soil Ingestion) Cancer Slope Factors for ROPCs 5-46
Table 5-8 External Exposure Cancer Slope Factors for ROPCs 5-48

5 Human Toxicological Data

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
100-02-7	p-Nitrophenol	2.80E-02	mg/m^3	[5]	8.00E-03	mg/(kg·d)	[2]	8.00E-03	mg/(kg·d)	[4]
100-21-0	Phthalic acid	3.50E+00	mg/m^3	[2]	1.00E+00	mg/(kg·d)	[1]	1.00E+00	mg/(kg·d)	[9]
100-25-4	1,4-Dinitrobenzene	3.50E-04	mg/m^3	[2]	1.00E-04	mg/(kg·d)	[1]	1.00E-04	mg/(kg·d)	[9]
100-41-4	Ethyl benzene	1.00E+00	mg/m^3	[11]	2.86E-01	mg/(kg·d)	[8]	1.00E-01	mg/(kg·d)	[14]
100-42-5	Styrene	1.00E+00	mg/m^3	[11]	2.86E-01	mg/(kg·d)	[8]	2.00E-01	mg/(kg·d)	[14]
100-44-7	Benzyl chloride	1.02E-02	mg/m^3	[3]	2.90E-03	mg/(kg·d)	[7]	2.00E-03	mg/(kg·d)	[9]
100-51-6	Benzyl alcohol	1.75E+00	mg/m^3	[2]	5.00E-01	mg/(kg·d)	[1]	5.00E-01	mg/(kg·d)	[9]
100-52-7	Benzaldehyde	3.50E-01	mg/m^3	[5]	1.00E-01	mg/(kg·d)	[2]	1.00E-01	mg/(kg·d)	[14]
10028-15-6	Ozone									
10061-01-5	cis-1,3-Dichloropropene	3.50E-02	mg/m^3	[2]	1.00E-02	mg/(kg·d)	[1]	1.00E-02	mg/(kg·d)	[13]
10061-02-6	trans-1,3-Dichloropropene									
101-55-3	4-Bromophenylphenyl ether									
101-77-9	4,4-Methylenedianiline									
10102-44-0	Nitrogen dioxide	3.50E+00	mg/m^3	[2]	1.00E+00	mg/(kg·d)	[1]	1.00E+00	mg/(kg·d)	[9]
103-65-1	n-Propyl benzene (Isocumene)									
104-51-8	n-Butylbenzene									
105-67-9	2,4-Dimethylphenol	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)									
106-44-5	p-Cresol (4-methyl phenol)	1.75E-02	mg/m^3	[5]	5.00E-03	mg/(kg·d)	[2]	5.00E-03	mg/(kg·d)	[4]
106-46-7	1,4-Dichlorobenzene	8.00E-01	mg/m^3	[11]	2.29E-01	mg/(kg·d)	[8]	3.00E-02	mg/(kg·d)	[4]
106-47-8	p-Chloroaniline	1.40E-02	mg/m^3	[5]	4.00E-03	mg/(kg·d)	[7]	4.00E-03	mg/(kg·d)	[14]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
106-51-4	Quinone	1.00E-01	mg/m^3	[7]	2.86E-02	mg/(kg·d)	[2]	2.86E-02	mg/(kg·d)	[2]
106-88-7	1,2-Epoxybutane	2.00E-02	mg/m^3	[11]	5.71E-03	mg/(kg·d)	[8]	5.71E-03	mg/(kg·d)	[2]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1.00E-03	mg/m^3	[11]	2.86E-04	mg/(kg·d)	[8]	2.00E-03	mg/(kg·d)	[4]
106-93-4	Ethylene dibromide	9.00E-03	mg/m^3	[11]	2.57E-03	mg/(kg·d)	[8]	9.00E-03	mg/(kg·d)	[14]
106-99-0	1,3-Butadiene	2.00E-03	mg/m^3	[11]	5.71E-04	mg/(kg·d)	[8]	5.70E-04	mg/(kg·d)	[8]
107-02-8	Acrolein	2.00E-05	mg/m^3	[11]	5.71E-06	mg/(kg·d)	[8]	5.00E-04	mg/(kg·d)	[14]
107-05-1	3-Chloropropene	1.00E-03	mg/m^3	[11]	2.86E-04	mg/(kg·d)	[8]	5.00E-02	mg/(kg·d)	[9]
107-06-2	1,2-Dichloroethane	2.40E+00	mg/m^3	[5]	1.40E-03	mg/(kg·d)	[7]	3.00E-02	mg/(kg·d)	[4]
107-12-0	Propionitrile	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[4]	5.70E+00	mg/(kg·d)	[2]
107-13-1	Acrylonitrile	2.00E-03	mg/m^3	[11]	5.71E-04	mg/(kg·d)	[8]	1.00E-03	mg/(kg·d)	[4]
107-19-7	Propargyl alcohol	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[4]	2.00E-03	mg/(kg·d)	[14]
107-21-1	Ethylene glycol (1,2-ethanediol)	7.00E+00	mg/m^3	[2]	2.00E+00	mg/(kg·d)	[1]	2.00E+00	mg/(kg·d)	[14]
107-98-2	Propylene glycol monomethyl ether	2.00E+00	mg/m^3	[11]	5.71E-01	mg/(kg·d)	[8]	7.00E-01	mg/(kg·d)	[9]
108-05-4	Acetic acid vinyl ester	2.00E-01	mg/m^3	[11]	5.71E-02	mg/(kg·d)	[8]	1.00E+00	mg/(kg·d)	[4]
108-10-1	4-Methyl-2-pentanone	3.00E+00	mg/m^3	[11]	8.57E-01	mg/(kg·d)	[8]	8.00E-02	mg/(kg·d)	[4]
108-39-4	m-Cresol	1.75E-01	mg/m^3	[5]	5.00E-02	mg/(kg·d)	[2]	5.00E-02	mg/(kg·d)	[14]
108-60-1	Bis(2-chloroisopropyl) ether	1.40E-01	mg/m^3	[2]	4.00E-02	mg/(kg·d)	[1]	4.00E-02	mg/(kg·d)	[14]
108-67-8	1,3,5-Trimethylbenzene	6.00E-03	mg/m^3	[6]	1.71E-03	mg/(kg·d)	[8]	5.00E-02	mg/(kg·d)	[9]
108-86-1	Bromobenzene (Phenyl bromide)	1.00E-02	mg/m^3	[6]	2.86E-03	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[9]
108-87-2	Methylcyclohexane	3.00E+00	mg/m^3	[6]	8.57E-01	mg/(kg·d)	[8]	8.57E-01	mg/(kg·d)	[2]
108-88-3	Toluene	5.00E+00	mg/m^3	[11]	1.43E+00	mg/(kg·d)	[8]	8.00E-02	mg/(kg·d)	[14]
108-90-7	Chlorobenzene	6.00E-02	mg/m^3	[5]	1.43E-02	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[14]
108-94-1	Cyclohexanone	2.00E+01	mg/m^3	[3]	5.71E+00	mg/(kg·d)	[5]	5.00E+00	mg/(kg·d)	[14]
108-95-2	Phenol	2.00E-01	mg/m^3	[5]	5.71E-02	mg/(kg·d)	[2]	3.00E-01	mg/(kg·d)	[14]
109-77-3	Malononitrile	3.50E-04	mg/m^3	[2]	1.00E-04	mg/(kg·d)	[1]	1.00E-04	mg/(kg·d)	[9]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
109-86-4	2-Methoxyethanol	2.00E-02	mg/m^3	[11]	5.71E-03	mg/(kg·d)	[8]	3.00E-03	mg/(kg·d)	[9]
109-99-9	Tetrahydrofuran	3.00E+00	mg/m^3	[4]	8.57E-01	mg/(kg·d)	[2]	3.00E-01	mg/(kg·d)	[3]
110-00-9	Furan	3.50E-03	mg/m^3	[2]	1.00E-03	mg/(kg·d)	[1]	1.00E-03	mg/(kg·d)	[14]
110-54-3	n-Hexane	7.00E-01	mg/m^3	[11]	2.00E-01	mg/(kg·d)	[8]	6.00E-02	mg/(kg·d)	[9]
110-80-5	2-Ethoxyethanol	2.00E-01	mg/m^3	[11]	5.71E-02	mg/(kg·d)	[8]	4.00E-01	mg/(kg·d)	[9]
110-82-7	Cyclohexane	6.00E+00	mg/m^3	[11]	1.70E+00	mg/(kg·d)	[7]	1.70E+00	mg/(kg·d)	[8]
110-83-8	Cyclohexene	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[5]	5.70E+00	mg/(kg·d)	[2]
110-86-1	Pyridine	3.50E-03	mg/m^3	[5]	1.00E-03	mg/(kg·d)	[2]	1.00E-03	mg/(kg·d)	[14]
111-15-9	Ethylene glycol monoethyl ether acetate	1.05E+00	mg/m^3	[2]	3.00E-01	mg/(kg·d)	[1]	3.00E-01	mg/(kg·d)	[9]
111-65-9	n-Octane	2.98E-01	mg/m^3	[3]	8.50E-02	mg/(kg·d)	[6]	3.00E-02	mg/(kg·d)	[7]
111-76-2	2-Butoxyethanol	1.30E+01	mg/m^3	[11]	3.71E+00	mg/(kg·d)	[8]	5.00E-01	mg/(kg·d)	[14]
111-84-2	n-Nonane	2.98E-01	mg/m^3	[3]	8.50E-02	mg/(kg·d)	[6]	3.00E-02	mg/(kg·d)	[7]
111-91-1	Bis(2-chloroethoxy) methane	1.05E-02	mg/m^3	[2]	3.00E-03	mg/(kg·d)	[1]	3.00E-03	mg/(kg·d)	[9]
1120-71-4	1,3-Propane sultone									
117-81-7	Bis(2-ethylhexyl) phthalate	7.00E-02	mg/m^3	[2]	2.00E-02	mg/(kg·d)	[1]	2.00E-02	mg/(kg·d)	[14]
117-84-0	Di-n-octylphthalate	1.40E-01	mg/m^3	[2]	4.00E-02	mg/(kg·d)	[1]	4.00E-02	mg/(kg·d)	[9]
118-74-1	Hexachlorobenzene	2.80E-03	mg/m^3	[2]	8.00E-04	mg/(kg·d)	[1]	8.00E-04	mg/(kg·d)	[14]
120-12-7	Anthracene	1.00E+00	mg/m^3	[5]	2.86E-01	mg/(kg·d)	[2]	3.00E-01	mg/(kg·d)	[14]
120-82-1	1,2,4-Trichlorobenzene	4.00E-03	mg/m^3	[6]	1.14E-03	mg/(kg·d)	[8]	1.00E-02	mg/(kg·d)	[14]
120-83-2	2,4-Dichlorophenol	1.10E-02	mg/m^3	[5]	3.14E-03	mg/(kg·d)	[2]	3.00E-03	mg/(kg·d)	[14]
121-14-2	2,4-Dinitrotoluene	7.00E-03	mg/m^3	[3]	2.00E-03	mg/(kg·d)	[7]	2.00E-03	mg/(kg·d)	[14]
122-39-4	N,N-Diphenylamine	8.75E-02	mg/m^3	[2]	2.50E-02	mg/(kg·d)	[1]	2.50E-02	mg/(kg·d)	[14]
123-33-1	Maleic hydrazide	1.75E+00	mg/m^3	[2]	5.00E-01	mg/(kg·d)	[1]	5.00E-01	mg/(kg·d)	[14]
123-38-6	Propionaldehyde	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[4]	5.70E+00	mg/(kg·d)	[6]
123-91-1	1,4-Dioxan	3.00E+00	mg/m^3	[5]	5.70E+00	mg/(kg·d)	[4]	8.57E-01	mg/(kg·d)	[4]
124-48-1	Chlorodibromo-methane	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
126-73-8	Tributyl phosphate	7.00E-01	mg/m^3	[2]	2.00E-01	mg/(kg·d)	[1]	2.00E-01	mg/(kg·d)	[9]
126-98-7	2-Methyl-2-propenenitrile	7.00E-04	mg/m^3	[5]	2.00E-04	mg/(kg·d)	[8]	1.00E-04	mg/(kg·d)	[14]
127-18-4	1,1,2,2-Tetrachloroethene	4.00E-01	mg/m^3	[5]	1.71E-01	mg/(kg·d)	[8]	1.00E-02	mg/(kg·d)	[14]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol									
129-00-0	Pyrene	1.10E-01	mg/m^3	[5]	3.14E-02	mg/(kg·d)	[2]	3.00E-02	mg/(kg·d)	[14]
131-11-3	Dimethyl Phthalate	3.50E+01	mg/m^3	[2]	1.00E+01	mg/(kg·d)	[1]	1.00E+01	mg/(kg·d)	[9]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	7.00E-03	mg/m^3	[2]	2.00E-03	mg/(kg·d)	[1]	2.00E-03	mg/(kg·d)	[14]
132-64-9	Dibenzofuran	7.00E-03	mg/m^3	[2]	2.00E-03	mg/(kg·d)	[1]	2.00E-03	mg/(kg·d)	[9]
133-06-2	Captan	4.55E-01	mg/m^3	[2]	1.30E-01	mg/(kg·d)	[1]	1.30E-01	mg/(kg·d)	[14]
1330-20-7	Xylenes (mixed isomers)	1.00E-01	mg/m^3	[11]	2.86E-02	mg/(kg·d)	[8]	2.00E-01	mg/(kg·d)	[14]
1336-36-3	Polychlorinated biphenyls	7.00E-05	mg/m^3	[2]	2.00E-05	mg/(kg·d)	[1]	2.00E-05	mg/(kg·d)	[17]
135-98-8	sec-Butylbenzene									
141-78-6	Acetic acid ethyl ester	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	9.00E-01	mg/(kg·d)	[14]
14265-44-2	Phosphate									
145-73-3	Endothall	7.00E-02	mg/m^3	[2]	2.00E-02	mg/(kg·d)	[1]	2.00E-02	mg/(kg·d)	[14]
14797-55-8	Nitrate	5.60E+00	mg/m^3	[2]	1.60E+00	mg/(kg·d)	[1]	1.60E+00	mg/(kg·d)	[14]
14797-65-0	Nitrite	3.50E-01	mg/m^3	[2]	1.00E-01	mg/(kg·d)	[1]	1.00E-01	mg/(kg·d)	[14]
14808-79-8	Sulfate									
156-59-2	cis-1,2-Dichloroethene	3.50E-02	mg/m^3	[2]	1.00E-02	mg/(kg·d)	[1]	1.00E-02	mg/(kg·d)	[9]
156-60-5	1,2-trans-Dichloroethene	7.00E-02	mg/m^3	[5]	1.71E-02	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[14]
1634-04-4	Methyl tert-butyl ether	3.00E+00	mg/m^3	[11]	8.57E-01	mg/(kg·d)	[8]	8.60E-01	mg/(kg·d)	[8]
16887-00-6	Chloride									
16984-48-8	Fluoride	2.10E-01	mg/m^3	[2]	6.00E-02	mg/(kg·d)	[1]	6.00E-02	mg/(kg·d)	[8]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin (TCDD)	3.50E-09	mg/m^3	[2]	1.00E-09	mg/(kg·d)	[1]	1.00E-09	mg/(kg·d)	[4]
191-24-2	Benzo(g,h,i)perylene									
192-97-2	Benzo(e)pyrene									
206-44-0	Fluoranthene	1.40E-01	mg/m^3	[5]	4.00E-02	mg/(kg·d)	[2]	4.00E-02	mg/(kg·d)	[14]
208-96-8	Acenaphthylene									
22967-92-6	Methyl mercury	3.50E-04	mg/m^3	[5]	1.00E-04	mg/(kg·d)	[2]	1.00E-04	mg/(kg·d)	[14]
23950-58-5	Pronamide	2.60E-01	mg/m^3	[5]	7.43E-02	mg/(kg·d)	[2]	7.50E-02	mg/(kg·d)	[14]
24959-67-9	Bromide									
27154-33-2	Trichlorofluoroethane	7.00E-01	mg/m^3	[10]	2.00E-01	mg/(kg·d)	[12]	3.00E-01	mg/(kg·d)	[12]
319-84-6	alpha-BHC	2.00E-02	mg/m^3	[2]	5.71E-03	mg/(kg·d)	[1]	5.71E-03	mg/(kg·d)	[4]
319-85-7	beta-BHC	2.00E-03	mg/m^3	[2]	5.71E-04	mg/(kg·d)	[1]	5.71E-04	mg/(kg·d)	[4]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	5.71E+00	mg/(kg·d)	[2]
41851-50-7	Chlorocyclopentadiene									
460-19-5	Cyanogen (oxalonitrile)	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	4.00E-02	mg/(kg·d)	[14]
50-00-0	Formaldehyde	9.80E-03	mg/m^3	[5]	2.80E-03	mg/(kg·d)	[2]	2.00E-01	mg/(kg·d)	[14]
506-68-3	Cyanogen bromide (bromocyanide)	3.15E-01	mg/m^3	[2]	9.00E-02	mg/(kg·d)	[1]	9.00E-02	mg/(kg·d)	[14]
506-77-4	Cyanogen chloride	1.75E-01	mg/m^3	[2]	5.00E-02	mg/(kg·d)	[1]	5.00E-02	mg/(kg·d)	[14]
51-28-5	2,4-Dinitrophenol	7.00E-03	mg/m^3	[5]	2.00E-03	mg/(kg·d)	[2]	2.00E-03	mg/(kg·d)	[14]
51-79-6	Ethyl carbamate (Urethane)									
510-15-6	Chlorobenzilate	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	3.50E-04	mg/m^3	[2]	1.00E-04	mg/(kg·d)	[1]	1.00E-04	mg/(kg·d)	[9]
532-27-4	2-Chloroacetophenone	3.00E-05	mg/m^3	[11]	8.57E-06	mg/(kg·d)	[8]	8.57E-06	mg/(kg·d)	[2]
534-52-1	4,6-Dinitro-o-cresol	3.50E-04	mg/m^3	[2]	1.00E-04	mg/(kg·d)	[1]	1.00E-04	mg/(kg·d)	[9]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	3.15E-02	mg/m^3	[2]	9.00E-03	mg/(kg·d)	[1]	9.00E-03	mg/(kg·d)	[9]
540-84-1	2,2,4-Trimethylpentane	3.00E-01	mg/m^3	[8]	8.57E-02	mg/(kg·d)	[9]	8.57E-02	mg/(kg·d)	[2]
541-73-1	1,3-Dichlorobenzene	3.20E-03	mg/m^3	[5]	9.14E-04	mg/(kg·d)	[2]	9.00E-04	mg/(kg·d)	[4]
542-75-6	1,3-Dichloropropene	2.00E-02	mg/m^3	[11]	5.71E-03	mg/(kg·d)	[8]	3.00E-02	mg/(kg·d)	[14]
56-23-5	Carbon tetrachloride	4.00E-02	mg/m^3	[5]	1.14E-02	mg/(kg·d)	[2]	7.00E-04	mg/(kg·d)	[14]
57-12-5	Cyanide	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]
57-24-9	Strychnine	1.10E-03	mg/m^3	[5]	3.14E-04	mg/(kg·d)	[2]	3.00E-04	mg/(kg·d)	[14]
57-74-9	Chlordane	7.00E-04	mg/m^3	[5]	2.00E-04	mg/(kg·d)	[8]	5.00E-04	mg/(kg·d)	[4]
58-89-9	gamma-BHC (Lindane)	1.05E-03	mg/m^3	[2]	3.00E-04	mg/(kg·d)	[1]	3.00E-04	mg/(kg·d)	[14]
58-90-2	2,3,4,6-Tetrachlorophenol	1.10E-01	mg/m^3	[5]	3.14E-02	mg/(kg·d)	[2]	3.00E-02	mg/(kg·d)	[14]
584-84-9	2,4-Toluene diisocyanate	7.00E-05	mg/m^3	[13]	2.00E-03	mg/(kg·d)	[10]	2.00E-03	mg/(kg·d)	[16]
59-50-7	4-Chloro-3-methylphenol									
59-89-2	N-Nitrosomorpholine									
591-78-6	2-Hexanone	5.00E-03	mg/m^3	[1]	1.43E-03	mg/(kg·d)	[2]	4.00E-02	mg/(kg·d)	[1]
593-60-2	Bromoethene (Vinyl bromide)	3.00E-03	mg/m^3	[11]	8.57E-04	mg/(kg·d)	[8]	8.57E-04	mg/(kg·d)	[2]
60-11-7	Dimethyl aminoazobenzene									
60-29-7	Ethyl ether	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	2.00E-01	mg/(kg·d)	[14]
60-35-5	Acetamide	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	5.71E+00	mg/(kg·d)	[2]
602-87-9	5-Nitroacenaphthene	2.10E-01	mg/m^3	[9]	6.00E-02	mg/(kg·d)	[2]	6.00E-02	mg/(kg·d)	[10]
606-20-2	2,6-Dinitrotoluene	3.50E-03	mg/m^3	[3]	1.00E-03	mg/(kg·d)	[7]	1.00E-03	mg/(kg·d)	[9]
608-93-5	Pentachlorobenzene	2.80E-03	mg/m^3	[5]	8.00E-04	mg/(kg·d)	[2]	8.00E-04	mg/(kg·d)	[14]
61626-71-9	Dichloropentadiene									
62-50-0	Ethyl methanesulfonate									

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
62-53-3	Aniline	1.00E-03	mg/m^3	[11]	2.86E-04	mg/(kg·d)	[8]	7.00E-03	mg/(kg·d)	[9]
62-75-9	N-Nitroso-N,N-dimethylamine	2.80E-05	mg/m^3	[2]	8.00E-06	mg/(kg·d)	[1]	8.00E-06	mg/(kg·d)	[9]
624-83-9	Methyl isocyanate	2.00E-03	mg/m^3	[12]	5.71E-04	mg/(kg·d)	[11]	1.00E-03	mg/(kg·d)	[11]
630-08-0	Carbon monoxide									
630-20-6	1,1,1,2-Tetrachloroethane	1.10E-01	mg/m^3	[5]	3.14E-02	mg/(kg·d)	[2]	3.00E-02	mg/(kg·d)	[14]
64-18-6	Formic acid (methanoic acid)	3.00E-03	mg/m^3	[6]	8.57E-04	mg/(kg·d)	[8]	2.00E+00	mg/(kg·d)	[4]
65-85-0	Benzoic acid	1.40E+01	mg/m^3	[5]	4.00E+00	mg/(kg·d)	[2]	4.00E+00	mg/(kg·d)	[14]
67-56-1	Methyl alcohol	4.00E+00	mg/m^3	[5]	1.14E+00	mg/(kg·d)	[2]	5.00E-01	mg/(kg·d)	[14]
67-63-0	2-Propyl alcohol	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	5.71E+00	mg/(kg·d)	[2]
67-64-1	2-Propanone (Acetone)	3.50E-01	mg/m^3	[5]	5.71E+00	mg/(kg·d)	[9]	9.00E-01	mg/(kg·d)	[14]
67-66-3	Chloroform	3.00E-04	mg/m^3	[5]	8.57E-05	mg/(kg·d)	[2]	1.00E-02	mg/(kg·d)	[14]
67-72-1	Hexachloroethane	3.50E-03	mg/m^3	[2]	1.00E-03	mg/(kg·d)	[1]	1.00E-03	mg/(kg·d)	[14]
70-30-4	Hexachlorophene	1.10E-03	mg/m^3	[5]	3.14E-04	mg/(kg·d)	[2]	3.00E-04	mg/(kg·d)	[14]
71-36-3	n-Butyl alcohol	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	1.00E-01	mg/(kg·d)	[14]
71-43-2	Benzene	3.00E-02	mg/m^3	[11]	8.57E-03	mg/(kg·d)	[8]	4.00E-03	mg/(kg·d)	[14]
71-55-6	1,1,1-Trichloroethane	2.20E+00	mg/m^3	[6]	6.29E-01	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[4]
72-43-5	Methoxychlor	1.80E-02	mg/m^3	[5]	5.14E-03	mg/(kg·d)	[2]	5.00E-03	mg/(kg·d)	[14]
74-83-9	Bromomethane	5.00E-03	mg/m^3	[11]	1.43E-03	mg/(kg·d)	[8]	1.40E-03	mg/(kg·d)	[14]
74-87-3	Chloromethane	9.00E-02	mg/m^3	[11]	2.57E-02	mg/(kg·d)	[8]	2.57E-03	mg/(kg·d)	[4]
74-88-4	Iodomethane									
74-95-3	Methylene bromide	3.50E-02	mg/m^3	[5]	1.00E-02	mg/(kg·d)	[2]	1.00E-02	mg/(kg·d)	[4]
74-97-5	Bromochloromethane									
7429-90-5	Aluminum	5.00E-03	mg/m^3	[6]	1.43E-03	mg/(kg·d)	[8]	1.00E+00	mg/(kg·d)	[9]
7439-89-6	Iron	1.05E+00	mg/m^3	[2]	3.00E-01	mg/(kg·d)	[1]	3.00E-01	mg/(kg·d)	[9]
7439-92-1	Lead	1.50E-03	mg/m^3	[5]	4.29E-04	mg/(kg·d)	[2]	4.29E-04	mg/(kg·d)	[4]
7439-93-2	Lithium									
7439-95-4	Magnesium									

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
7439-96-5	Manganese	5.00E-05	mg/m^3	[11]	1.43E-05	mg/(kg·d)	[8]	1.40E-01	mg/(kg·d)	[14]
7439-96-5	Manganese	5.00E-05	mg/m^3	[11]	1.43E-05	mg/(kg·d)	[8]	4.67E-02	mg/(kg·d)	[15]
7439-97-6	Mercury	3.00E-04	mg/m^3	[11]	8.60E-05	mg/(kg·d)	[7]	8.57E-05	mg/(kg·d)	[4]
7439-98-7	Molybdenum	1.75E-02	mg/m^3	[2]	5.00E-03	mg/(kg·d)	[1]	5.00E-03	mg/(kg·d)	[14]
7440-02-0	Nickel	2.00E-04	mg/m^3	[5]	5.71E-05	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[4]
7440-16-6	Rhodium									
7440-22-4	Silver	1.80E-02	mg/m^3	[5]	5.14E-03	mg/(kg·d)	[2]	5.00E-03	mg/(kg·d)	[14]
7440-23-5	Sodium									
7440-24-6	Strontium (total)	2.10E+00	mg/m^3	[2]	6.00E-01	mg/(kg·d)	[1]	6.00E-01	mg/(kg·d)	[14]
7440-25-7	Tantalum									
7440-28-0	Thallium	2.45E-04	mg/m^3	[2]	7.00E-05	mg/(kg·d)	[1]	7.00E-05	mg/(kg·d)	[8]
7440-31-5	Tin	2.10E+00	mg/m^3	[2]	6.00E-01	mg/(kg·d)	[1]	6.00E-01	mg/(kg·d)	[9]
7440-33-7	Tungsten									
7440-36-0	Antimony	1.40E-03	mg/m^3	[5]	4.00E-04	mg/(kg·d)	[2]	4.00E-04	mg/(kg·d)	[14]
7440-38-2	Arsenic	3.00E-05	mg/m^3	[5]	1.50E+01	mg/(kg·d)	[7]	3.00E-04	mg/(kg·d)	[14]
7440-39-3	Barium	5.00E-04	mg/m^3	[5]	1.43E-04	mg/(kg·d)	[8]	2.00E-01	mg/(kg·d)	[14]
7440-41-7	Beryllium	2.00E-05	mg/m^3	[11]	5.71E-06	mg/(kg·d)	[8]	2.00E-03	mg/(kg·d)	[14]
7440-43-9	Cadmium	2.00E-04	mg/m^3	[5]	5.71E-05	mg/(kg·d)	[2]	1.00E-03	mg/(kg·d)	[14]
7440-43-9	Cadmium	2.00E-04	mg/m^3	[5]	5.71E-05	mg/(kg·d)	[2]	1.00E-03	mg/(kg·d)	[14]
7440-47-3	Chromium	5.30E+00	mg/m^3	[5]	1.51E+00	mg/(kg·d)	[2]	1.50E+00	mg/(kg·d)	[4]
7440-48-4	Cobalt	2.00E-05	mg/m^3	[6]	5.71E-06	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[9]
7440-50-8	Copper	1.40E-01	mg/m^3	[2]	4.00E-02	mg/(kg·d)	[1]	4.00E-02	mg/(kg·d)	[9]
7440-61-1	Uranium	2.10E-03	mg/m^3	[2]	6.00E-04	mg/(kg·d)	[1]	6.00E-04	mg/(kg·d)	[9]
7440-62-2	Vanadium	2.45E-02	mg/m^3	[2]	7.00E-03	mg/(kg·d)	[1]	7.00E-03	mg/(kg·d)	[9]
7440-65-5	Yttrium	5.00E-03	mg/m^3	[7]	1.43E-03	mg/(kg·d)	[2]	1.43E-03	mg/(kg·d)	[2]
7440-66-6	Zinc	5.30E+00	mg/m^3	[5]	1.51E+00	mg/(kg·d)	[2]	3.00E-01	mg/(kg·d)	[14]
7440-67-7	Zirconium									
7446-09-5	Sulfur dioxide									
7487-94-7	Mercury (Hg^{+2})	1.10E-03	mg/m^3	[5]	3.14E-04	mg/(kg·d)	[2]	3.00E-04	mg/(kg·d)	[14]
75-00-3	Chloroethane	1.00E+01	mg/m^3	[11]	2.86E+00	mg/(kg·d)	[8]	4.00E-01	mg/(kg·d)	[4]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
75-01-4	1-Chloroethene	1.00E-01	mg/m^3	[11]	2.86E-02	mg/(kg·d)	[8]	3.00E-03	mg/(kg·d)	[14]
75-05-8	Acetonitrile	6.00E-02	mg/m^3	[11]	1.71E-02	mg/(kg·d)	[8]	6.00E-03	mg/(kg·d)	[9]
75-07-0	Acetaldehyde	9.00E-03	mg/m^3	[11]	2.57E-03	mg/(kg·d)	[8]	4.00E-02	mg/(kg·d)	[4]
75-09-2	Dichloromethane (Methylene Chloride)	3.00E+00	mg/m^3	[5]	8.57E-01	mg/(kg·d)	[8]	6.00E-02	mg/(kg·d)	[14]
75-15-0	Carbon disulfide	7.00E-01	mg/m^3	[11]	2.00E-01	mg/(kg·d)	[8]	1.00E-01	mg/(kg·d)	[14]
75-25-2	Bromoform	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]
75-27-4	Bromodichloro-methane	7.00E-02	mg/m^3	[5]	2.00E-02	mg/(kg·d)	[2]	2.00E-02	mg/(kg·d)	[14]
75-29-6	2-Chloropropane	1.00E-01	mg/m^3	[6]	2.86E-02	mg/(kg·d)	[8]	2.86E-02	mg/(kg·d)	[2]
75-34-3	1,1-Dichloroethane	5.00E-01	mg/m^3	[5]	1.43E-01	mg/(kg·d)	[8]	2.00E-01	mg/(kg·d)	[9]
75-35-4	1,1-Dichloroethene	2.00E-01	mg/m^3	[11]	5.71E-02	mg/(kg·d)	[8]	5.00E-02	mg/(kg·d)	[14]
75-44-5	Phosgene (Hydrogen phosphide)	3.00E-04	mg/m^3	[11]	8.57E-05	mg/(kg·d)	[2]	8.57E-05	mg/(kg·d)	[2]
75-45-6	Chlorodifluoro-methane	5.00E+01	mg/m^3	[11]	1.43E+01	mg/(kg·d)	[8]	1.43E+01	mg/(kg·d)	[4]
75-50-3	Trimethylamine	2.00E+01	mg/m^3	[8]	5.71E+00	mg/(kg·d)	[9]	5.71E+00	mg/(kg·d)	[2]
75-69-4	Trichlorofluoro-methane	7.00E-01	mg/m^3	[5]	2.00E-01	mg/(kg·d)	[8]	3.00E-01	mg/(kg·d)	[14]
75-71-8	Dichlorodifluoro-methane	2.00E-01	mg/m^3	[5]	5.71E-02	mg/(kg·d)	[8]	2.00E-01	mg/(kg·d)	[14]
76-01-7	Pentachloroethane	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[4]	5.70E+00	mg/(kg·d)	[6]
76-13-1	1,2,2-Trichlorotrifluoro-ethane	3.00E+01	mg/m^3	[6]	8.57E+00	mg/(kg·d)	[8]	3.00E+01	mg/(kg·d)	[14]
76-44-8	Heptachlor	1.80E-03	mg/m^3	[5]	5.14E-04	mg/(kg·d)	[2]	5.00E-04	mg/(kg·d)	[14]
7647-01-0	Hydrogen chloride	2.00E-02	mg/m^3	[11]	5.71E-03	mg/(kg·d)	[8]	5.71E-03	mg/(kg·d)	[4]
765-34-4	Glycidylaldehyde	1.00E-03	mg/m^3	[6]	2.86E-04	mg/(kg·d)	[8]	4.00E-04	mg/(kg·d)	[14]
7664-39-3	Hydrogen Fluoride									
7664-41-7	Ammonia/Ammonium	1.00E-01	mg/m^3	[11]	2.86E-02	mg/(kg·d)	[8]	2.86E-02	mg/(kg·d)	[2]
77-47-4	Hexachlorocyclopenta diene	2.00E-04	mg/m^3	[11]	5.71E-05	mg/(kg·d)	[8]	6.00E-03	mg/(kg·d)	[14]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
77-78-1	Dimethyl sulfate									
7723-14-0	Phosphorus	7.00E-05	mg/m^3	[2]	2.00E-05	mg/(kg·d)	[1]	2.00E-05	mg/(kg·d)	[14]
7782-41-4	Fluorine gas (F_2)	2.10E-01	mg/m^3	[2]	6.00E-02	mg/(kg·d)	[1]	6.00E-02	mg/(kg·d)	[14]
7782-49-2	Selenium	2.00E-02	mg/m^3	[5]	5.71E-03	mg/(kg·d)	[2]	5.00E-03	mg/(kg·d)	[14]
7782-50-5	Chlorine	2.00E-04	mg/m^3	[5]	5.71E-05	mg/(kg·d)	[8]	1.00E-01	mg/(kg·d)	[14]
78-83-1	2-Methylpropyl alcohol	2.00E+01	mg/m^3	[3]	5.70E+00	mg/(kg·d)	[4]	3.00E-01	mg/(kg·d)	[14]
78-87-5	1,2-Dichloropropane	4.00E-03	mg/m^3	[11]	1.14E-03	mg/(kg·d)	[8]	1.14E-03	mg/(kg·d)	[4]
78-93-3	2-Butanone	5.00E+00	mg/m^3	[11]	1.43E+00	mg/(kg·d)	[8]	6.00E-01	mg/(kg·d)	[14]
79-00-5	1,1,2-Trichloroethane	1.40E-02	mg/m^3	[2]	4.00E-03	mg/(kg·d)	[1]	4.00E-03	mg/(kg·d)	[14]
79-01-6	1,1,2-Trichloroethylene	6.00E-01	mg/m^3	[5]	1.14E-02	mg/(kg·d)	[8]	6.00E-03	mg/(kg·d)	[4]
79-10-7	2-Propenoic acid	1.00E-03	mg/m^3	[11]	2.86E-04	mg/(kg·d)	[8]	5.00E-01	mg/(kg·d)	[14]
79-34-5	1,1,2,2-Tetrachloroethane	2.10E-01	mg/m^3	[5]	6.00E-02	mg/(kg·d)	[2]	6.00E-02	mg/(kg·d)	[9]
79-46-9	2-Nitropropane	2.00E-02	mg/m^3	[11]	5.71E-03	mg/(kg·d)	[8]	5.71E-03	mg/(kg·d)	[2]
80-62-6	Methyl methacrylate	7.00E-01	mg/m^3	[11]	2.00E-01	mg/(kg·d)	[8]	1.40E+00	mg/(kg·d)	[14]
82-68-8	Pentachloronitrobenzene (PCNB)	1.10E-02	mg/m^3	[5]	3.14E-03	mg/(kg·d)	[2]	3.00E-03	mg/(kg·d)	[14]
822-06-0	Hexamethylene-1,5-diisocyanate	1.00E-05	mg/m^3	[11]	2.86E-06	mg/(kg·d)	[8]	2.86E-06	mg/(kg·d)	[2]
823-40-5	Toluene-2,6-diamine	7.00E-01	mg/m^3	[3]	2.00E-01	mg/(kg·d)	[7]	3.00E-02	mg/(kg·d)	[9]
83-32-9	Acenaphthene	2.10E-01	mg/m^3	[5]	6.00E-02	mg/(kg·d)	[2]	6.00E-02	mg/(kg·d)	[14]
84-66-2	Diethyl phthalate	2.80E+00	mg/m^3	[2]	8.00E-01	mg/(kg·d)	[1]	8.00E-01	mg/(kg·d)	[14]
84-74-2	Di-n-butylphthalate	3.50E-01	mg/m^3	[5]	1.00E-01	mg/(kg·d)	[2]	1.00E-01	mg/(kg·d)	[14]
85-01-8	Phenanthrene									
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	2.00E-02	mg/m^3	[5]	3.43E-02	mg/(kg·d)	[8]	2.00E+00	mg/(kg·d)	[14]
85-68-7	Butylbenzylphthalate	7.00E-01	mg/m^3	[5]	2.00E-01	mg/(kg·d)	[7]	2.00E-01	mg/(kg·d)	[14]
86-73-7	Fluorene	1.40E-01	mg/m^3	[5]	4.00E-02	mg/(kg·d)	[2]	4.00E-02	mg/(kg·d)	[14]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
87-61-6	1,2,3-Trichlorobenzene									
87-68-3	Hexachlorobutadiene	7.00E-04	mg/m^3	[2]	2.00E-04	mg/(kg·d)	[1]	2.00E-04	mg/(kg·d)	[4]
87-86-5	Pentachlorophenol	1.05E-01	mg/m^3	[2]	3.00E-02	mg/(kg·d)	[1]	3.00E-02	mg/(kg·d)	[14]
88-74-4	o-Nitroaniline (2-nitroaniline)	1.00E-04	mg/m^3	[6]	2.86E-05	mg/(kg·d)	[8]	3.00E-03	mg/(kg·d)	[9]
88-75-5	2-Nitrophenol									
90-04-0	o-Anisidine									
90-12-0	1-Methylnaphthalene	1.05E-03	mg/m^3	[2]	3.00E-04	mg/(kg·d)	[1]	3.00E-04	mg/(kg·d)	[8]
91-20-3	Naphthalene	3.00E-03	mg/m^3	[11]	8.57E-04	mg/(kg·d)	[8]	2.00E-02	mg/(kg·d)	[14]
91-57-6	2-Methylnaphthalene	1.40E-02	mg/m^3	[2]	4.00E-03	mg/(kg·d)	[1]	4.00E-03	mg/(kg·d)	[14]
91-58-7	2-Chloronaphthalene	2.80E-01	mg/m^3	[5]	8.00E-02	mg/(kg·d)	[2]	8.00E-02	mg/(kg·d)	[14]
92-52-4	1,1`-Biphenyl	1.75E-01	mg/m^3	[3]	5.00E-02	mg/(kg·d)	[7]	5.00E-02	mg/(kg·d)	[14]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)									
94-75-7	2,4-D	3.50E-02	mg/m^3	[2]	1.00E-02	mg/(kg·d)	[1]	1.00E-02	mg/(kg·d)	[14]
95-48-7	o-Cresol	1.80E-01	mg/m^3	[5]	5.14E-02	mg/(kg·d)	[2]	5.00E-02	mg/(kg·d)	[14]
95-49-8	o-Chlorotoluene	7.00E-02	mg/m^3	[2]	2.00E-02	mg/(kg·d)	[1]	2.00E-02	mg/(kg·d)	[14]
95-50-1	1,2-Dichlorobenzene	2.00E-01	mg/m^3	[5]	5.71E-02	mg/(kg·d)	[8]	9.00E-02	mg/(kg·d)	[14]
95-57-8	2-Chlorophenol	1.80E-02	mg/m^3	[5]	5.14E-03	mg/(kg·d)	[2]	5.00E-03	mg/(kg·d)	[14]
95-63-6	1,2,4-Trimethyl benzene	6.00E-03	mg/m^3	[6]	1.71E-03	mg/(kg·d)	[8]	5.00E-02	mg/(kg·d)	[9]
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10E-03	mg/m^3	[5]	3.14E-04	mg/(kg·d)	[2]	3.00E-04	mg/(kg·d)	[14]
95-95-4	2,4,5-Trichlorophenol	3.50E-01	mg/m^3	[5]	1.00E-01	mg/(kg·d)	[2]	1.00E-01	mg/(kg·d)	[14]
96-12-8	1,2-Dibromo-3-chloropropane	2.00E-04	mg/m^3	[11]	5.71E-05	mg/(kg·d)	[8]	5.70E-04	mg/(kg·d)	[4]
96-18-4	1,2,3-Trichloropropane	2.10E-02	mg/m^3	[5]	6.00E-03	mg/(kg·d)	[2]	6.00E-03	mg/(kg·d)	[14]
96-45-7	Ethylene thiourea	2.80E-04	mg/m^3	[2]	8.00E-05	mg/(kg·d)	[1]	8.00E-05	mg/(kg·d)	[14]
97-63-2	Ethyl methacrylate	3.20E-01	mg/m^3	[5]	5.70E+00	mg/(kg·d)	[4]	9.00E-02	mg/(kg·d)	[4]
98-01-1	Furfural	5.00E-02	mg/m^3	[6]	1.43E-02	mg/(kg·d)	[8]	3.00E-03	mg/(kg·d)	[14]

Table 5-1 Inhalation Reference Concentration and Dose, and Oral Reference Dose

CAS Registry Number	Analyte Name	Inhalation Chronic Reference Concentration (*RfC*)	Units for Inhalation Chronic Reference Concentration	Reference	Inhalation Chronic Reference Dose (RfD_i)	Units for Inhalation Chronic Reference Dose	Reference	Oral Chronic Reference Dose (RfD_o)	Units for Oral Chronic Reference Dose	Reference
98-06-6	tert-Butyl benzene									
98-82-8	Cumene	4.00E-01	mg/m^3	[11]	1.14E-01	mg/(kg·d)	[8]	1.00E-01	mg/(kg·d)	[14]
98-83-9	Methyl styrene (mixed isomers)	2.45E-01	mg/m^3	[2]	7.00E-02	mg/(kg·d)	[1]	7.00E-02	mg/(kg·d)	[9]
98-86-2	Acetophenone	3.50E-01	mg/m^3	[5]	5.71E-06	mg/(kg·d)	[8]	1.00E-01	mg/(kg·d)	[14]
98-95-3	Nitrobenzene	2.00E-03	mg/m^3	[6]	5.71E-04	mg/(kg·d)	[8]	5.00E-04	mg/(kg·d)	[14]
99-35-4	1,3,5-Trinitrobenzene	1.10E-01	mg/m^3	[5]	3.14E-02	mg/(kg·d)	[2]	3.00E-02	mg/(kg·d)	[14]
99-65-0	1,3-Dinitrobenzene	3.50E-04	mg/m^3	[5]	1.00E-04	mg/(kg·d)	[2]	1.00E-04	mg/(kg·d)	[14]
99-87-6	p-Cymene	2.98E-01	mg/m^3	[3]	8.50E-02	mg/(kg·d)	[3]	8.50E-02	mg/(kg·d)	[5]

Reference	Reference (source) for Inhalation Reference Concentration
[1]	CCN 063814, "EPA To WTP Regarding Surrogate Toxicity Values," E-mail communication from Marcia Bailey, US Environmental Protection Agency, EPA Region 10, to Sharon Robers, SAIC, 11 June 2002.
[2]	Calculated value using the inverse of Eq. A-2-38 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Converted to inhalation concentration from inhalation dose based on a conversion factor of 70 kg per 20 m3/day (refer to EPA. 1997. *Health Effects Assessment Summary Tables (HEAST) FY-1997 Annual*, EPA/540/R-97/036. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC).
[4]	EPA. 2007. *Toxicological Review of Tetrahydrofuran, External Peer Review Draft*, NCEA-S-1620. US Environmental Protection Agency, Washington, DC.
[5]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[6]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[7]	Provisional value from EPA Region 10.
[8]	Recommended reference doses for petroleum fractions and individual hazardous substances (MTCA hydrocarbon guidance).
[9]	Surrogate value from Acenaphthene.
[10]	Surrogate value from Trichlorofluoromethane.
[11]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.

Reference	Reference (source) for Inhalation Reference Concentration
[12]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from Acrylonitrile). Accessed January 2007.
[13]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed January 2007.

Reference	Reference (source) for Inhalation Reference Dose
[1]	Calculated value using route-to-route extrapolation from oral RfD, see Section A.2-3.2 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[2]	Converted to inhalation dose from inhalation concentration based on a conversion factor of 20 m^3/day per 70 kg (refer to EPA. 1997. *Health Effects Assessment Summary Tables (HEAST) FY-1997 Annual*, EPA/540/R-97/036. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC).
[3]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC10 to EC12).
[4]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC5 to EC6).
[5]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC6 to EC8).
[6]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC8 to EC10).
[7]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[8]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[9]	Recommended reference doses for petroleum fractions and individual hazardous substances (MTCA hydrocarbon guidance).
[10]	Surrogate value from 2,4-Dinitrotoluene.
[11]	Surrogate value from Acrylonitrile.
[12]	Surrogate value from Trichlorofluoromethane.

Reference	Reference (source) for Oral Reference Dose
[1]	CCN 063814, "EPA To WTP Regarding Surrogate Toxicity Values," E-mail communication from Marcia Bailey, US Environmental Protection Agency, EPA Region 10, to Sharon Robers, SAIC, 11 June 2002.
[2]	Calculated value per Eq. A-2-38 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. 2007. *Toxicological Review of Tetrahydrofuran, External Peer Review Draft*, NCEA-S-1620. US Environmental Protection Agency, Washington, DC.
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.

Reference	Reference (source) for Oral Reference Dose
[5]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC10 to EC12).
[6]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC5 to EC6).
[7]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC8 to EC10).
[8]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[9]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[10]	Surrogate value from Acenaphthene.
[11]	Surrogate value from Acrylonitrile.
[12]	Surrogate value from Trichlorofluoromethane.
[13]	Surrogate value from cis-1,2-Dichloroethene.
[14]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.
[15]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/) (Modifying factor of 3 be applied for nondietary exposures). Accessed June 2006.
[16]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from 2,4-Dinitrotoluene). Accessed January 2007.
[17]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from Aroclor-1254). Accessed January 2007.

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
100-02-7	p-Nitrophenol	1	unitless	[3]	8.00E-03	mg/(kg/d)	[2]
100-21-0	Phthalic acid	0.5	unitless	[3]	5.00E-01	mg/(kg/d)	[2]
100-25-4	1,4-Dinitrobenzene	0.5	unitless	[3]	5.00E-05	mg/(kg/d)	[2]
100-41-4	Ethyl benzene	0.97	unitless	[3]	9.70E-02	mg/(kg/d)	[2]
100-42-5	Styrene	0.8	unitless	[3]	1.60E-01	mg/(kg/d)	[2]
100-44-7	Benzyl chloride	0.8	unitless	[3]	1.60E-03	mg/(kg/d)	[2]
100-51-6	Benzyl alcohol	0.66	unitless	[3]	3.30E-01	mg/(kg/d)	[2]
100-52-7	Benzaldehyde	0.8	unitless	[3]	8.00E-02	mg/(kg/d)	[2]
10028-15-6	Ozone	1	unitless	[2]			
10061-01-5	cis-1,3-Dichloropropene	1	unitless	[2]	1.00E-02	mg/(kg/d)	[7]
10061-02-6	trans-1,3-Dichloropropene	1	unitless	[2]			
101-55-3	4-Bromophenylphenyl ether	0.5	unitless	[3]			
101-77-9	4,4-Methylenedianiline	0.5	unitless	[3]			
10102-44-0	Nitrogen dioxide	0.2	unitless	[3]	2.00E-01	mg/(kg/d)	[2]
103-65-1	n-Propyl benzene (Isocumene)	1	unitless	[2]			
104-51-8	n-Butylbenzene	1	unitless	[2]			
105-67-9	2,4-Dimethylphenol	0.5	unitless	[3]	1.00E-02	mg/(kg/d)	[2]
106-43-4	4-Chlorotoluene (p-Tolyl chloride)	1	unitless	[2]			
106-44-5	p-Cresol (4-methyl phenol)	0.65	unitless	[3]	3.25E-03	mg/(kg/d)	[2]
106-46-7	1,4-Dichlorobenzene	0.9	unitless	[3]	2.70E-02	mg/(kg/d)	[1]
106-47-8	p-Chloroaniline	0.5	unitless	[3]	2.00E-03	mg/(kg/d)	[2]
106-51-4	Quinone	1	unitless	[2]	2.86E-02	mg/(kg/d)	[1]
106-88-7	1,2-Epoxybutane	0.5	unitless	[3]	2.86E-03	mg/(kg/d)	[1]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	0.8	unitless	[3]	1.60E-03	mg/(kg/d)	[2]
106-93-4	Ethylene dibromide	0.8	unitless	[3]	7.20E-03	mg/(kg/d)	[2]
106-99-0	1,3-Butadiene	0.8	unitless	[3]	4.56E-04	mg/(kg/d)	[1]
107-02-8	Acrolein	0.8	unitless	[3]	4.00E-04	mg/(kg/d)	[2]
107-05-1	3-Chloropropene	0.8	unitless	[3]	4.00E-02	mg/(kg/d)	[2]
107-06-2	1,2-Dichloroethane	1	unitless	[3]	2.00E-02	mg/(kg/d)	[2]
107-12-0	Propionitrile	1	unitless	[2]	5.70E+00	mg/(kg/d)	[1]
107-13-1	Acrylonitrile	0.8	unitless	[3]	8.00E-04	mg/(kg/d)	[2]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
107-19-7	Propargyl alcohol	0.8	unitless	[3]	1.60E-03	mg/(kg/d)	[2]
107-21-1	Ethylene glycol (1,2-ethanediol)	0.5	unitless	[3]	1.00E+00	mg/(kg/d)	[2]
107-98-2	Propylene glycol monomethyl ether	0.5	unitless	[3]	3.50E-01	mg/(kg/d)	[2]
108-05-4	Acetic acid vinyl ester	0.65	unitless	[3]	6.50E-01	mg/(kg/d)	[2]
108-10-1	4-Methyl-2-pentanone	0.8	unitless	[3]	6.40E-02	mg/(kg/d)	[2]
108-39-4	m-Cresol	0.5	unitless	[3]	2.50E-02	mg/(kg/d)	[2]
108-60-1	bis (2-Chloroisopropyl)ether	0.5	unitless	[3]	2.00E-02	mg/(kg/d)	[1]
108-67-8	1,3,5-Trimethylbenzene	0.8	unitless	[3]	4.00E-02	mg/(kg/d)	[2]
108-86-1	Bromobenzene (Phenyl bromide)	0.8	unitless	[3]	1.60E-02	mg/(kg/d)	[2]
108-87-2	Methylcyclohexane	0.8	unitless	[3]	6.86E-01	mg/(kg/d)	[1]
108-88-3	Toluene	0.8	unitless	[3]	6.40E-02	mg/(kg/d)	[2]
108-90-7	Chlorobenzene	0.31	unitless	[3]	6.20E-03	mg/(kg/d)	[2]
108-94-1	Cyclohexanone	0.8	unitless	[3]	4.00E+00	mg/(kg/d)	[2]
108-95-2	Phenol	0.9	unitless	[3]	2.70E-01	mg/(kg/d)	[2]
109-77-3	Malononitrile	0.8	unitless	[3]	8.00E-05	mg/(kg/d)	[2]
109-86-4	2-Methoxyethanol	0.5	unitless	[3]	1.50E-03	mg/(kg/d)	[2]
109-99-9	Tetrahydrofuran	1	unitless	[2]	3.00E-01	mg/(kg/d)	[1]
110-00-9	Furan	0.8	unitless	[3]	8.00E-04	mg/(kg/d)	[2]
110-54-3	n-Hexane	0.8	unitless	[3]	4.80E-02	mg/(kg/d)	[2]
110-80-5	2-Ethoxyethanol	0.5	unitless	[3]	2.00E-01	mg/(kg/d)	[2]
110-82-7	Cyclohexane	1	unitless	[2]	1.70E+00	mg/(kg/d)	[1]
110-83-8	Cyclohexene	1	unitless	[2]	5.70E+00	mg/(kg/d)	[1]
110-86-1	Pyridine	0.5	unitless	[3]	5.00E-04	mg/(kg/d)	[2]
111-15-9	Ethylene glycol monoethyl ether acetate	0.5	unitless	[3]	1.50E-01	mg/(kg/d)	[2]
111-65-9	n-Octane	1	unitless	[2]	3.00E-02	mg/(kg/d)	[1]
111-76-2	2-Butoxyethanol	0.5	unitless	[3]	2.50E-01	mg/(kg/d)	[2]
111-84-2	n-Nonane	1	unitless	[2]	3.00E-02	mg/(kg/d)	[1]
111-91-1	Bis(2-chloroethoxy)methane	0.5	unitless	[3]	1.50E-03	mg/(kg/d)	[2]
1120-71-4	1,3-Propane sultone	1	unitless	[2]			
117-81-7	Bis(2-ethylhexyl) phthalate	0.19	unitless	[3]	3.80E-03	mg/(kg/d)	[2]
117-84-0	Di-n-octylphthalate	0.9	unitless	[3]	3.60E-02	mg/(kg/d)	[2]
118-74-1	Hexachlorobenzene	0.5	unitless	[3]	4.00E-04	mg/(kg/d)	[2]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
120-12-7	Anthracene	0.76	unitless	[3]	2.28E-01	mg/(kg/d)	[2]
120-82-1	1,2,4-Trichlorobenzene	0.97	unitless	[3]	9.70E-03	mg/(kg/d)	[2]
120-83-2	2,4-Dichlorophenol	0.82	unitless	[3]	2.46E-03	mg/(kg/d)	[2]
121-14-2	2,4-Dinitrotoluene	0.85	unitless	[3]	1.70E-03	mg/(kg/d)	[2]
122-39-4	N,N-Diphenylamine	0.5	unitless	[3]	1.25E-02	mg/(kg/d)	[2]
123-33-1	Maleic hydrazide	0.5	unitless	[3]	2.50E-01	mg/(kg/d)	[2]
123-38-6	Propionaldehyde	1	unitless	[2]	5.70E+00	mg/(kg/d)	[1]
123-91-1	1,4-Dioxan	0.8	unitless	[3]	6.86E-01	mg/(kg/d)	[1]
124-48-1	Chlorodibromomethane	0.6	unitless	[3]	1.20E-02	mg/(kg/d)	[2]
126-73-8	Tributyl phosphate	0.5	unitless	[3]	1.00E-01	mg/(kg/d)	[2]
126-98-7	2-Methyl-2-propenenitrile	0.8	unitless	[3]	8.00E-05	mg/(kg/d)	[2]
127-18-4	1,1,2,2-Tetrachloroethene	1	unitless	[3]	1.00E-02	mg/(kg/d)	[2]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1	unitless	[2]			
129-00-0	Pyrene	0.31	unitless	[3]	9.30E-03	mg/(kg/d)	[2]
131-11-3	Dimethyl Phthalate	0.9	unitless	[3]	9.00E+00	mg/(kg/d)	[2]
131-89-5	2-Cycloyhexyl-4,6-dinitrophenol	0.5	unitless	[3]	1.00E-03	mg/(kg/d)	[2]
132-64-9	Dibenzofuran	0.8	unitless	[3]	1.60E-03	mg/(kg/d)	[2]
133-06-2	Captan	0.5	unitless	[3]	6.50E-02	mg/(kg/d)	[2]
1330-20-7	Xylenes (mixed isomers)	0.92	unitless	[3]	1.84E-01	mg/(kg/d)	[2]
1336-36-3	Polychlorinated biphenyls	0.9	unitless	[3]	1.80E-05	mg/(kg/d)	[1]
135-98-8	sec-Butylbenzene	1	unitless	[2]			
141-78-6	Acetic acid ethyl ester	0.8	unitless	[3]	7.20E-01	mg/(kg/d)	[2]
14265-44-2	Phosphate	1	unitless	[2]			
145-73-3	Endothall	0.5	unitless	[3]	1.00E-02	mg/(kg/d)	[2]
14797-55-8	Nitrate	0.5	unitless	[3]	8.00E-01	mg/(kg/d)	[2]
14797-65-0	Nitrite	0.5	unitless	[3]	5.00E-02	mg/(kg/d)	[2]
14808-79-8	Sulfate	0.2	unitless	[3]			
156-59-2	cis-1,2-Dichloroethene	1	unitless	[3]	1.00E-02	mg/(kg/d)	[2]
156-60-5	1,2-trans-Dichloroethene	1	unitless	[3]	2.00E-02	mg/(kg/d)	[2]
1634-04-4	Methyl tert-butyl ether	0.8	unitless	[3]	6.88E-01	mg/(kg/d)	[1]
16887-00-6	Chloride	1	unitless	[3]			
16984-48-8	Fluoride	1	unitless	[2]	6.00E-02	mg/(kg/d)	[1]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	0.5	unitless	[3]	5.00E-10	mg/(kg/d)	[1]
191-24-2	Benzo(g,h,i)perylene	0.31	unitless	[3]			
192-97-2	Benzo(e)pyrene	1	unitless	[2]			
206-44-0	Fluoranthene	0.31	unitless	[3]	1.24E-02	mg/(kg/d)	[2]
208-96-8	Acenaphthylene	0.31	unitless	[3]			
22967-92-6	Methyl mercury	0.9	unitless	[3]	9.00E-05	mg/(kg/d)	[2]
23950-58-5	Pronamide	0.5	unitless	[3]	3.75E-02	mg/(kg/d)	[2]
24959-67-9	Bromide	1	unitless	[2]			
27154-33-2	Trichlorofluoroethane	0.23	unitless	[5]	6.90E-02	mg/(kg/d)	[6]
319-84-6	alpha-BHC	0.97	unitless	[3]	5.54E-03	mg/(kg/d)	[1]
319-85-7	beta-BHC	0.91	unitless	[3]	5.20E-04	mg/(kg/d)	[1]
4170-30-3	Crotonaldehyde (Propylene aldehyde)	1	unitless	[2]	5.71E+00	mg/(kg/d)	[1]
41851-50-7	Chlorocyclopentadiene	0.5	unitless	[3]			
460-19-5	Cyanogen (Oxalonitrile)	0.8	unitless	[3]	3.20E-02	mg/(kg/d)	[2]
50-00-0	Formaldehyde	0.8	unitless	[3]	1.60E-01	mg/(kg/d)	[2]
506-68-3	Cyanogen bromide (Bromocyanide)	0.8	unitless	[3]	7.20E-02	mg/(kg/d)	[2]
506-77-4	Cyanogen chloride	0.8	unitless	[3]	4.00E-02	mg/(kg/d)	[2]
51-28-5	2,4-Dinitrophenol	1	unitless	[3]	2.00E-03	mg/(kg/d)	[2]
51-79-6	Ethyl carbamate (urethane)	1	unitless	[2]			
510-15-6	Chlorobenzilate	0.5	unitless	[3]	1.00E-02	mg/(kg/d)	[2]
528-29-0	1,2-Dinitrobenzene (o-Dinitrobenzene)	0.93	unitless	[3]	9.30E-05	mg/(kg/d)	[2]
532-27-4	2-Chloroacetophenone	0.5	unitless	[3]	4.29E-06	mg/(kg/d)	[1]
534-52-1	4,6-Dinitro-o-cresol	1	unitless	[3]	1.00E-04	mg/(kg/d)	[2]
540-59-0	1,2-Dichloroethene (total) (1,2-Dichloroethylene)	0.8	unitless	[3]	7.20E-03	mg/(kg/d)	[2]
540-84-1	2,2,4-Trimethylpentane	1	unitless	[2]	8.57E-02	mg/(kg/d)	[1]
541-73-1	1,3-Dichlorobenzene	0.8	unitless	[3]	7.20E-04	mg/(kg/d)	[1]
542-75-6	1,3-Dichloropropene	0.55	unitless	[3]	1.65E-02	mg/(kg/d)	[2]
56-23-5	Carbon tetrachloride	0.65	unitless	[3]	4.55E-04	mg/(kg/d)	[2]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
57-12-5	Cyanide	0.17	unitless	[3]	3.40E-03	mg/(kg/d)	[2]
57-24-9	Strychnine	0.5	unitless	[3]	1.50E-04	mg/(kg/d)	[2]
57-74-9	Chlordane	0.5	unitless	[3]	2.50E-04	mg/(kg/d)	[2]
58-89-9	gamma-BHC (Lindane)	0.97	unitless	[3]	2.91E-04	mg/(kg/d)	[2]
58-90-2	2,3,4,6-Tetrachlorophenol	0.5	unitless	[3]	1.50E-02	mg/(kg/d)	[2]
584-84-9	2,4-Toluene diisocyanate	1	unitless	[2]	1.70E-03	mg/(kg/d)	[3]
59-50-7	4-Chloro-3-methylphenol	0.5	unitless	[3]			
59-89-2	N-Nitrosomorpholine	1	unitless	[2]			
591-78-6	2-Hexanone	0.66	unitless	[3]	2.64E-02	mg/(kg/d)	[1]
593-60-2	Bromoethene (Vinyl bromide)	0.8	unitless	[3]	6.86E-04	mg/(kg/d)	[1]
60-11-7	Dimethyl aminoazobenzene	1	unitless	[2]			
60-29-7	Ethyl ether	0.8	unitless	[3]	1.60E-01	mg/(kg/d)	[2]
60-35-5	Acetamide	1	unitless	[2]	5.71E+00	mg/(kg/d)	[1]
602-87-9	5-Nitroacenaphthene	1	unitless	[2]	1.86E-02	mg/(kg/d)	[4]
606-20-2	2,6-Dinitrotoluene	0.85	unitless	[3]	8.50E-04	mg/(kg/d)	[2]
608-93-5	Pentachlorobenzene	0.8	unitless	[3]	6.40E-04	mg/(kg/d)	[2]
61626-71-9	Dichloropentadiene	1	unitless	[2]			
62-50-0	Ethyl methanesulfonate	1	unitless	[2]			
62-53-3	Aniline	0.5	unitless	[3]	3.50E-03	mg/(kg/d)	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	0.5	unitless	[3]	4.00E-06	mg/(kg/d)	[2]
624-83-9	Methyl isocyanate	0.8	unitless	[4]	8.00E-04	mg/(kg/d)	[5]
630-08-0	Carbon monoxide	1	unitless	[2]			
630-20-6	1,1,1,2-Tetrachloroethane	0.8	unitless	[3]	2.40E-02	mg/(kg/d)	[2]
64-18-6	Formic acid (methanoic acid)	0.5	unitless	[3]	1.00E+00	mg/(kg/d)	[2]
65-85-0	Benzoic acid	1	unitless	[3]	4.00E+00	mg/(kg/d)	[2]
67-56-1	Methyl alcohol	0.8	unitless	[3]	4.00E-01	mg/(kg/d)	[2]
67-63-0	2-Propyl alcohol	1	unitless	[3]	5.71E+00	mg/(kg/d)	[1]
67-64-1	2-Propanone (Acetone)	0.83	unitless	[3]	7.47E-01	mg/(kg/d)	[2]
67-66-3	Chloroform	0.2	unitless	[3]	2.00E-03	mg/(kg/d)	[2]
67-72-1	Hexachloroethane	0.5	unitless	[3]	5.00E-04	mg/(kg/d)	[2]
70-30-4	Hexachlorophene	0.5	unitless	[3]	1.50E-04	mg/(kg/d)	[2]
71-36-3	n-Butyl alcohol	0.5	unitless	[3]	5.00E-02	mg/(kg/d)	[2]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
71-43-2	Benzene	0.97	unitless	[3]	3.88E-03	mg/(kg/d)	[2]
71-55-6	1,1,1-Trichloroethane	0.9	unitless	[3]	1.80E-01	mg/(kg/d)	[2]
72-43-5	Methoxychlor	0.5	unitless	[3]	2.50E-03	mg/(kg/d)	[2]
74-83-9	Bromomethane	0.8	unitless	[3]	1.12E-03	mg/(kg/d)	[2]
74-87-3	Chloromethane	0.8	unitless	[3]	2.06E-03	mg/(kg/d)	[1]
74-88-4	Iodomethane	1	unitless	[2]			
74-95-3	Methylene bromide	0.8	unitless	[3]	8.00E-03	mg/(kg/d)	[2]
74-97-5	Bromochloromethane	0.8	unitless	[3]			
7429-90-5	Aluminum	0.1	unitless	[3]	1.00E-01	mg/(kg/d)	[2]
7439-89-6	Iron	0.15	unitless	[3]	4.50E-02	mg/(kg/d)	[2]
7439-92-1	Lead	0.15	unitless	[3]	6.44E-05	mg/(kg/d)	[1]
7439-93-2	Lithium	0.8	unitless	[3]			
7439-95-4	Magnesium	0.2	unitless	[3]			
7439-96-5	Manganese	0.04	unitless	[3]	5.60E-03	mg/(kg/d)	[2]
7439-96-5	Manganese	0.04	unitless	[3]	1.84E-03	mg/(kg/d)	[2]
7439-97-6	Mercury	0.07	unitless	[3]	2.10E-05	mg/(kg/d)	[2]
7439-98-7	Molybdenum	0.38	unitless	[3]	1.90E-03	mg/(kg/d)	[2]
7440-02-0	Nickel	0.27	unitless	[3]	5.40E-03	mg/(kg/d)	[2]
7440-16-6	Rhodium	1	unitless	[2]			
7440-22-4	Silver	0.18	unitless	[3]	9.00E-04	mg/(kg/d)	[2]
7440-23-5	Sodium	1	unitless	[3]			
7440-24-6	Strontium (total)	0.2	unitless	[3]	1.20E-01	mg/(kg/d)	[2]
7440-25-7	Tantalum	1	unitless	[2]			
7440-28-0	Thallium	0.15	unitless	[3]	1.05E-05	mg/(kg/d)	[1]
7440-31-5	Tin	0.1	unitless	[3]	6.00E-02	mg/(kg/d)	[2]
7440-33-7	Tungsten	0.2	unitless	[3]			
7440-36-0	Antimony	0.02	unitless	[3]	8.00E-06	mg/(kg/d)	[2]
7440-38-2	Arsenic	0.41	unitless	[3]	1.23E-04	mg/(kg/d)	[2]
7440-39-3	Barium	0.07	unitless	[3]	1.40E-02	mg/(kg/d)	[2]
7440-41-7	Beryllium	0.01	unitless	[3]	2.00E-05	mg/(kg/d)	[2]
7440-43-9	Cadmium	0.01	unitless	[3]	5.00E-06	mg/(kg/d)	[2]
7440-43-9	Cadmium	0.01	unitless	[3]	1.00E-05	mg/(kg/d)	[2]

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
7440-47-3	Chromium	0.013	unitless	[1]	1.95E-02	mg/(kg/d)	[1]
7440-48-4	Cobalt	0.8	unitless	[3]	1.60E-02	mg/(kg/d)	[2]
7440-50-8	Copper	0.3	unitless	[3]	1.20E-02	mg/(kg/d)	[2]
7440-61-1	Uranium	0.85	unitless	[3]	5.10E-04	mg/(kg/d)	[2]
7440-62-2	Vanadium	0.01	unitless	[3]	7.00E-05	mg/(kg/d)	[2]
7440-65-5	Yttrium	1	unitless	[2]	1.43E-03	mg/(kg/d)	[1]
7440-66-6	Zinc	0.2	unitless	[3]	6.00E-02	mg/(kg/d)	[2]
7440-67-7	Zirconium	0.8	unitless	[3]			
7446-09-5	Sulfur dioxide	1	unitless	[2]			
7487-94-7	Mercury (Hg^{+2})	0.07	unitless	[3]	2.10E-05	mg/(kg/d)	[2]
75-00-3	Chloroethane	0.8	unitless	[3]	3.20E-01	mg/(kg/d)	[2]
75-01-4	1-Chloroethene	1	unitless	[3]	3.00E-03	mg/(kg/d)	[2]
75-05-8	Acetonitrile	0.8	unitless	[3]	4.80E-03	mg/(kg/d)	[2]
75-07-0	Acetaldehyde	0.8	unitless	[3]	3.20E-02	mg/(kg/d)	[1]
75-09-2	Dichloromethane (Methylene chloride)	0.95	unitless	[3]	5.70E-02	mg/(kg/d)	[2]
75-15-0	Carbon disulfide	0.63	unitless	[3]	6.30E-02	mg/(kg/d)	[2]
75-25-2	Bromoform	0.6	unitless	[3]	1.20E-02	mg/(kg/d)	[2]
75-27-4	Bromodichloromethane	0.98	unitless	[3]	1.96E-02	mg/(kg/d)	[2]
75-29-6	2-Chloropropane	0.8	unitless	[3]	2.29E-02	mg/(kg/d)	[1]
75-34-3	1,1-Dichloroethane	1	unitless	[3]	2.00E-01	mg/(kg/d)	[2]
75-35-4	1,1-Dichloroethene	1	unitless	[3]	5.00E-02	mg/(kg/d)	[2]
75-44-5	Phosgene (Hydrogen phosphide)						
75-45-6	Chlorodifluoromethane	0.8	unitless	[3]	1.14E+01	mg/(kg/d)	[1]
75-50-3	Trimethylamine	1	unitless	[2]	5.71E+00	mg/(kg/d)	[1]
75-69-4	Trichlorofluoromethane	0.23	unitless	[3]	6.90E-02	mg/(kg/d)	[2]
75-71-8	Dichlorodifluoromethane	0.23	unitless	[3]	4.60E-02	mg/(kg/d)	[2]
76-01-7	Pentachloroethane	1	unitless	[2]	5.70E+00	mg/(kg/d)	[1]
76-13-1	1,2,2-Trichlorotrifluoroethane	0.8	unitless	[3]	2.40E+01	mg/(kg/d)	[2]
76-44-8	Heptachlor	0.72	unitless	[3]	3.60E-04	mg/(kg/d)	[2]
7647-01-0	Hydrogen chloride	0.2	unitless	[3]	1.14E-03	mg/(kg/d)	[1]
765-34-4	Glycidylaldehyde	0.5	unitless	[3]	2.00E-04	mg/(kg/d)	[2]
7664-39-3	Hydrogen Fluoride	1	unitless	[2]	-	-	-

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
7664-41-7	Ammonia/Ammonium	0.2	unitless	[3]	5.71E-03	mg/(kg/d)	[1]
77-47-4	Hexachlorocyclopentadiene	0.5	unitless	[3]	3.00E-03	mg/(kg/d)	[2]
77-78-1	Dimethyl sulfate	0.5	unitless	[3]			
7723-14-0	Phosphorus	0.2	unitless	[3]	4.00E-06	mg/(kg/d)	[2]
7782-41-4	Fluorine gas (F_2)	0.97	unitless	[3]	5.82E-02	mg/(kg/d)	[2]
7782-49-2	Selenium	0.44	unitless	[3]	2.20E-03	mg/(kg/d)	[2]
7782-50-5	Chlorine	0.2	unitless	[3]	2.00E-02	mg/(kg/d)	[2]
78-83-1	2-Methylpropyl alcohol	0.8	unitless	[3]	2.40E-01	mg/(kg/d)	[2]
78-87-5	1,2-Dichloropropane	0.74	unitless	[3]	8.44E-04	mg/(kg/d)	[1]
78-93-3	2-Butanone	0.8	unitless	[3]	4.80E-01	mg/(kg/d)	[2]
79-00-5	1,1,2-Trichloroethane	0.81	unitless	[3]	3.24E-03	mg/(kg/d)	[2]
79-01-6	1,1,2-Trichloroethylene	0.15	unitless	[3]	4.50E-05	mg/(kg/d)	[2]
79-10-7	2-Propenoic acid	0.5	unitless	[3]	2.50E-01	mg/(kg/d)	[2]
79-34-5	1,1,2,2-Tetrachloroethane	0.7	unitless	[3]	4.20E-02	mg/(kg/d)	[2]
79-46-9	2-Nitropropane	0.8	unitless	[3]	4.57E-03	mg/(kg/d)	[1]
80-62-6	Methyl methacrylate	0.8	unitless	[3]	1.12E+00	mg/(kg/d)	[2]
82-68-8	Pentachloronitrobenzene (PCNB)	0.8	unitless	[3]	2.40E-03	mg/(kg/d)	[2]
822-06-0	Hexamethylene-1,5-diisocyanate	0.5	unitless	[3]	1.43E-06	mg/(kg/d)	[1]
823-40-5	Toluene-2,6-diamine	0.5	unitless	[3]	1.50E-02	mg/(kg/d)	[2]
83-32-9	Acenaphthene	0.31	unitless	[3]	1.86E-02	mg/(kg/d)	[2]
84-66-2	Diethyl phthalate	0.9	unitless	[3]	7.20E-01	mg/(kg/d)	[2]
84-74-2	Di-n-butylphthalate	1	unitless	[3]	1.00E-01	mg/(kg/d)	[2]
85-01-8	Phenanthrene	0.73	unitless	[3]			
85-44-9	Phthalic anhydride (1,2-benzenedicarboxylic anhydride)	0.5	unitless	[3]	1.00E+00	mg/(kg/d)	[2]
85-68-7	Butylbenzylphthalate	0.61	unitless	[3]	1.22E-01	mg/(kg/d)	[2]
86-73-7	Fluorene	0.5	unitless	[3]	2.00E-02	mg/(kg/d)	[2]
87-61-6	1,2,3-Trichlorobenzene	1	unitless	[2]			
87-68-3	Hexachlorobutadiene	0.5	unitless	[3]	1.00E-04	mg/(kg/d)	[2]
87-86-5	Pentachlorophenol	1	unitless	[3]	3.00E-02	mg/(kg/d)	[2]
88-74-4	o-Nitroaniline (2-nitroaniline)	0.5	unitless	[3]	1.50E-03	mg/(kg/d)	[2]
88-75-5	2-Nitrophenol	1	unitless	[2]			
90-04-0	o-Anisidine	1	unitless	[2]			

Table 5-2 Percent Gastrointestinal Absorption and Dermal Chronic Reference Dose

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Reference Dose (RfD_{dermal})	Units for Dermal Chronic Reference Dose	Reference
90-12-0	1-Methylnaphthalene	0.8	unitless	[3]	2.40E-04	mg/(kg/d)	[1]
91-20-3	Naphthalene	0.8	unitless	[3]	1.60E-02	mg/(kg/d)	[2]
91-57-6	2-Methylnaphthalene	0.8	unitless	[3]	3.20E-03	mg/(kg/d)	[2]
91-58-7	2-Chloronaphthalene	0.5	unitless	[3]	4.00E-02	mg/(kg/d)	[2]
92-52-4	1,1`-Biphenyl	0.5	unitless	[3]	2.50E-02	mg/(kg/d)	[2]
94-59-7	Safrole (5-(2-Propenyl)-1,3-benzodioxole)	1	unitless	[2]			
94-75-7	2,4-D	0.8	unitless	[3]	8.00E-03	mg/(kg/d)	[2]
95-48-7	o-Cresol	0.5	unitless	[3]	2.50E-02	mg/(kg/d)	[2]
95-49-8	o-Chlorotoluene	0.8	unitless	[3]	1.60E-02	mg/(kg/d)	[2]
95-50-1	1,2-Dichlorobenzene	0.8	unitless	[3]	7.20E-02	mg/(kg/d)	[2]
95-57-8	2-Chlorophenol	0.5	unitless	[3]	2.50E-03	mg/(kg/d)	[2]
95-63-6	1,2,4-Trimethyl benzene	0.8	unitless	[3]	4.00E-02	mg/(kg/d)	[2]
95-94-3	1,2,4,5-Tetrachlorobenzene	0.8	unitless	[3]	2.40E-04	mg/(kg/d)	[2]
95-95-4	2,4,5-Trichlorophenol	0.5	unitless	[3]	5.00E-02	mg/(kg/d)	[2]
96-12-8	1,2-Dibromo-3-chloropropane	0.8	unitless	[3]	4.56E-04	mg/(kg/d)	[1]
96-18-4	1,2,3-Trichloropropane	0.8	unitless	[3]	4.80E-03	mg/(kg/d)	[2]
96-45-7	Ethylene thiourea	0.5	unitless	[3]	4.00E-05	mg/(kg/d)	[2]
97-63-2	Ethyl methacrylate	0.8	unitless	[3]	7.20E-02	mg/(kg/d)	[2]
98-01-1	Furfural	0.5	unitless	[3]	1.50E-03	mg/(kg/d)	[2]
98-06-6	tert-Butyl benzene	1	unitless	[2]			
98-82-8	Cumene	0.8	unitless	[3]	8.00E-02	mg/(kg/d)	[2]
98-83-9	Methyl styrene (mixed isomers)	0.8	unitless	[3]	5.60E-02	mg/(kg/d)	[2]
98-86-2	Acetophenone	0.8	unitless	[3]	8.00E-02	mg/(kg/d)	[2]
98-95-3	Nitrobenzene	0.97	unitless	[3]	4.85E-04	mg/(kg/d)	[2]
99-35-4	1,3,5-Trinitrobenzene	0.65	unitless	[3]	1.95E-02	mg/(kg/d)	[2]
99-65-0	1,3-Dinitrobenzene	0.65	unitless	[3]	6.50E-05	mg/(kg/d)	[2]
99-87-6	p-Cymene	1	unitless	[2]	8.50E-02	mg/(kg/d)	[1]

Reference	Source for Gastrointestinal Absorption
[1]	CCN 063814, "EPA To WTP Regarding Surrogate Toxicity Values," E-mail communication from Marcia Bailey, US Environmental Protection Agency EPA Region 10, to Sharon Robers, SAIC, 11 June 2002.

Reference	Source for Gastrointestinal Absorption
[2]	Calculated value per Eq. A-2-38 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. 2007. *Toxicological Review of Tetrahydrofuran, External Peer Review Draft*, NCEA-S-1620. US Environmental Protection Agency, Washington, DC.
[4]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[5]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC10 to EC12).
[6]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC5 to EC6).
[7]	Ecology. 2001. CLARC v3.1 part IV, Pub. 94-145. "Table: Recommended Reference Doses for Petroleum Fractions and Individual Hazardous Substances" (Aliphatic EC8 to EC10).
[8]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[9]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[10]	Surrogate value from Acenaphthene.
[11]	Surrogate value from Acrylonitrile.
[12]	Surrogate value from Trichlorofluoromethane.
[13]	Surrogate value from cis-1,2-Dichloroethene.
[14]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.
[15]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/) (Modifying factor of 3 be applied for nondietary exposures). Accessed June 2006.
[16]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from 2,4-Dinitrotoluene). Accessed January 2007.
[17]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from Aroclor-1254). Accessed January 2007.

Reference	Source for Dermal Reference Dose
[1]	Calculated value per Eq. 4.3 in EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)*, Final, EPA/540/R/99/005, July 2004. US Environmental Protection Agency, Washington, DC, USA (http://www.epa.gov/oswer/riskassessment/ragse/pdf/2004_1101_part_e.pdf).
[2]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[3]	Surrogate value from 2,4-Dinitrotoluene.
[4]	Surrogate value from Acenaphthene.
[5]	Surrogate value from Acrylonitrile.

Reference	Source for Dermal Reference Dose
[6]	Surrogate value from Trichlorofluoromethane.
[7]	Surrogate value from cis-1,2-Dichloroethene.

Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Inhalation Unit Risk (*IUR*)	Units for Inhalation Unit Risk	Reference	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference
100-41-4	Ethyl benzene	1.10E-03	m^3/mg	[4]	3.85E-03	(kg·d)/mg	[5]
100-42-5	Styrene	5.71E-04	m^3/mg	[1]	2.00E-03	(kg·d)/mg	[4]
100-44-7	Benzyl chloride	4.90E-02	m^3/mg	[3]	1.70E-01	(kg·d)/mg	[4]
101-77-9	4,4-Methylenedianiline				2.50E-01	(kg·d)/mg	[2]
103-33-3	Azobenzene	3.10E-02	m^3/mg	[6]	1.09E-01	(kg·d)/mg	[5]
10595-95-6	n-Nitrosomethylethylamine				2.20E+01	(kg·d)/mg	[2]
106-46-7	1,4-Dichlorobenzene	1.10E-02	m^3/mg	[3]	3.85E-02	(kg·d)/mg	[3]
106-47-8	p-Chloroaniline				5.40E-02	(kg·d)/mg	[2]
106-49-0	p-Toluidine				1.90E-01	(kg·d)/mg	[2]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	1.20E-03	m^3/mg	[6]	4.20E-03	(kg·d)/mg	[5]
106-93-4	Ethylene dibromide	6.00E-01	m^3/mg	[6]	2.10E+00	(kg·d)/mg	[5]
106-99-0	1,3-Butadiene	3.00E-02	m^3/mg	[6]	1.05E-01	(kg·d)/mg	[5]
107-06-2	1,2-Dichloroethane	2.60E-02	m^3/mg	[6]	9.10E-02	(kg·d)/mg	[5]
107-13-1	Acrylonitrile	6.80E-02	m^3/mg	[6]	2.38E-01	(kg·d)/mg	[5]
108-60-1	Bis(2-chloroisopropyl)ether	1.00E-02	m^3/mg	[4]	3.50E-02	(kg·d)/mg	[5]
109-99-9	Tetrahydrofuran	1.90E-03	m^3/mg	[2]	6.65E-03	(kg·d)/mg	[3]
111-44-4	Bis(2-chloroethyl)ether	3.30E-01	m^3/mg	[6]	1.16E+00	(kg·d)/mg	[5]
117-81-7	Bis(2-ethylhexyl) phthalate				1.40E-02	(kg·d)/mg	[2]
118-74-1	Hexachlorobenzene	4.60E-01	m^3/mg	[6]	1.61E+00	(kg·d)/mg	[5]
119-90-4	3,3'-Dimethoxybenzidine	4.00E-02	m^3/mg	[3]	1.40E-01	(kg·d)/mg	[3]
120-82-1	1,2,4-Trichlorobenzene				3.60E-03	(kg·d)/mg	[2]
121-14-2	2,4-Dinitrotoluene	8.90E-02	m^3/mg	[3]	3.12E-01	(kg·d)/mg	[3]
122-66-7	1,2-Diphenylhydrazine	2.20E-01	m^3/mg	[6]	7.70E-01	(kg·d)/mg	[5]
123-91-1	1,4-Dioxan	3.10E-03	m^3/mg	[3]	1.09E-02	(kg·d)/mg	[3]
124-48-1	Chlorodibromomethane	2.40E-02	m^3/mg	[3]	8.40E-02	(kg·d)/mg	[3]
126-73-8	Tributyl phosphate				5.40E-03	(kg·d)/mg	[2]
127-18-4	1,1,2,2-Tetrachloroethene	5.90E-03	m^3/mg	[3]	2.07E-02	(kg·d)/mg	[5]
133-06-2	Captan				3.50E-03	(kg·d)/mg	[2]
1336-36-3	Polychlorinated biphenyls	1.00E-01	m^3/mg	[8]	4.00E-01	(kg·d)/mg	[9]
1634-04-4	Methyl tert-butyl ether	2.60E-04	m^3/mg	[1]	9.10E-04	(kg·d)/mg	[5]

Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Inhalation Unit Risk (*IUR*)	Units for Inhalation Unit Risk	Reference	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	3.30E+04	m^3/mg	[4]	1.16E+05	(kg·d)/mg	[5]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-30-0	Dibenzo(a,l)pyrene	8.86E-01	m^3/mg	[1]	3.10E+00	(kg·d)/mg	[7]
192-65-4	Dibenzo[a,e]pyrene						
193-39-5	Indeno(1,2,3-cd)pyrene	1.10E-01	m^3/mg	[3]	3.08E-01	(kg·d)/mg	[5]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	1.30E+03	m^3/mg	[3]	4.55E+03	(kg·d)/mg	[5]
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo(b)fluoranthene	1.10E-01	m^3/mg	[3]	3.08E-01	(kg·d)/mg	[5]
207-08-9	Benzo(k)fluoranthene	1.10E-01	m^3/mg	[3]	3.08E-02	(kg·d)/mg	[5]
218-01-9	Chrysene	1.10E-02	m^3/mg	[3]	3.08E-03	(kg·d)/mg	[5]
224-42-0	Dibenz[a,j]acridine						
226-36-8	Dibenz[a,h]acridine						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)						
319-84-6	alpha-BHC	1.80E+00	m^3/mg	[6]	6.30E+00	(kg·d)/mg	[5]
319-85-7	beta-BHC	5.30E-01	m^3/mg	[6]	1.86E+00	(kg·d)/mg	[5]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)						
3268-87-9	Octachlorodibenzo(p)dioxin	3.30E+01	m^3/mg	[4]	1.16E+02	(kg·d)/mg	[5]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)						
39001-02-0	Octachlorodibenzofuran	3.30E+01	m^3/mg	[4]	1.16E+02	(kg·d)/mg	[5]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						

Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Inhalation Unit Risk (*IUR*)	Units for Inhalation Unit Risk	Reference	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
50-00-0	Formaldehyde	1.30E-02	m^3/mg	[6]	4.55E-02	(kg·d)/mg	[5]
50-32-8	Benzo(a)pyrene	1.10E+00	m^3/mg	[3]	3.08E+00	(kg·d)/mg	[5]
510-15-6	Chlorobenzilate	7.80E-02	m^3/mg	[3]	2.73E-01	(kg·d)/mg	[5]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	3.30E+03	m^3/mg	[4]	1.16E+04	(kg·d)/mg	[5]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)						
53-70-3	Dibenz[a,h]anthracene	1.20E+00	m^3/mg	[3]	3.08E+00	(kg·d)/mg	[5]
5385-75-1	Dibenzo(a,e)fluoranthene						
540-73-8	1,2-Dimethylhydrazine						
542-75-6	1,3-Dichloropropene	4.00E-03	m^3/mg	[6]	1.40E-02	(kg·d)/mg	[5]
542-88-1	Bis(chloromethyl)ether	6.20E+01	m^3/mg	[6]	2.17E+02	(kg·d)/mg	[5]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	1.50E-02	m^3/mg	[6]	5.25E-02	(kg·d)/mg	[5]
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo(a)anthracene	1.10E-01	m^3/mg	[3]	3.08E-01	(kg·d)/mg	[5]
57-74-9	Chlordane	1.00E-01	m^3/mg	[3]	3.50E-01	(kg·d)/mg	[5]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.70E+03	m^3/mg	[4]	5.78E+03	(kg·d)/mg	[5]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.70E+04	m^3/mg	[4]	5.78E+04	(kg·d)/mg	[5]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)						
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	1.30E+03	m^3/mg	[6]	4.55E+03	(kg·d)/mg	[3]
58-89-9	gamma-BHC (Lindane)				1.30E+00	(kg·d)/mg	[2]
584-84-9	2,4-Toluene diisocyanate	8.90E-02	m^3/mg	[5]	3.12E-01	(kg·d)/mg	[3]
593-60-2	Bromoethene (Vinyl bromide)	3.20E-02	m^3/mg	[4]	1.12E-01	(kg·d)/mg	[5]
606-20-2	2,6-Dinitrotoluene				6.80E-01	(kg·d)/mg	[2]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						

Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Inhalation Unit Risk (*IUR*)	Units for Inhalation Unit Risk	Reference	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference
62-53-3	Aniline	1.60E-03	m^3/mg	[3]	5.60E-03	(kg·d)/mg	[3]
62-75-9	N-Nitroso-N,N-dimethylamine	1.40E+01	m^3/mg	[6]	4.90E+01	(kg·d)/mg	[5]
621-64-7	N-Nitroso-di-n-propylamine	2.00E+00	m^3/mg	[3]	7.00E+00	(kg·d)/mg	[3]
624-83-9	Methyl isocyanate	6.80E-02	m^3/mg	[7]	2.38E-01	(kg·d)/mg	[6]
630-20-6	1,1,1,2-Tetrachloroethane	7.40E-03	m^3/mg	[6]	2.59E-02	(kg·d)/mg	[5]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)						
67-66-3	Chloroform	2.30E-02	m^3/mg	[6]	8.10E-02	(kg·d)/mg	[8]
67-72-1	Hexachloroethane	4.00E-03	m^3/mg	[6]	1.40E-02	(kg·d)/mg	[5]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)						
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-43-2	Benzene	2.20E-03	m^3/mg	[6]	2.73E-02	(kg·d)/mg	[5]
72-55-9	4,4-DDE	9.70E-02	m^3/mg	[3]	3.40E-01	(kg·d)/mg	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-87-3	Chloromethane	1.80E-03	m^3/mg	[3]	6.30E-03	(kg·d)/mg	[5]
7439-92-1	Lead	1.20E-02	m^3/mg	[3]	4.20E-02	(kg·d)/mg	[3]
7440-02-0	Nickel	2.40E-01	m^3/mg	[3]	8.40E-01	(kg·d)/mg	[1]
7440-38-2	Arsenic	4.30E+00	m^3/mg	[6]	1.51E+01	(kg·d)/mg	[5]
7440-41-7	Beryllium	2.40E+00	m^3/mg	[6]	8.40E+00	(kg·d)/mg	[5]
7440-43-9	Cadmium	1.80E+00	m^3/mg	[6]	6.30E+00	(kg·d)/mg	[5]
7440-43-9	Cadmium	1.80E+00	m^3/mg	[6]	6.30E+00	(kg·d)/mg	[5]
7440-48-4	Cobalt	2.80E+00	m^3/mg	[4]	9.80E+00	(kg·d)/mg	[5]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)						
75-00-3	Chloroethane	8.29E-04	m^3/mg	[1]	2.90E-03	(kg·d)/mg	[4]
75-01-4	1-Chloroethene	4.40E-03	m^3/mg	[6]	3.08E-02	(kg·d)/mg	[5]
75-07-0	Acetaldehyde	2.20E-03	m^3/mg	[6]	7.70E-03	(kg·d)/mg	[5]

Table 5-3 Inhalation Unit Risk and Inhalation Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Inhalation Unit Risk (*IUR*)	Units for Inhalation Unit Risk	Reference	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference
75-09-2	Dichloromethane (Methylene Chloride)	4.70E-04	m^3/mg	[6]	1.65E-03	(kg·d)/mg	[5]
75-21-8	Ethylene oxide (Oxirane)	8.80E-02	m^3/mg	[3]	3.50E-01	(kg·d)/mg	[5]
75-25-2	Bromoform	1.10E-03	m^3/mg	[6]	3.85E-03	(kg·d)/mg	[5]
75-27-4	Bromodichloromethane	1.80E-02	m^3/mg	[3]	6.30E-02	(kg·d)/mg	[3]
75-34-3	1,1-Dichloroethane	1.60E-03	m^3/mg	[3]	5.60E-03	(kg·d)/mg	[3]
75-35-4	1,1-Dichloroethene	5.00E-02	m^3/mg	[4]	1.75E-01	(kg·d)/mg	[5]
76-44-8	Heptachlor	1.30E+00	m^3/mg	[6]	4.55E+00	(kg·d)/mg	[5]
764-41-0	1,4-Dichloro-2-butene	2.60E+00	m^3/mg	[4]	9.10E+00	(kg·d)/mg	[5]
765-34-4	Glycidylaldehyde						
77-78-1	Dimethyl sulfate						
78-87-5	1,2-Dichloropropane	1.00E-02	m^3/mg	[3]	3.50E-02	(kg·d)/mg	[3]
79-00-5	1,1,2-Trichloroethane	1.60E-02	m^3/mg	[6]	5.60E-02	(kg·d)/mg	[5]
79-01-6	1,1,2-Trichloroethylene	2.00E-03	m^3/mg	[3]	4.00E-01	(kg·d)/mg	[5]
79-34-5	1,1,2,2-Tetrachloroethane	5.80E-02	m^3/mg	[6]	2.03E-01	(kg·d)/mg	[5]
79-46-9	2-Nitropropane	2.70E+00	m^3/mg	[4]	9.45E+00	(kg·d)/mg	[5]
82-68-8	Pentachloronitrobenzene (PCNB)	7.40E-02	m^3/mg	[3]	2.59E-01	(kg·d)/mg	[3]
85-68-7	Butylbenzylphthalate	1.40E-03	m^3/mg	[3]	4.90E-03	(kg·d)/mg	[3]
87-68-3	Hexachlorobutadiene	2.20E-02	m^3/mg	[6]	7.70E-02	(kg·d)/mg	[5]
87-86-5	Pentachlorophenol	4.60E-03	m^3/mg	[3]	1.61E-02	(kg·d)/mg	[3]
88-06-2	2,4,6-Trichlorophenol	3.10E-03	m^3/mg	[6]	1.09E-02	(kg·d)/mg	[5]
91-22-5	Quinoline				3.00E+00	(kg·d)/mg	[2]
91-94-1	3,3'-Dichlorobenzidine	3.40E-01	m^3/mg	[3]	1.19E+00	(kg·d)/mg	[3]
924-16-3	N-Nitroso-di-n-Buetylamine	1.60E+00	m^3/mg	[6]	5.60E+00	(kg·d)/mg	[5]
95-53-4	o-Toluidine	5.10E-02	m^3/mg	[3]	1.79E-01	(kg·d)/mg	[3]
96-12-8	1,2-Dibromo-3-chloropropane	1.90E+00	m^3/mg	[3]	2.42E-03	(kg·d)/mg	[5]
96-18-4	1,2,3-Trichloropropane	2.00E+00	m^3/mg	[3]	7.00E+00	(kg·d)/mg	[3]
96-45-7	Ethylene thiourea				1.10E-01	(kg·d)/mg	[2]
98-07-7	Benzotrichloride				1.30E+01	(kg·d)/mg	[2]

Reference **Reference (source) for Inhalation Unit Risk**

[1] Calculated value per Eq. A-2-39 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).

Reference	Reference (source) for Inhalation Unit Risk
[2]	EPA. 2007. *Toxicological Review of Tetrahydrofuran, External Peer Review Draft*, NCEA-S-1620. US Environmental Protection Agency, Washington, DC.
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[5]	Surrogate value from 2,4-Dinitrotoluene.
[6]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.
[7]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from Acrylonitrile). Accessed January 2007.
[8]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (upper-bound unit risk). Accessed January 2007.

Reference	Reference (source) for Inhalation Cancer Slope Factor
[1]	Calculated from inhalation unit risk. IUR from Integrated Risk Information System (IRIS) (Value used is for nickel refinery dust.)
[2]	Calculated value using route-to-route extrapolation from oral CSF, see Section A.2-3.2 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	Calculated value using the inverse of Eq. A-2-39 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[4]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[5]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[6]	Surrogate value from Acrylonitrile.
[7]	Surrogate value, based on assignments from EPA Region 10.
[8]	EPA. 1997. *Health Affects Assessment Summary Table (HEAST), FY 1997 Update*. EPA-540-R-97-036. Office of Research and Development, National Center for Environmental Assessment, Washington, DC.
[9]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (upper-bound slope factor). Accessed January 2007.

Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Drinking Water Unit Risk (*DWUR*)	Units for Drinking Water Unit Risk	Reference	Oral Slope Factor (CSF_o)	Units for Oral Slope Factor	Reference
100-41-4	Ethyl benzene				3.85E-03	(kg·d)/mg	[2]
100-42-5	Styrene	0.0008571	L/mg	[1]	3.00E-02	(kg·d)/mg	[4]
100-44-7	Benzyl chloride	0.0049	L/mg	[5]	1.70E-01	(kg·d)/mg	[7]
101-77-9	4,4-Methylenedianiline	0.0071429	L/mg	[1]	2.50E-01	(kg·d)/mg	[5]
103-33-3	Azobenzene	0.0031	L/mg	[5]	1.10E-01	(kg·d)/mg	[7]
10595-95-6	n-Nitrosomethylethylamine	0.63	L/mg	[5]	2.20E+01	(kg·d)/mg	[7]
106-46-7	1,4-Dichlorobenzene	0.00068	L/mg	[2]	5.40E-03	(kg·d)/mg	[3]
106-47-8	p-Chloroaniline	0.0015429	L/mg	[1]	5.40E-02	(kg·d)/mg	[5]
106-49-0	p-Toluidine	0.0054	L/mg	[2]	1.90E-01	(kg·d)/mg	[5]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	0.00028	L/mg	[5]	9.90E-03	(kg·d)/mg	[7]
106-93-4	Ethylene dibromide	0.06	L/mg	[5]	2.00E+00	(kg·d)/mg	[7]
106-99-0	1,3-Butadiene	0.0031429	L/mg	[1]	1.10E-01	(kg·d)/mg	[4]
107-06-2	1,2-Dichloroethane	0.0026	L/mg	[5]	9.10E-02	(kg·d)/mg	[7]
107-13-1	Acrylonitrile	0.015	L/mg	[5]	5.40E-01	(kg·d)/mg	[7]
108-60-1	bis (2-Chloroisopropyl)ether	0.002	L/mg	[2]	7.00E-02	(kg·d)/mg	[5]
109-99-9	Tetrahydrofuran	0.0002171	L/mg	[1]	7.60E-03	(kg·d)/mg	[3]
111-44-4	Bis(2-chloroethyl)ether	0.033	L/mg	[5]	1.10E+00	(kg·d)/mg	[7]
117-81-7	Bis(2-ethylhexyl) phthalate	0.0004	L/mg	[5]	1.40E-02	(kg·d)/mg	[7]
118-74-1	Hexachlorobenzene	0.046	L/mg	[5]	1.60E+00	(kg·d)/mg	[7]
119-90-4	3,3'-Dimethoxybenzidine	0.0004	L/mg	[2]	1.40E-02	(kg·d)/mg	[3]
120-82-1	1,2,4-Trichlorobenzene	0.0001029	L/mg	[1]	3.60E-03	(kg·d)/mg	[3]
121-14-2	2,4-Dinitrotoluene	0.019	L/mg	[2]	3.10E-01	(kg·d)/mg	[3]
122-66-7	1,2-Diphenylhydrazine	0.022	L/mg	[5]	8.00E-01	(kg·d)/mg	[7]
123-91-1	1,4-Dioxan	0.00031	L/mg	[5]	1.10E-02	(kg·d)/mg	[7]
124-48-1	Chlorodibromomethane	0.0024	L/mg	[5]	8.40E-02	(kg·d)/mg	[7]
126-73-8	Tributyl phosphate	0.0001543	L/mg	[1]	5.40E-03	(kg·d)/mg	[5]
127-18-4	1,1,2,2-Tetrachloroethene	0.0014857	L/mg	[1]	5.20E-02	(kg·d)/mg	[3]
133-06-2	Captan	0.0001	L/mg	[2]	3.50E-03	(kg·d)/mg	[5]
1336-36-3	Polychlorinated biphenyls	0.0571429	L/mg	[1]	2.00E+00	(kg·d)/mg	[8]
1634-04-4	Methyl tert-butyl ether	0.0000514	L/mg	[1]	1.80E-03	(kg·d)/mg	[5]

Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Drinking Water Unit Risk (*DWUR*)	Units for Drinking Water Unit Risk	Reference	Oral Slope Factor (CSF_o)	Units for Oral Slope Factor	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	4500	L/mg	[2]	1.50E+05	(kg·d)/mg	[3]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-30-0	Dibenzo(a,l)pyrene	0.2085714	L/mg	[1]	7.30E+00	(kg·d)/mg	[6]
192-65-4	Dibenzo[a,e]pyrene						
193-39-5	Indeno(1,2,3-cd)pyrene	0.0208571	L/mg	[1]	7.30E-01	(kg·d)/mg	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	180	L/mg	[2]	6.20E-03	(kg·d)/mg	[3]
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo(b)fluoranthene	0.0208571	L/mg	[1]	7.30E-01	(kg·d)/mg	[3]
207-08-9	Benzo(k)fluoranthene	0.0020857	L/mg	[1]	7.30E-02	(kg·d)/mg	[3]
218-01-9	Chrysene	0.0002086	L/mg	[1]	7.30E-03	(kg·d)/mg	[3]
224-42-0	Dibenz[a,j]acridine						
226-36-8	Dibenz[a,h]acridine						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)						
319-84-6	alpha-BHC	0.18	L/mg	[5]	6.30E+00	(kg·d)/mg	[7]
319-85-7	beta-BHC	0.053	L/mg	[5]	1.80E+00	(kg·d)/mg	[7]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)						
3268-87-9	Octachlorodibenzo(p)dioxin	4.5	L/mg	[2]	1.50E+02	(kg·d)/mg	[5]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)						
39001-02-0	Octachlorodibenzofuran	4.5	L/mg	[2]	1.50E+02	(kg·d)/mg	[5]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						

Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Drinking Water Unit Risk (*DWUR*)	Units for Drinking Water Unit Risk	Reference	Oral Slope Factor (CSF_o)	Units for Oral Slope Factor	Reference
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
50-00-0	Formaldehyde	3.7143E-7	L/mg	[1]	1.30E-05	(kg·d)/mg	[3]
50-32-8	Benzo(a)pyrene	0.21	L/mg	[5]	7.30E+00	(kg·d)/mg	[7]
510-15-6	Chlorobenzilate	0.0078	L/mg	[2]	2.70E-01	(kg·d)/mg	[3]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	450	L/mg	[2]	1.50E+04	(kg·d)/mg	[5]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)						
53-70-3	Dibenz[a,h]anthracene	0.2085714	L/mg	[1]	7.30E+00	(kg·d)/mg	[3]
5385-75-1	Dibenzo(a,e)fluoranthene						
540-73-8	1,2-Dimethylhydrazine						
542-75-6	1,3-Dichloropropene	0.003	L/mg	[5]	1.00E-01	(kg·d)/mg	[7]
542-88-1	Bis(chloromethyl)ether	6.2	L/mg	[5]	2.20E+02	(kg·d)/mg	[7]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	0.0037	L/mg	[5]	1.30E-01	(kg·d)/mg	[7]
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo(a)anthracene	0.0208571	L/mg	[1]	7.30E-01	(kg·d)/mg	[3]
57-74-9	Chlordane	0.01	L/mg	[2]	3.50E-01	(kg·d)/mg	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	230	L/mg	[2]	7.50E+03	(kg·d)/mg	[5]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	2300	L/mg	[2]	7.50E+04	(kg·d)/mg	[5]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)						
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	180	L/mg	[5]	6.20E+03	(kg·d)/mg	[7]
58-89-9	gamma-BHC (Lindane)	0.037	L/mg	[2]	1.30E+00	(kg·d)/mg	[5]
584-84-9	2,4-Toluene diisocyanate	0.019	L/mg	[3]	6.80E-01	(kg·d)/mg	[9]
593-60-2	Bromoethene (Vinyl bromide)				1.12E-01	(kg·d)/mg	[2]
606-20-2	2,6-Dinitrotoluene	0.019	L/mg	[2]	6.80E-01	(kg·d)/mg	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						

Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Drinking Water Unit Risk (*DWUR*)	Units for Drinking Water Unit Risk	Reference	Oral Slope Factor (CSF_o)	Units for Oral Slope Factor	Reference
62-53-3	Aniline	0.00016	L/mg	[5]	5.70E-03	(kg·d)/mg	[7]
62-75-9	N-Nitroso-N,N-dimethylamine	1.4	L/mg	[5]	5.10E+01	(kg·d)/mg	[7]
621-64-7	N-Nitroso-di-n-propylamine	0.2	L/mg	[5]	7.00E+00	(kg·d)/mg	[7]
624-83-9	Methyl isocyanate	0.015	L/mg	[4]	5.40E-01	(kg·d)/mg	[10]
630-20-6	1,1,1,2-Tetrachloroethane	0.00074	L/mg	[5]	2.60E-02	(kg·d)/mg	[7]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)						
67-66-3	Chloroform	0.00017	L/mg	[2]	5.95E-03	(kg·d)/mg	[1]
67-72-1	Hexachloroethane	0.0004	L/mg	[5]	1.40E-02	(kg·d)/mg	[7]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)						
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-43-2	Benzene	0.0016	L/mg	[5]	5.50E-02	(kg·d)/mg	[7]
72-55-9	4,4-DDE	0.0097	L/mg	[5]	3.40E-01	(kg·d)/mg	[7]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-87-3	Chloromethane	0.00037	L/mg	[2]	1.30E-02	(kg·d)/mg	[3]
7439-92-1	Lead	0.0002429	L/mg	[1]	8.50E-03	(kg·d)/mg	[3]
7440-02-0	Nickel	-	-	-	8.40E-01	(kg·d)/mg	[2]
7440-38-2	Arsenic	0.05	L/mg	[5]	1.50E+00	(kg·d)/mg	[7]
7440-41-7	Beryllium	0.12	L/mg	[2]	4.30E+00	(kg·d)/mg	[5]
7440-43-9	Cadmium	0.0108571	L/mg	[1]	3.80E-01	(kg·d)/mg	[3]
7440-43-9	Cadmium	0.0108571	L/mg	[1]	3.80E-01	(kg·d)/mg	[3]
7440-48-4	Cobalt				9.80E+00	(kg·d)/mg	[2]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)						
75-00-3	Chloroethane	0.0000829	L/mg	[1]	2.90E-03	(kg·d)/mg	[5]
75-01-4	1-Chloroethene	0.021	L/mg	[5]	7.20E-01	(kg·d)/mg	[7]
75-07-0	Acetaldehyde				7.70E-03	(kg·d)/mg	[2]

Table 5-4 Drinking Water Unit Risk and Oral Cancer Slope Factors for COPCs

CAS Registry Number	Analyte Name	Drinking Water Unit Risk (*DWUR*)	Units for Drinking Water Unit Risk	Reference	Oral Slope Factor (CSF_o)	Units for Oral Slope Factor	Reference
75-09-2	Dichloromethane (Methylene Chloride)	0.00021	L/mg	[5]	7.50E-03	(kg·d)/mg	[7]
75-21-8	Ethylene oxide (Oxirane)	0.029	L/mg	[2]	3.10E-01	(kg·d)/mg	[3]
75-25-2	Bromoform	0.00023	L/mg	[5]	7.90E-03	(kg·d)/mg	[7]
75-27-4	Bromodichloromethane	0.0018	L/mg	[5]	6.20E-02	(kg·d)/mg	[7]
75-34-3	1,1-Dichloroethane	0.0001629	L/mg	[1]	5.70E-03	(kg·d)/mg	[3]
75-35-4	1,1-Dichloroethene	0.017	L/mg	[2]	6.00E-01	(kg·d)/mg	[5]
76-44-8	Heptachlor	0.13	L/mg	[5]	4.50E+00	(kg·d)/mg	[7]
764-41-0	1,4-Dichloro-2-butene				9.10E+00	(kg·d)/mg	[2]
765-34-4	Glycidylaldehyde						
77-78-1	Dimethyl sulfate						
78-87-5	1,2-Dichloropropane	0.0019	L/mg	[2]	3.60E-02	(kg·d)/mg	[3]
79-00-5	1,1,2-Trichloroethane	0.0016	L/mg	[5]	5.70E-02	(kg·d)/mg	[7]
79-01-6	1,1,2-Trichloroethylene	0.0003714	L/mg	[1]	1.30E-02	(kg·d)/mg	[3]
79-34-5	1,1,2,2-Tetrachloroethane	0.0058	L/mg	[5]	2.00E-01	(kg·d)/mg	[7]
79-46-9	2-Nitropropane	0.2714286	L/mg	[1]	9.50E+00	(kg·d)/mg	[5]
82-68-8	Pentachloronitrobenzene (PCNB)	0.0074	L/mg	[2]	2.60E-01	(kg·d)/mg	[3]
85-68-7	Butylbenzylphthalate	0.0000543	L/mg	[1]	1.90E-03	(kg·d)/mg	[5]
87-68-3	Hexachlorobutadiene	0.0022	L/mg	[5]	7.80E-02	(kg·d)/mg	[7]
87-86-5	Pentachlorophenol	0.003	L/mg	[5]	1.20E-01	(kg·d)/mg	[7]
88-06-2	2,4,6-Trichlorophenol	0.00031	L/mg	[5]	1.10E-02	(kg·d)/mg	[7]
91-22-5	Quinoline	0.09	L/mg	[5]	3.00E+00	(kg·d)/mg	[7]
91-94-1	3,3'-Dichlorobenzidine	0.013	L/mg	[5]	4.50E-01	(kg·d)/mg	[7]
924-16-3	N-Nitroso-di-n-Buetylamine	0.16	L/mg	[5]	5.40E+00	(kg·d)/mg	[7]
95-53-4	o-Toluidine	0.0069	L/mg	[2]	1.80E-01	(kg·d)/mg	[3]
96-12-8	1,2-Dibromo-3-chloropropane	0.04	L/mg	[2]	7.00E+00	(kg·d)/mg	[3]
96-18-4	1,2,3-Trichloropropane	0.2	L/mg	[2]	7.00E+00	(kg·d)/mg	[3]
96-45-7	Ethylene thiourea	0.0034	L/mg	[2]	1.10E-01	(kg·d)/mg	[5]
98-07-7	Benzotrichloride	0.36	L/mg	[5]	1.30E+01	(kg·d)/mg	[7]

Reference **Reference (source) for Drinking Water Unit Risk**

[1] Calculated value using route-to-route extrapolation (refer to EPA. 2005. *Guidelines for Carcinogen Risk Assessment*, EPA/630/P-03/001F. US Environmental Protection Agency, Washington, DC, USA. [www.epa.gov/cancerguidelines])

Reference	Reference (source) for Drinking Water Unit Risk
[2]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[3]	Surrogate value from 2,4-Dinitrotoluene.
[4]	Surrogate value from Acrylonitrile.
[5]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.

Reference	Reference (source) for Oral Cancer Slope Factor
[1]	Calculated value using route-to-route extrapolation (refer to EPA. 2005. *Guidelines for Carcinogen Risk Assessment,* EPA/630/P-03/001F. US Environmental Protection Agency, Washington, DC, USA. [www.epa.gov/cancerguidelines])
[2]	Calculated value using route-to-route extrapolation from inhalation CSF, see Section A.2-3.2 in EPA. 2005. *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, EPA/530/R-05/006, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm).
[3]	EPA. The Hazardous Waste Companion Database. US Environmental Protection Agency, Office of Solid Waste, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm). Accessed April 2006.
[4]	Ecology. Cleanup Levels and Risk Calculations (CLARC) database at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx. Accessed June 2006.
[5]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[6]	Surrogate value, based on assignments from EPA Region 10.
[7]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed June 2006.
[8]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (high risk and persistence tier). Accessed January 2007.
[9]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from 2,4-/2,6-Dinitrotoluene mixture) Accessed January 2007 .
[10]	EPA. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). (surrogate from Acrylonitrile). Accessed January 2007.

Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Slope Factor (CSF_{dermal})	Units for Dermal Chronic Slope Factor	Reference
100-41-4	Ethyl benzene	0.97	unitless	[3]	3.97E-03	(kg·d)/mg	[1]
100-42-5	Styrene	0.8	unitless	[3]	3.75E-02	(kg·d)/mg	[1]
100-44-7	Benzyl chloride	0.8	unitless	[3]	2.13E-01	(kg·d)/mg	[2]
101-77-9	4,4-Methylenedianiline	0.5	unitless	[3]	5.00E-01	(kg·d)/mg	[2]
103-33-3	Azobenzene	0.5	unitless	[3]	2.20E-01	(kg·d)/mg	[2]
10595-95-6	n-Nitrosomethylethylamine	0.5	unitless	[3]	4.40E+01	(kg·d)/mg	[2]
106-46-7	1,4-Dichlorobenzene	0.9	unitless	[3]	2.67E-02	(kg·d)/mg	[2]
106-47-8	p-Chloroaniline	0.5	unitless	[3]	1.08E-01	(kg·d)/mg	[2]
106-49-0	p-Toluidine	0.5	unitless	[3]	3.80E-01	(kg·d)/mg	[2]
106-89-8	Epichlorohydrin (1-chloro-2,3 epoxypropane)	0.8	unitless	[3]	1.24E-02	(kg·d)/mg	[2]
106-93-4	Ethylene dibromide	0.8	unitless	[3]	2.50E+00	(kg·d)/mg	[2]
106-99-0	1,3-Butadiene	0.8	unitless	[3]	1.38E-01	(kg·d)/mg	[1]
107-06-2	1,2-Dichloroethane	1	unitless	[3]	9.10E-02	(kg·d)/mg	[2]
107-13-1	Acrylonitrile	0.8	unitless	[3]	6.75E-01	(kg·d)/mg	[2]
108-60-1	bis (2-Chloroisopropyl)ether	0.5	unitless	[3]	1.40E-01	(kg·d)/mg	[2]
109-99-9	Tetrahydrofuran	1	unitless	[2]	7.60E-03	(kg·d)/mg	[1]
111-44-4	Bis(2-chloroethyl)ether	0.5	unitless	[3]	2.20E+00	(kg·d)/mg	[2]
117-81-7	Bis(2-ethylhexyl) phthalate	0.19	unitless	[3]	7.37E-02	(kg·d)/mg	[2]
118-74-1	Hexachlorobenzene	0.5	unitless	[3]	3.20E+00	(kg·d)/mg	[2]
119-90-4	3,3'-Dimethoxybenzidine	0.5	unitless	[3]	2.80E-02	(kg·d)/mg	[2]
120-82-1	1,2,4-Trichlorobenzene	0.97	unitless	[3]	3.71E-03	(kg·d)/mg	[1]
121-14-2	2,4-Dinitrotoluene	0.85	unitless	[3]	8.00E-01	(kg·d)/mg	[2]
122-66-7	1,2-Diphenylhydrazine	0.5	unitless	[3]	1.60E+00	(kg·d)/mg	[2]
123-91-1	1,4-Dioxan	0.8	unitless	[3]	1.38E-02	(kg·d)/mg	[2]
124-48-1	Chlorodibromomethane	0.6	unitless	[3]	1.40E-01	(kg·d)/mg	[2]
126-73-8	Tributyl phosphate	0.5	unitless	[3]	1.08E-02	(kg·d)/mg	[2]
127-18-4	1,1,2,2-Tetrachloroethene	1	unitless	[3]	5.40E-01	(kg·d)/mg	[2]
133-06-2	Captan	0.5	unitless	[3]	7.00E-03	(kg·d)/mg	[2]
1336-36-3	Polychlorinated biphenyls	0.9	unitless	[3]	2.22E+00	(kg·d)/mg	[2]
1634-04-4	Methyl tert-butyl ether	0.8	unitless	[3]	2.25E-03	(kg·d)/mg	[2]

Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Slope Factor (CSF_{dermal})	Units for Dermal Chronic Slope Factor	Reference
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin (TCDD)	0.5	unitless	[3]	3.00E+05	(kg·d)/mg	[2]
189-55-9	Dibenzo[a,i]pyrene	0.89	unitless	[1]			
189-64-0	Dibenzo[a,h]pyrene	0.89	unitless	[1]			
191-30-0	Dibenzo(a,l)pyrene	0.89	unitless	[1]	8.20E+00	(kg·d)/mg	[1]
192-65-4	Dibenzo[a,e]pyrene	0.89	unitless	[1]			
193-39-5	Indeno(1,2,3-cd)pyrene	0.31	unitless	[3]	2.35E+00	(kg·d)/mg	[2]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	0.5	unitless	[3]	1.24E+04	(kg·d)/mg	[2]
205-82-3	Benzo[j]fluoranthene	0.89	unitless	[1]			
205-99-2	Benzo(b)fluoranthene	0.31	unitless	[3]	2.35E+00	(kg·d)/mg	[2]
207-08-9	Benzo(k)fluoranthene	0.31	unitless	[3]	2.35E-01	(kg·d)/mg	[2]
218-01-9	Chrysene	0.31	unitless	[3]	2.35E-02	(kg·d)/mg	[2]
224-42-0	Dibenz[a,j]acridine	0.89	unitless	[1]			
226-36-8	Dibenz[a,h]acridine	0.89	unitless	[1]			
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	0.96	unitless	[1]			
319-84-6	alpha-BHC	0.97	unitless	[3]	6.49E+00	(kg·d)/mg	[2]
319-85-7	beta-BHC	0.91	unitless	[3]	1.98E+00	(kg·d)/mg	[2]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	0.96	unitless	[1]			
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	0.96	unitless	[1]			
3268-87-9	Octachlorodibenzo(p)dioxin	0.5	unitless	[3]	3.00E+02	(kg·d)/mg	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	0.96	unitless	[1]			
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	1	unitless	[2]			
3697-24-3	5-Methylchrysene	0.89	unitless	[1]			
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	0.96	unitless	[1]			
39001-02-0	Octachlorodibenzofuran	0.5	unitless	[3]	3.00E+02	(kg·d)/mg	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	1	unitless	[2]			

Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Slope Factor (CSF_{dermal})	Units for Dermal Chronic Slope Factor	Reference
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	0.96	unitless	[1]			
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	1	unitless	[2]			
50-00-0	Formaldehyde	0.8	unitless	[3]	1.63E-05	(kg·d)/mg	[1]
50-32-8	Benzo(a)pyrene	0.31	unitless	[3]	2.35E+01	(kg·d)/mg	[2]
510-15-6	Chlorobenzilate	0.5	unitless	[3]	5.40E-01	(kg·d)/mg	[2]
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.5	unitless	[3]	3.00E+04	(kg·d)/mg	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	0.96	unitless	[1]			
53-70-3	Dibenz[a,h]anthracene	0.31	unitless	[3]	2.35E+01	(kg·d)/mg	[2]
5385-75-1	Dibenzo(a,e)fluoranthene	0.89	unitless	[1]			
540-73-8	1,2-Dimethylhydrazine	0.5	unitless	[3]			
542-75-6	1,3-Dichloropropene	0.55	unitless	[3]	1.82E-01	(kg·d)/mg	[2]
542-88-1	Bis(chloromethyl)ether	0.8	unitless	[3]	2.75E+02	(kg·d)/mg	[2]
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1	unitless	[2]			
56-23-5	Carbon tetrachloride	0.65	unitless	[3]	2.00E-01	(kg·d)/mg	[2]
56-49-5	3-Methylcholanthrene	0.89	unitless	[1]			
56-55-3	Benzo(a)anthracene	0.31	unitless	[3]	2.35E+00	(kg·d)/mg	[2]
57-74-9	Chlordane	0.5	unitless	[3]	7.00E-01	(kg·d)/mg	[2]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	0.5	unitless	[3]	1.50E+04	(kg·d)/mg	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.5	unitless	[3]	1.50E+05	(kg·d)/mg	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1	unitless	[2]			
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	0.96	unitless	[1]			
57653-85-7	1,2,3,6,7,8,-Hexachlorodibenzo(p)dioxin	1	unitless	[2]	6.20E+03	(kg·d)/mg	[1]
58-89-9	gamma-BHC (Lindane)	0.97	unitless	[3]	1.34E+00	(kg·d)/mg	[2]
584-84-9	2,4-Toluene diisocyanate	1	unitless	[2]	6.80E-01	(kg·d)/mg	[1]
593-60-2	Bromoethene (Vinyl bromide)	0.8	unitless	[3]	1.40E-01	(kg·d)/mg	[1]
606-20-2	2,6-Dinitrotoluene	0.85	unitless	[3]	8.00E-01	(kg·d)/mg	[2]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	1	unitless	[2]			

Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Slope Factor (CSF_{dermal})	Units for Dermal Chronic Slope Factor	Reference
62-53-3	Aniline	0.5	unitless	[3]	1.14E-02	(kg·d)/mg	[2]
62-75-9	N-Nitroso-N,N-dimethylamine	0.5	unitless	[3]	1.02E+02	(kg·d)/mg	[2]
621-64-7	N-Nitroso-di-n-propylamine	0.25	unitless	[3]	2.80E+01	(kg·d)/mg	[2]
624-83-9	Methyl isocyanate	0.8	unitless	[4]	6.75E-01	(kg·d)/mg	[1]
630-20-6	1,1,1,2-Tetrachloroethane	0.8	unitless	[3]	3.25E-02	(kg·d)/mg	[2]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	0.96	unitless	[1]			
67-66-3	Chloroform	0.2	unitless	[3]	3.05E-02	(kg·d)/mg	[2]
67-72-1	Hexachloroethane	0.5	unitless	[3]	2.80E-02	(kg·d)/mg	[2]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1	unitless	[2]			
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	0.96	unitless	[1]			
70362-50-4	3,4,4',5-Tetrachlorobiphenyl (PCB 81)	0.96	unitless	[1]			
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1	unitless	[2]			
71-43-2	Benzene	0.97	unitless	[3]	5.67E-02	(kg·d)/mg	[2]
72-55-9	4,4-DDE	0.7	unitless	[3]	4.86E-01	(kg·d)/mg	[2]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1	unitless	[2]			
74-87-3	Chloromethane	0.8	unitless	[3]	1.63E-02	(kg·d)/mg	[2]
7439-92-1	Lead	0.15	unitless	[3]	5.67E-02	(kg·d)/mg	[1]
7440-02-0	Nickel	0.27	unitless	[3]	3.11E+00	(kg·d)/mg	[1]
7440-38-2	Arsenic	0.41	unitless	[3]	3.66E+00	(kg·d)/mg	[2]
7440-41-7	Beryllium	0.01	unitless	[3]	4.30E+02	(kg·d)/mg	[2]
7440-43-9	Cadmium	0.01	unitless	[3]	3.80E+01	(kg·d)/mg	[1]
7440-43-9	Cadmium	0.01	unitless	[3]	3.80E+01	(kg·d)/mg	[1]
7440-48-4	Cobalt	0.8	unitless	[3]	1.23E+01	(kg·d)/mg	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	0.96	unitless	[1]			
75-00-3	Chloroethane	0.8	unitless	[3]	3.63E-03	(kg·d)/mg	[2]
75-01-4	1-Chloroethene	1	unitless	[3]	1.50E+00	(kg·d)/mg	[2]
75-07-0	Acetaldehyde	0.8	unitless	[3]	9.63E-03	(kg·d)/mg	[1]

Table 5-5 Percent Gastrointestinal Absorption and Dermal Cancer Slope Factor

CAS Registry Number	Analyte Name	Gastro-intestinal Absorption (*GAF*)	Units for Gastro-intestinal Absorption	Reference	Dermal Chronic Slope Factor (CSF_{dermal})	Units for Dermal Chronic Slope Factor	Reference
75-09-2	Dichloromethane (Methylene chloride)	0.95	unitless	[3]	7.89E-03	(kg·d)/mg	[2]
75-21-8	Ethylene oxide (Oxirane)	0.8	unitless	[3]	1.28E+00	(kg·d)/mg	[2]
75-25-2	Bromoform	0.6	unitless	[3]	1.32E-02	(kg·d)/mg	[2]
75-27-4	Bromodichloromethane	0.98	unitless	[3]	6.33E-02	(kg·d)/mg	[2]
75-34-3	1,1-Dichloroethane	1	unitless	[3]	5.70E-03	(kg·d)/mg	[1]
75-35-4	1,1-Dichloroethene	1	unitless	[3]	6.00E-01	(kg·d)/mg	[2]
76-44-8	Heptachlor	0.72	unitless	[3]	6.25E+00	(kg·d)/mg	[2]
764-41-0	1,4-Dichloro-2-butene	0.8	unitless	[3]	1.14E+01	(kg·d)/mg	[1]
765-34-4	Glycidylaldehyde	0.5	unitless	[3]			
77-78-1	Dimethyl sulfate	0.5	unitless	[3]			
78-87-5	1,2-Dichloropropane	0.74	unitless	[3]	9.19E-02	(kg·d)/mg	[2]
79-00-5	1,1,2-Trichloroethane	0.81	unitless	[3]	7.04E-02	(kg·d)/mg	[2]
79-01-6	1,1,2-Trichloroethylene	0.15	unitless	[3]	2.67E+00	(kg·d)/mg	[2]
79-34-5	1,1,2,2-Tetrachloroethane	0.7	unitless	[3]	2.86E-01	(kg·d)/mg	[2]
79-46-9	2-Nitropropane	0.8	unitless	[3]	1.19E+01	(kg·d)/mg	[2]
82-68-8	Pentachloronitrobenzene (PCNB)	0.8	unitless	[3]	3.25E-01	(kg·d)/mg	[2]
85-68-7	Butylbenzylphthalate	0.61	unitless	[3]	3.11E-03	(kg·d)/mg	[2]
87-68-3	Hexachlorobutadiene	0.5	unitless	[3]	1.56E-01	(kg·d)/mg	[2]
87-86-5	Pentachlorophenol	1	unitless	[3]	1.20E-01	(kg·d)/mg	[2]
88-06-2	2,4,6-Trichlorophenol	0.5	unitless	[3]	2.20E-02	(kg·d)/mg	[2]
91-22-5	Quinoline	0.5	unitless	[3]	6.00E+00	(kg·d)/mg	[2]
91-94-1	3,3'-Dichlorobenzidine	0.5	unitless	[3]	9.00E-01	(kg·d)/mg	[2]
924-16-3	N-Nitroso-di-n-Buetylamine	0.5	unitless	[3]	1.08E+01	(kg·d)/mg	[2]
95-53-4	o-Toluidine	0.5	unitless	[3]	4.80E-01	(kg·d)/mg	[2]
96-12-8	1,2-Dibromo-3-chloropropane	0.8	unitless	[3]	1.75E+00	(kg·d)/mg	[2]
96-18-4	1,2,3-Trichloropropane	0.8	unitless	[3]	8.75E+00	(kg·d)/mg	[2]
96-45-7	Ethylene thiourea	0.5	unitless	[3]	2.20E-01	(kg·d)/mg	[2]
98-07-7	Benzotrichloride	0.5	unitless	[3]	2.60E+01	(kg·d)/mg	[2]

Reference	Source for Gastrointestinal Absorption
[1]	EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)*, Final, EPA/540/R/99/005 (Table 4-1), July 2004. US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/oswer/riskassessment/ragse/pdf/2004_1101_part_e.pdf).
[2]	EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)*, Final, EPA/540/R/99/005, July 2004. US Environmental Protection Agency, Washington, DC, USA (assumed value, see Section 4.2 of ref.).
[3]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.
[4]	Surrogate value from Acrylonitrile.

Reference	Reference (source) for Dermal Cancer Slope Factor
[1]	Calculated value per Eq. 4.2 in EPA. 2004. *Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)*, Final, EPA/540/R/99/005, July 2004. US Environmental Protection Agency, Washington, DC, USA.
[2]	ORNL. The Risk Assessment Information System (RAIS) Database. Oak Ridge National Laboratory and The University of Tennessee, Oak Ridge, TN, USA. (http://rais.ornl.gov/index.shtml). Accessed June 2006.

Table 5-6 Inhalation and Oral (Food Ingestion) Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference	Ingestion of Food Slope Factor (CSF_o)	Units for Ingestion of Food Slope Factor	Reference
10028-17-8	Tritium	5.07E-14	risk/pCi	[1]	9.25E-14	risk/pCi	[1]
10045-97-3	Cesium-137	3.04E-11	risk/pCi	[1]	4.33E-11	risk/pCi	[1]
10098-97-2	Strontium-90	5.59E-11	risk/pCi	[1]	9.18E-11	risk/pCi	[1]
10198-40-0	Cobalt-60	1.57E-11	risk/pCi	[1]	4.03E-11	risk/pCi	[1]
13966-29-5	Uranium-234	7.07E-11	risk/pCi	[1]	1.58E-10	risk/pCi	[1]
13967-48-1	Ruthenium-106	4.22E-11	risk/pCi	[1]	1.19E-10	risk/pCi	[1]
13967-70-9	Cesium-134	4.22E-11	risk/pCi	[1]	5.81E-11	risk/pCi	[1]
13968-55-3	Uranium-233	7.18E-11	risk/pCi	[1]	1.60E-10	risk/pCi	[1]
13981-15-2	Curium-244	8.36E-11	risk/pCi	[1]	1.81E-10	risk/pCi	[1]
13981-16-3	Plutonium-238	1.31E-10	risk/pCi	[1]	2.72E-10	risk/pCi	[1]
13981-37-8	Nickel-63	6.70E-13	risk/pCi	[1]	1.79E-12	risk/pCi	[1]
13982-10-0	Plutonium-242	1.28E-10	risk/pCi	[1]	2.63E-10	risk/pCi	[1]
13982-63-3	Radium-226	3.85E-10	risk/pCi	[1]	7.29E-10	risk/pCi	[1]
13982-70-2	Uranium-236	6.70E-11	risk/pCi	[1]	1.49E-10	risk/pCi	[1]
13994-20-2	Neptunium-237	6.18E-11	risk/pCi	[1]	1.46E-10	risk/pCi	[1]
14119-32-5	Plutonium-241	1.76E-12	risk/pCi	[1]	3.29E-12	risk/pCi	[1]
14119-33-6	Plutonium-240	1.35E-10	risk/pCi	[1]	2.77E-10	risk/pCi	[1]
14133-76-7	Technetium-99	2.75E-12	risk/pCi	[1]	7.66E-12	risk/pCi	[1]
14158-29-3	Uranium-232	2.92E-10	risk/pCi	[1]	5.74E-10	risk/pCi	[1]
14234-35-6	Antimony-125	5.13E-12	risk/pCi	[1]	1.32E-11	risk/pCi	[1]
14331-85-2	Protactinium-231	1.73E-10	risk/pCi	[1]	3.74E-10	risk/pCi	[1]
14336-70-0	Nickel-59	2.74E-13	risk/pCi	[1]	7.33E-13	risk/pCi	[1]
14391-16-3	Europium-155	1.90E-12	risk/pCi	[1]	5.40E-12	risk/pCi	[1]
14596-10-2	Americium-241	1.04E-10	risk/pCi	[1]	2.17E-10	risk/pCi	[1]
14683-23-9	Europium-152	6.07E-12	risk/pCi	[1]	1.62E-11	risk/pCi	[1]
14762-75-5	Carbon-14	1.55E-12	risk/pCi	[1]	2.79E-12	risk/pCi	[1]
14952-40-0	Actinium-227	4.86E-10	risk/pCi	[1]	1.16E-09	risk/pCi	[1]
14993-75-0	Americium-243	1.03E-10	risk/pCi	[1]	2.17E-10	risk/pCi	[1]
15046-84-1	Iodine-129	1.48E-10	risk/pCi	[1]	2.71E-10	risk/pCi	[1]
15117-48-3	Plutonium-239	1.35E-10	risk/pCi	[1]	2.76E-10	risk/pCi	[1]
15117-96-1	Uranium-235	7.18E-11	risk/pCi	[1]	1.63E-10	risk/pCi	[1]
15262-20-1	Radium-228	1.04E-09	risk/pCi	[1]	2.28E-09	risk/pCi	[1]

Table 5-6 Inhalation and Oral (Food Ingestion) Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	Inhalation Slope Factor (CSF_i)	Units for Inhalation Slope Factor	Reference	Ingestion of Food Slope Factor (CSF_o)	Units for Ingestion of Food Slope Factor	Reference
15510-73-3	Curium-242	3.85E-11	risk/pCi	[1]	1.05E-10	risk/pCi	[1]
15585-10-1	Europium-154	1.03E-11	risk/pCi	[1]	2.85E-11	risk/pCi	[1]
15594-54-4	Thorium-229	2.24E-10	risk/pCi	[1]	4.96E-10	risk/pCi	[1]
15715-94-3	Samarium-151	5.55E-13	risk/pCi	[1]	1.59E-12	risk/pCi	[1]
15751-77-6	Zirconium-93	1.11E-12	risk/pCi	[1]	2.12E-12	risk/pCi	[1]
15757-87-6	Curium-243	9.47E-11	risk/pCi	[1]	2.05E-10	risk/pCi	[1]
15758-45-9	Selenium-79	7.29E-12	risk/pCi	[1]	1.60E-11	risk/pCi	[1]
15832-50-5	Tin-126	2.56E-11	risk/pCi	[1]	7.07E-11	risk/pCi	[1]
378253-44-2	Cadmium-113m	2.87E-11	risk/pCi	[1]	5.11E-11	risk/pCi	[1]
378782-82-2	Niobium-93m	8.03E-13	risk/pCi	[1]	2.31E-12	risk/pCi	[1]
7440-29-1	Thorium-232	1.01E-10	risk/pCi	[1]	2.31E-10	risk/pCi	[1]
7440-61-1R	Uranium-238	8.71E-11	risk/pCi	[1]	2.10E-10	risk/pCi	[1]

Reference **Reference (source) for Radionuclide Inhalation Cancer Slope Factors**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST) - Radionuclides Table (formerly Table 4)*, Office of Radiation and Indoor Air, Radiation Protection Division, Washington, DC. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Reference **Reference (source) for Radionuclide Oral (food) Cancer Slope Factors**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST) - Radionuclides Table (formerly Table 4)*, Office of Radiation and Indoor Air, Radiation Protection Division, Washington, DC. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Table 5-7 Oral (Water and Soil Ingestion) Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	Ingestion of Water Slope Factor (CSF_o)	Units for Ingestion of Water Slope Factor	Reference	Ingestion of Soil Slope Factor (CSF_o)	Units for Ingestion of Soil Slope Factor	Reference
10028-17-8	Tritium	5.07E-14	risk/pCi	[1]	9.25E-14	risk/pCi	[1]
10045-97-3	Cesium-137	3.04E-11	risk/pCi	[1]	4.33E-11	risk/pCi	[1]
10098-97-2	Strontium-90	5.59E-11	risk/pCi	[1]	9.18E-11	risk/pCi	[1]
10198-40-0	Cobalt-60	1.57E-11	risk/pCi	[1]	4.03E-11	risk/pCi	[1]
13966-29-5	Uranium-234	7.07E-11	risk/pCi	[1]	1.58E-10	risk/pCi	[1]
13967-48-1	Ruthenium-106	4.22E-11	risk/pCi	[1]	1.19E-10	risk/pCi	[1]
13967-70-9	Cesium-134	4.22E-11	risk/pCi	[1]	5.81E-11	risk/pCi	[1]
13968-55-3	Uranium-233	7.18E-11	risk/pCi	[1]	1.60E-10	risk/pCi	[1]
13981-15-2	Curium-244	8.36E-11	risk/pCi	[1]	1.81E-10	risk/pCi	[1]
13981-16-3	Plutonium-238	1.31E-10	risk/pCi	[1]	2.72E-10	risk/pCi	[1]
13981-37-8	Nickel-63	6.70E-13	risk/pCi	[1]	1.79E-12	risk/pCi	[1]
13982-10-0	Plutonium-242	1.28E-10	risk/pCi	[1]	2.63E-10	risk/pCi	[1]
13982-63-3	Radium-226	3.85E-10	risk/pCi	[1]	7.29E-10	risk/pCi	[1]
13982-70-2	Uranium-236	6.70E-11	risk/pCi	[1]	1.49E-10	risk/pCi	[1]
13994-20-2	Neptunium-237	6.18E-11	risk/pCi	[1]	1.46E-10	risk/pCi	[1]
14119-32-5	Plutonium-241	1.76E-12	risk/pCi	[1]	3.29E-12	risk/pCi	[1]
14119-33-6	Plutonium-240	1.35E-10	risk/pCi	[1]	2.77E-10	risk/pCi	[1]
14133-76-7	Technetium-99	2.75E-12	risk/pCi	[1]	7.66E-12	risk/pCi	[1]
14158-29-3	Uranium-232	2.92E-10	risk/pCi	[1]	5.74E-10	risk/pCi	[1]
14234-35-6	Antimony-125	5.13E-12	risk/pCi	[1]	1.32E-11	risk/pCi	[1]
14331-85-2	Protactinium-231	1.73E-10	risk/pCi	[1]	3.74E-10	risk/pCi	[1]
14336-70-0	Nickel-59	2.74E-13	risk/pCi	[1]	7.33E-13	risk/pCi	[1]
14391-16-3	Europium-155	1.90E-12	risk/pCi	[1]	5.40E-12	risk/pCi	[1]
14596-10-2	Americium-241	1.04E-10	risk/pCi	[1]	2.17E-10	risk/pCi	[1]
14683-23-9	Europium-152	6.07E-12	risk/pCi	[1]	1.62E-11	risk/pCi	[1]
14762-75-5	Carbon-14	1.55E-12	risk/pCi	[1]	2.79E-12	risk/pCi	[1]
14952-40-0	Actinium-227	4.86E-10	risk/pCi	[1]	1.16E-09	risk/pCi	[1]
14993-75-0	Americium-243	1.03E-10	risk/pCi	[1]	2.17E-10	risk/pCi	[1]
15046-84-1	Iodine-129	1.48E-10	risk/pCi	[1]	2.71E-10	risk/pCi	[1]
15117-48-3	Plutonium-239	1.35E-10	risk/pCi	[1]	2.76E-10	risk/pCi	[1]
15117-96-1	Uranium-235	7.18E-11	risk/pCi	[1]	1.63E-10	risk/pCi	[1]
15262-20-1	Radium-228	1.04E-09	risk/pCi	[1]	2.28E-09	risk/pCi	[1]

Table 5-7 Oral (Water and Soil Ingestion) Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	Ingestion of Water Slope Factor (CSF_o)	Units for Ingestion of Water Slope Factor	Reference	Ingestion of Soil Slope Factor (CSF_o)	Units for Ingestion of Soil Slope Factor	Reference
15510-73-3	Curium-242	3.85E-11	risk/pCi	[1]	1.05E-10	risk/pCi	[1]
15585-10-1	Europium-154	1.03E-11	risk/pCi	[1]	2.85E-11	risk/pCi	[1]
15594-54-4	Thorium-229	2.24E-10	risk/pCi	[1]	4.96E-10	risk/pCi	[1]
15715-94-3	Samarium-151	5.55E-13	risk/pCi	[1]	1.59E-12	risk/pCi	[1]
15751-77-6	Zirconium-93	1.11E-12	risk/pCi	[1]	2.12E-12	risk/pCi	[1]
15757-87-6	Curium-243	9.47E-11	risk/pCi	[1]	2.05E-10	risk/pCi	[1]
15758-45-9	Selenium-79	7.29E-12	risk/pCi	[1]	1.60E-11	risk/pCi	[1]
15832-50-5	Tin-126	2.56E-11	risk/pCi	[1]	7.07E-11	risk/pCi	[1]
378253-44-2	Cadmium-113m	2.87E-11	risk/pCi	[1]	5.11E-11	risk/pCi	[1]
378782-82-2	Niobium-93m	8.03E-13	risk/pCi	[1]	2.31E-12	risk/pCi	[1]
7440-29-1	Thorium-232	1.01E-10	risk/pCi	[1]	2.31E-10	risk/pCi	[1]
7440-61-1R	Uranium-238	8.71E-11	risk/pCi	[1]	2.10E-10	risk/pCi	[1]

Reference **Reference (source) for Radionuclide Water Ingestion Cancer Slope Factors**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST) - Radionuclides Table (formerly Table 4)*, Office of Radiation and Indoor Air, Radiation Protection Division, Washington, DC. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Reference **Reference (source) for Radionuclide Soil Ingestion Cancer Slope Factors**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST) - Radionuclides Table (formerly Table 4)*, Office of Radiation and Indoor Air, Radiation Protection Division, Washington, DC. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Table 5-8 External Exposure Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	External Exposure to Air Slope Factor (CSF_x)	Units for External Exposure to Air Slope Factor	Reference	External Exposure to Soil Slope Factor (CSF_x)	Units for External Exposure to Soil Slope Factor	Reference
10028-17-8	Tritium	0.00E+00	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
10045-97-3	Cesium-137	2.04E-15	m^3/Bq·sec	[1]	2.55E-06	risk/year per pCi/g soil	[1]
10098-97-2	Strontium-90	2.10E-17	m^3/Bq·sec	[1]	4.82E-10	risk/year per pCi/g soil	[1]
10198-40-0	Cobalt-60	9.63E-15	m^3/Bq·sec	[1]	1.24E-05	risk/year per pCi/g soil	[1]
13966-29-5	Uranium-234	4.37E-19	m^3/Bq·sec	[1]	2.52E-10	risk/year per pCi/g soil	[1]
13967-48-1	Ruthenium-106	7.85E-16	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
13967-70-9	Cesium-134	5.68E-15	m^3/Bq·sec	[1]	7.10E-06	risk/year per pCi/g soil	[1]
13968-55-3	Uranium-233	1.09E-18	m^3/Bq·sec	[1]	9.82E-10	risk/year per pCi/g soil	[1]
13981-15-2	Curium-244	2.15E-19	m^3/Bq·sec	[1]	4.85E-11	risk/year per pCi/g soil	[1]
13981-16-3	Plutonium-238	2.28E-19	m^3/Bq·sec	[1]	7.22E-11	risk/year per pCi/g soil	[1]
13981-37-8	Nickel-63	0.00E+00	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
13982-10-0	Plutonium-242	1.91E-19	m^3/Bq·sec	[1]	6.25E-11	risk/year per pCi/g soil	[1]
13982-63-3	Radium-226	6.74E-15	m^3/Bq·sec	[1]	2.29E-08	risk/year per pCi/g soil	[1]
13982-70-2	Uranium-236	2.67E-19	m^3/Bq·sec	[1]	1.25E-10	risk/year per pCi/g soil	[1]
13994-20-2	Neptunium-237	7.43E-16	m^3/Bq·sec	[1]	5.36E-08	risk/year per pCi/g soil	[1]
14119-32-5	Plutonium-241	4.89E-21	m^3/Bq·sec	[1]	4.11E-12	risk/year per pCi/g soil	[1]
14119-33-6	Plutonium-240	2.24E-19	m^3/Bq·sec	[1]	6.98E-11	risk/year per pCi/g soil	[1]
14133-76-7	Technetium-99	3.72E-19	m^3/Bq·sec	[1]	8.14E-11	risk/year per pCi/g soil	[1]
14158-29-3	Uranium-232	8.67E-19	m^3/Bq·sec	[1]	5.98E-10	risk/year per pCi/g soil	[1]
14234-35-6	Antimony-125	1.50E-15	m^3/Bq·sec	[1]	1.81E-06	risk/year per pCi/g soil	[1]
14331-85-2	Protactinium-231	1.24E-16	m^3/Bq·sec	[1]	1.39E-07	risk/year per pCi/g soil	[1]
14336-70-0	Nickel-59	0.00E+00	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
14391-16-3	Europium-155	1.64E-16	m^3/Bq·sec	[1]	1.24E-07	risk/year per pCi/g soil	[1]
14596-10-2	Americium-241	5.00E-17	m^3/Bq·sec	[1]	2.76E-08	risk/year per pCi/g soil	[1]
14683-23-9	Europium-152	4.25E-15	m^3/Bq·sec	[1]	5.30E-06	risk/year per pCi/g soil	[1]
14762-75-5	Carbon-14	3.66E-20	m^3/Bq·sec	[1]	7.83E-12	risk/year per pCi/g soil	[1]
14952-40-0	Actinium-227	1.34E-15	m^3/Bq·sec	[1]	1.47E-06	risk/year per pCi/g soil	[1]
14993-75-0	Americium-243	6.83E-16	m^3/Bq·sec	[1]	9.47E-08	risk/year per pCi/g soil	[1]
15046-84-1	Iodine-129	1.85E-17	m^3/Bq·sec	[1]	6.10E-09	risk/year per pCi/g soil	[1]
15117-48-3	Plutonium-239	2.56E-19	m^3/Bq·sec	[1]	2.00E-10	risk/year per pCi/g soil	[1]
15117-96-1	Uranium-235	5.43E-16	m^3/Bq·sec	[1]	5.43E-07	risk/year per pCi/g soil	[1]

Table 5-8 External Exposure Cancer Slope Factors for ROPCs

CAS Registry Number	Analyte Name	External Exposure to Air Slope Factor (CSF_x)	Units for External Exposure to Air Slope Factor	Reference	External Exposure to Soil Slope Factor (CSF_x)	Units for External Exposure to Soil Slope Factor	Reference
15262-20-1	Radium-228	3.61E-15	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
15510-73-3	Curium-242	2.59E-19	m^3/Bq·sec	[1]	7.73E-11	risk/year per pCi/g soil	[1]
15585-10-1	Europium-154	4.63E-15	m^3/Bq·sec	[1]	5.83E-06	risk/year per pCi/g soil	[1]
15594-54-4	Thorium-229	1.08E-15	m^3/Bq·sec	[1]	2.25E-07	risk/year per pCi/g soil	[1]
15715-94-3	Samarium-151	1.52E-21	m^3/Bq·sec	[1]	3.60E-13	risk/year per pCi/g soil	[1]
15751-77-6	Zirconium-93	0.00E+00	m^3/Bq·sec	[1]	0.00E+00	risk/year per pCi/g soil	[1]
15757-87-6	Curium-243	4.16E-16	m^3/Bq·sec	[1]	4.19E-07	risk/year per pCi/g soil	[1]
15758-45-9	Selenium-79	5.39E-20	m^3/Bq·sec	[1]	1.10E-11	risk/year per pCi/g soil	[1]
15832-50-5	Tin-126	7.19E-15	m^3/Bq·sec	[1]	9.96E-08	risk/year per pCi/g soil	[1]
378253-44-2	Cadmium-113m	1.29E-18	m^3/Bq·sec	[1]	4.45E-10	risk/year per pCi/g soil	[1]
378782-82-2	Niobium-93m	1.92E-19	m^3/Bq·sec	[1]	3.83E-11	risk/year per pCi/g soil	[1]
7440-29-1	Thorium-232	5.35E-19	m^3/Bq·sec	[1]	3.42E-10	risk/year per pCi/g soil	[1]
7440-61-1R	Uranium-238	9.03E-17	m^3/Bq·sec	[1]	1.14E-07	risk/year per pCi/g soil	[1]

Reference **Reference (source) for Radionuclide External Air Cancer Slope Factor**

[1] EPA. 1999. *Cancer Risk Coefficients for Environmental Exposure to Radionuclides*, Federal Guidance Report No. 13, EPA 402-R-99-001 (Table 2.3), Air and Radiation, September 1999. US Environmental Protection Agency, Washington, DC.

Reference **Reference (source) for Radionuclide External Soil Contact Cancer Slope Factor**

[1] EPA. 2001. *Health Effects Assessment Summary Tables (HEAST) - Radionuclides Table (formerly Table 4)*, Office of Radiation and Indoor Air, Radiation Protection Division, Washington, DC. (http://www.epa.gov/radiation/heast/index.html). HEAST table accessed online June 2006.

Contents

6 Bioconcentration Factors for Ecological Receptors 6-1

Tables

Table 6-1 Media-to-Plant Bioconcentration Factors 6-1

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors 6-18

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors 6-42

Table 6-4 Bio-Equivalence Factors, and Bird and Fish Toxicity Equivalence Factors 6-59

Table 6-5 Food Chain Multipliers 6-60

6 Bioconcentration Factors for Ecological Receptors

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene						
100-42-5	Styrene						
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde						
10028-15-6	Ozone	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
10028-17-8	Tritium						
10045-97-3	Cesium-137	8.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
10098-97-2	Strontium-90	2.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
10198-40-0	Cobalt-60	2.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol						
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						
106-47-8	p-Chloroaniline						
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane						
107-12-0	Propionitrile						
107-13-1	Acrylonitrile				1.15E-01	L/kg tissue	[3]
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone						
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene						
108-90-7	Chlorobenzene						
108-94-1	Cyclohexanone						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
108-95-2	Phenol						
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	bis(2-Chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	bis(2-Chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)				9.93E+03	L/kg tissue	[3]
117-84-0	n-Dioctyl phthalate				2.85E+04	L/kg tissue	[3]
118-74-1	Hexachlorobenzene				1.11E+04	L/kg tissue	[3]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol						
121-14-2	2,4-Dinitrotoluene				2.51E+03	L/kg tissue	[3]
122-39-4	N,N-Diphenylamine						
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide						
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane				4.31E-02	L/kg tissue	[3]
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene						
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)				4.77E+05	L/kg tissue	[3]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13967-48-1	Ruthenium-106	7.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13967-70-9	Cesium-134	8.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
13968-55-3	Uranium-233	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13981-15-2	Curium-244	8.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13981-16-3	Plutonium-238	4.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13981-37-8	Nickel-63	3.20E-02	kg dry soil / kg dry tissue	[4]	6.10E+01	L/kg tissue	[3]
13982-10-0	Plutonium-242	4.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13982-63-3	Radium-226	1.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13982-70-2	Uranium-236	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
13994-20-2	Neptunium-237	1.00E-01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	4.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14119-33-6	Plutonium-240	4.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14133-76-7	Technetium-99	9.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14158-29-3	Uranium-232	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14234-35-6	Antimony-125	2.00E-01	kg dry soil / kg dry tissue	[4]	1.48E+03	L/kg tissue	[1]
14265-44-2	Phosphate	3.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14331-85-2	Protactinium-231	2.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14336-70-0	Nickel-59	3.20E-02	kg dry soil / kg dry tissue	[4]	6.10E+01	L/kg tissue	[3]
14391-16-3	Europium-155	1.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
145-73-3	Endothall						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
14596-10-2	Americium-241	5.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14683-23-9	Europium-152	1.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14762-75-5	Carbon-14						
14797-55-8	Nitrate	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
14797-65-0	Nitrite	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
14808-79-8	Sulfate	1.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14952-40-0	Actinium-227	3.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
14993-75-0	Americium-243	5.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15046-84-1	Iodine-129	1.50E-01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15117-48-3	Plutonium-239	4.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15117-96-1	Uranium-235	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15262-20-1	Radium-228	1.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15510-73-3	Curium-242	8.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15585-10-1	Europium-154	1.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15594-54-4	Thorium-229	8.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	1.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15751-77-6	Zirconium-93	2.00E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
15757-87-6	Curium-243	8.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
15758-45-9	Selenium-79	2.50E-02	kg dry soil / kg dry tissue	[4]	1.85E+03	L/kg tissue	[1]
15832-50-5	Tin-126	3.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride	7.00E+01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
16984-48-8	Fluoride	6.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	5.60E-03	kg dry soil / kg dry tissue	[4]	3.30E+03	L/kg tissue	[3]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene				5.26E+03	L/kg tissue	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	7.80E-04	kg dry soil / kg dry tissue	[3]	4.62E+02	L/kg tissue	[2]
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene				5.26E+03	L/kg tissue	[3]
206-44-0	Fluoranthene						
207-08-9	Benzo[k]fluoranthene				5.26E+03	L/kg tissue	[3]
208-96-8	Acenaphthylene						
218-01-9	Chrysene				5.26E+03	L/kg tissue	[3]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
22967-92-6	Methylmercury	1.37E-01	kg dry soil / kg dry tissue	[4]	8.00E+04	L/kg tissue	[3]
23950-58-5	Pronamide						
24959-67-9	Bromide	1.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC						
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin	6.70E-05	kg dry soil / kg dry tissue	[3]	3.96E+01	L/kg tissue	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	2.90E-04	kg dry soil / kg dry tissue	[3]	1.68E+02	L/kg tissue	[2]
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran	9.00E-05	kg dry soil / kg dry tissue	[3]	5.28E+01	L/kg tissue	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	1.70E-03	kg dry soil / kg dry tissue	[3]	1.02E+03	L/kg tissue	[2]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	5.20E-03	kg dry soil / kg dry tissue	[3]	3.04E+03	L/kg tissue	[2]
4170-30-3	2-Butenaldehyde (2-Butenal)				2.02E-01	L/kg tissue	[3]
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
50-00-0	Formaldehyde				1.36E-01	L/kg tissue	[3]
50-32-8	Benzo[a]pyrene	0.00E+00	kg dry soil / kg dry tissue	[4]	5.26E+03	L/kg tissue	[3]
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol						
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	4.50E-03	kg dry soil / kg dry tissue	[3]	2.64E+03	L/kg tissue	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene				5.26E+03	L/kg tissue	[3]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene						
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene						
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.20E-03	kg dry soil / kg dry tissue	[3]	1.29E+03	L/kg tissue	[2]
56-23-5	Carbon tetrachloride				3.00E+02	L/kg tissue	[3]
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene				5.26E+03	L/kg tissue	[3]
57-12-5	Cyanide	1.72E+00	kg dry soil / kg dry tissue	[1]	2.20E+01	L/kg tissue	[3]
57-24-9	Strychnine						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
57-74-9	Chlordane						
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	9.00E-03	kg dry soil / kg dry tissue	[3]	5.28E+03	L/kg tissue	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.10E-03	kg dry soil / kg dry tissue	[3]	7.26E+02	L/kg tissue	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.10E-03	kg dry soil / kg dry tissue	[3]	6.27E+02	L/kg tissue	[2]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	6.70E-04	kg dry soil / kg dry tissue	[3]	3.96E+02	L/kg tissue	[2]
58-89-9	gamma-BHC (Lindane)						
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene						
608-93-5	Pentachlorobenzene				4.00E+03	L/kg tissue	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	3.80E-03	kg dry soil / kg dry tissue	[3]	2.21E+03	L/kg tissue	[2]
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)				4.70E-02	L/kg tissue	[3]
67-66-3	Chloroform				2.82E+00	L/kg tissue	[3]
67-72-1	Hexachloroethane						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	6.20E-05	kg dry soil / kg dry tissue	[3]	3.63E+01	L/kg tissue	[2]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene				1.50E+03	L/kg tissue	[3]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl				-	-	-
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	4.30E-04	kg dry soil / kg dry tissue	[3]	2.51E+02	L/kg tissue	[2]
71-36-3	n-Butyl alcohol						
71-43-2	Benzene						
71-55-6	1,1,1-Trichloroethane						
72-43-5	Methoxychlor						
72-55-9	4,4'-DDE				1.13E+04	L/kg tissue	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	3.50E-03	kg dry soil / kg dry tissue	[3]	2.08E+03	L/kg tissue	[2]
74-83-9	Bromomethane						
74-87-3	Chloromethane						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	4.00E-03	kg dry soil / kg dry tissue	[4]	8.33E+02	L/kg tissue	[3]
7439-89-6	Iron	4.00E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7439-92-1	Lead	4.50E-02	kg dry soil / kg dry tissue	[4]	1.71E+03	L/kg tissue	[3]
7439-93-2	Lithium	2.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7439-95-4	Magnesium	1.00E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7439-96-5	Manganese	2.50E-01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7439-97-6	Mercury						
7439-98-7	Molybdenum	2.50E-01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-02-0	Nickel	3.20E-02	kg dry soil / kg dry tissue	[4]	6.10E+01	L/kg tissue	[3]
7440-16-6	Rhodium	1.50E-01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-22-4	Silver	4.00E-01	kg dry soil / kg dry tissue	[4]	1.07E+04	L/kg tissue	[3]
7440-23-5	Sodium	7.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-24-6	Strontium	2.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-25-7	Tantalum	1.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-28-0	Thallium	4.00E-03	kg dry soil / kg dry tissue	[4]	1.50E+04	L/kg tissue	[3]
7440-29-1	Thorium-232	8.50E-04	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-31-5	Tin	3.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
7440-33-7	Tungsten	4.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-36-0	Antimony	2.00E-01	kg dry soil / kg dry tissue	[4]	1.48E+03	L/kg tissue	[3]
7440-38-2	Arsenic	3.60E-02	kg dry soil / kg dry tissue	[4]	2.93E+02	L/kg tissue	[3]
7440-39-3	Barium	1.50E-01	kg dry soil / kg dry tissue	[4]	2.60E+02	L/kg tissue	[3]
7440-41-7	Beryllium	1.00E-02	kg dry soil / kg dry tissue	[4]	1.41E+02	L/kg tissue	[3]
7440-43-9	Cadmium	3.64E-01	kg dry soil / kg dry tissue	[4]	7.82E+02	L/kg tissue	[3]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-50-8	Copper	4.00E-01	kg dry soil / kg dry tissue	[4]	5.41E+02	L/kg tissue	[3]
7440-61-1	Uranium	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-61-1R	Uranium-238	8.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-62-2	Vanadium	5.50E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-65-5	Yttrium	1.50E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7440-66-6	Zinc	1.20E-12	kg dry soil / kg dry tissue	[4]	2.18E+03	L/kg tissue	[3]
7440-67-7	Zirconium	2.00E-03	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7446-09-5	Sulfur dioxide	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene				6.20E-01	L/kg tissue	[3]

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
75-02-5	Fluoroethene (Vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane						
75-15-0	Carbon disulfide						
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene						
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane						
75-71-8	Dichlorodifluoromethane						
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor				2.10E+04	L/kg tissue	[3]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride	7.00E+01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride	6.00E-02	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7664-41-7	Ammonia/Ammonium	1.72E+00	kg dry soil / kg dry tissue	[1]	4.06E+03	L/kg tissue	[1]
77-47-4	Hexachlorocyclopentadiene				6.10E+02	L/kg tissue	[3]
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
7723-14-0	Phosphorus	3.50E+00	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	1.60E-02	kg dry soil / kg dry tissue	[4]	1.85E+03	L/kg tissue	[3]
7782-50-5	Chlorine	7.00E+01	kg dry soil / kg dry tissue	[2]	4.06E+03	L/kg tissue	[1]
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone						
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene						
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						
82-68-8	Pentachloronitrobenzene				4.74E+03	L/kg tissue	[3]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene						
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate						
84-74-2	Dibutyl phthalate						
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene						
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene				1.60E+02	L/kg tissue	[3]
87-86-5	Pentachlorophenol				1.71E+03	L/kg tissue	[3]
88-06-2	2,4,6-Trichlorophenol						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene						
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl						
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol						
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene						
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						
95-95-4	2,4,5-Trichlorophenol						
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						

Table 6-1 Media-to-Plant Bioconcentration Factors

CAS Registry Number	Constituent	Soil/ Sediment-to-Plant Bioconcentration Factor (BCF_{s-p})	Units for Soil/ Sediment-to-Plant Bioconcentration Factor	Reference	Water-to-Plant Bioconcentration Factor (BCF_{w-p})	Units for Water-to-Plant Bioconcentration Factor	Reference
98-95-3	Nitrobenzene				2.40E+01	L/kg tissue	[3]
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene				2.51E+03	L/kg tissue	[3]
99-87-6	p-Cymene						

Reference	Reference (source) for Soil/Sediment-to-Plant Bioconcentration Factor
[1]	Arithmetic average of the available BCF values for other inorganics without double counting elements (e.g., isotopes of a stable element).
[2]	Baes CF, III, Sharp RD, Sjoreen AL, and Shor RW. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides Through Agriculture*, ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
[3]	Calculated value per Eq. 2-6 (BCF_TCDD × BEF) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[4]	Table C-2 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Water-to-Plant Bioconcentration Factor
[1]	Arithmetic average of the available BCF values for other inorganics (aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury (Hg+2), nickel, selenium, silver, thallium, and zinc).
[2]	Calculated value per Eq. 2-6 (BCF_TCDD × BEF) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[3]	Table C-4 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
100-02-7	4-Nitrophenol									
100-21-0	p-Phthalic acid									
100-25-4	1,4-Dinitrobenzene									
100-40-3	4-Ethenylcyclohexene									
100-41-4	Ethyl benzene									
100-42-5	Styrene									
100-44-7	Benzyl chloride									
100-47-0	Benzonitrile									
100-51-6	Benzyl alcohol									
100-52-7	Benzaldehyde									
10028-15-6	Ozone	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
10028-17-8	Tritium									
10045-97-3	Cesium-137	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
10061-01-5	cis-1,3-Dichloropropene									
10061-02-6	trans-1,3-Dichloropropene									
10098-91-6	Yttrium-90	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
10098-97-2	Strontium-90	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
101-55-3	4-Bromophenylphenyl ether									
101-77-9	4,4'-Methylenedianiline									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
10102-44-0	Nitrogen dioxide	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
10198-40-0	Cobalt-60	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
103-33-3	Azobenzene									
103-65-1	n-Propyl benzene									
104-51-8	n-Butyl benzene									
104-76-7	2-Ethyl-1-hexanol									
105-67-9	2,4-Dimethylphenol									
10595-95-6	n-Nitrosomethylethyl-amine									
106-43-4	4-Chlorotoluene									
106-44-5	p-Cresol									
106-46-7	1,4-Dichlorobenzene									
106-47-8	p-Chloroaniline									
106-49-0	p-Toluidine									
106-51-4	Quinone									
106-88-7	1,2-Epoxybutane									
106-89-8	Epichlorohydrin									
106-93-4	Ethylene dibromide									
106-99-0	1,3-Butadiene									
107-02-8	Acrolein									
107-05-1	3-Chloropropene (Allyl chloride)									
107-06-2	1,2-Dichloroethane									
107-12-0	Propionitrile									
107-13-1	Acrylonitrile									
107-19-7	Propargyl alcohol									
107-21-1	Ethylene glycol									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
107-98-2	Propylene glycol monomethyl ether									
108-05-4	Vinyl acetate									
108-10-1	4-Methyl-2-pentanone									
108-39-4	m-Cresol									
108-60-1	Dichloroisopropyl ether									
108-67-8	1,3,5-Trimethyl benzene									
108-86-1	Bromobenzene									
108-87-2	Methylcyclohexane									
108-88-3	Toluene									
108-90-7	Chlorobenzene									
108-94-1	Cyclohexanone									
108-95-2	Phenol									
109-74-0	n-Butanenitrile									
109-75-1	3-Butenenitrile									
109-77-3	Malononitrile									
109-86-4	2-Methoxyethanol									
109-99-9	Tetrahydrofuran									
110-00-9	Furan									
110-54-3	n-Hexane									
110-59-8	Pentanenitrile									
110-80-5	2-Ethoxyethanol									
110-82-7	Cyclohexane									
110-83-8	Cyclohexene									
110-86-1	Pyridine									
111-15-9	Ethylene glycol monoethyl ether acetate									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
111-44-4	Bis(2-chloroethyl) ether									
111-65-9	n-Octane									
111-76-2	Ethylene glycol monobutyl ether									
111-84-2	n-Nonane									
111-91-1	Bis(2-chloroethoxy) methane									
112-30-1	1-Decanol									
112-31-2	Decanal									
112-40-3	Dodecane									
1120-21-4	Undecane									
1120-71-4	1,3-Propane sultone									
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)							3.18E+02	L/kg tissue	[3]
117-84-0	n-Dioctyl phthalate							5.95E+03	L/kg tissue	[3]
118-74-1	Hexachlorobenzene							2.60E+03	L/kg tissue	[3]
119-90-4	3,3'-Dimethoxybenzidine									
120-12-7	Anthracene				3.27E+00	kg dry sediment / kg tissue	[6]			
120-82-1	1,2,4-Trichlorobenzene									
120-83-2	2,4-Dichlorophenol									
121-14-2	2,4-Dinitrotoluene				5.80E+01	kg dry sediment / kg tissue	[3]	1.30E+01	L/kg tissue	[3]
122-39-4	N,N-Diphenylamine									
122-66-7	1,2-Diphenylhydrazine									
123-33-1	Maleic hydrazide									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
123-38-6	n-Propionaldehyde									
123-72-8	Butanal									
123-91-1	1,4-Dioxane									
124-18-5	Decane									
124-38-9	Carbon dioxide									
124-48-1	Chlorodibromo-methane									
126-73-8	Tributyl phosphate									
126-98-7	2-Methyl-2-propenenitrile									
127-18-4	1,1,2,2-Tetrachloroethene									
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol									
129-00-0	Pyrene				3.73E+00	kg dry sediment / kg tissue	[6]			
131-11-3	Dimethyl phthalate									
131-89-5	2-Cyclohexyl-4,6-dinitrophenol									
132-64-9	Dibenzofuran				1.00E+02	kg dry sediment / kg tissue	[6]			
133-06-2	Captan									
1330-20-7	Xylenes (mixed isomers)									
1336-36-3	Polychlorinated biphenyls (PCBs)	1.13E+00	kg dry soil / kg tissue	[3]	5.30E-01	kg dry sediment / kg tissue	[3]	5.54E+03	L/kg tissue	[3]
134-32-7	alpha-Naphthylamine									
135-98-8	sec-Butyl benzene									
13966-29-5	Uranium-234	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
13967-48-1	Ruthenium-106	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13967-70-9	Cesium-134	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13968-55-3	Uranium-233	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13981-15-2	Curium-244	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13981-16-3	Plutonium-238	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13981-37-8	Nickel-63	2.00E-02	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	2.80E+01	L/kg tissue	[3]
13982-10-0	Plutonium-242	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13982-63-3	Radium-226	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13982-70-2	Uranium-236	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
13994-20-2	Neptunium-237	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
141-78-6	Acetic acid ethyl ester									
14119-32-5	Plutonium-241	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
14119-33-6	Plutonium-240	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14133-76-7	Technetium-99	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14158-29-3	Uranium-232	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14234-35-6	Antimony-125	2.21E-01	kg dry soil / kg tissue	[1]	9.00E-01	kg dry sediment / kg tissue	[1]	7.00E+00	L/kg tissue	[1]
14265-44-2	Phosphate	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14331-85-2	Protactinium-231	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14336-70-0	Nickel-59	2.00E-02	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	2.80E+01	L/kg tissue	[3]
14391-16-3	Europium-155	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
145-73-3	Endothall									
14596-10-2	Americium-241	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14683-23-9	Europium-152	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14762-75-5	Carbon-14									
14797-55-8	Nitrate	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
14797-65-0	Nitrite	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14808-79-8	Sulfate	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14952-40-0	Actinium-227	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
14993-75-0	Americium-243	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15046-84-1	Iodine-129	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15117-48-3	Plutonium-239	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15117-96-1	Uranium-235	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15262-20-1	Radium-228	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15510-73-3	Curium-242	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15585-10-1	Europium-154	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15594-54-4	Thorium-229	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
156-59-2	cis-1,2-Dichloroethene									
156-60-5	trans-1,2-Dichloroethylene									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
15715-94-3	Samarium-151	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15751-77-6	Zirconium-93	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15757-87-6	Curium-243	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
15758-45-9	Selenium-79	2.21E-01	kg dry soil / kg tissue	[1]	9.00E-01	kg dry sediment / kg tissue	[1]	1.26E+03	L/kg tissue	[1]
15832-50-5	Tin-126	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
1634-04-4	Methyl tert-butyl ether									
16887-00-6	Chloride	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
16984-48-8	Fluoride	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
1746-01-6	2,3,7,8-Tetrachlorodibenzo (p)dioxin	1.59E+00	kg dry soil / kg tissue	[3]	1.96E+04	kg dry sediment / kg tissue	[3]	1.56E+03	L/kg tissue	[3]
189-55-9	Dibenzo[a,i]pyrene									
189-64-0	Dibenzo[a,h]pyrene									
191-24-2	Benzo[g,h,i]perylene				2.15E-01	kg dry sediment / kg tissue	[6]			
191-30-0	Benzo[a,i]pyrene									
192-65-4	Dibenzo[a,e]pyrene									
192-97-2	Benzo[e]pyrene				4.55E-01	kg dry sediment / kg tissue	[6]			

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
193-39-5	Indeno[1,2,3-cd] pyrene	8.00E-02	kg dry soil / kg tissue	[3]	1.61E+00	kg dry sediment / kg tissue	[3]	4.70E+03	L/kg tissue	[3]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo (p)dioxin	2.20E-01	kg dry soil / kg tissue	[2]	2.74E+03	kg dry sediment / kg tissue	[2]	2.18E+02	L/kg tissue	[2]
205-82-3	Benzo[j]fluoranthene									
205-99-2	Benzo[b]fluoranthene	7.00E-02	kg dry soil / kg tissue	[3]	1.61E+00	kg dry sediment / kg tissue	[3]	4.70E+03	L/kg tissue	[3]
206-44-0	Fluoranthene				1.33E+01	kg dry sediment / kg tissue	[6]			
207-08-9	Benzo[k]fluoranthene	8.00E-02	kg dry soil / kg tissue	[3]	1.61E+00	kg dry sediment / kg tissue	[3]	1.32E+04	L/kg tissue	[3]
208-96-8	Acenaphthylene				2.85E+00	kg dry sediment / kg tissue	[6]			
218-01-9	Chrysene	4.00E-02	kg dry soil / kg tissue	[3]	1.38E+00	kg dry sediment / kg tissue	[3]	9.80E+02	L/kg tissue	[3]
224-42-0	Dibenz[a,j]acridine									
2245-38-7	2,3,5-Trimethylnaphthalene									
226-36-8	Dibenz[a,h]acridine									
22967-92-6	Methylmercury	8.50E+00	kg dry soil / kg tissue	[3]	4.80E-01	kg dry sediment / kg tissue	[3]	5.50E+04	L/kg tissue	[3]
23950-58-5	Pronamide									
24959-67-9	Bromide	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
27154-33-2	Trichlorofluoroethane									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl				4.74E+00	kg dry sediment / kg tissue	[6]			
319-84-6	alpha-BHC				1.00E+00	kg dry sediment / kg tissue	[6]			
319-85-7	beta-BHC									
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl									
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl				3.85E+00	kg dry sediment / kg tissue	[6]			
3268-87-9	Octachlorodibenzo (p)dioxin	1.90E-02	kg dry soil / kg tissue	[2]	2.35E+01	kg dry sediment / kg tissue	[2]	1.87E+01	L/kg tissue	[2]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl				1.00E+02	kg dry sediment / kg tissue	[6]			
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo (p)dioxin	8.10E-02	kg dry soil / kg tissue	[2]	9.94E+01	kg dry sediment / kg tissue	[2]	7.96E+01	L/kg tissue	[2]
3697-24-3	5-Methylchrysene									
378253-40-8	Barium-137m									
378253-44-2	Cadmium-113m									
378782-82-2	Niobium-93m									
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl				6.70E-01	kg dry sediment / kg tissue	[6]			
39001-02-0	Octachlorodibenzo-furan	2.50E-02	kg dry soil / kg tissue	[2]	3.14E+02	kg dry sediment / kg tissue	[2]	2.50E+01	L/kg tissue	[2]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo (p)dioxin	4.90E-01	kg dry soil / kg tissue	[2]	6.08E+03	kg dry sediment / kg tissue	[2]	4.84E+02	L/kg tissue	[2]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl									
40321-76-4	1,2,3,7,8-Pentachlorodibenzo (p)dioxin	1.46E+00	kg dry soil / kg tissue	[2]	1.80E+04	kg dry sediment / kg tissue	[2]	1.44E+03	L/kg tissue	[2]
4170-30-3	2-Butenaldehyde (2-Butenal)									
41851-50-7	Chlorocyclopentadiene									
460-19-5	Cyanogen									
4786-20-3	2-Butenenitrile									
50-00-0	Formaldehyde									
50-32-8	Benzo[a]pyrene	7.00E-02	kg dry soil / kg tissue	[3]	1.59E+00	kg dry sediment / kg tissue	[3]	4.70E+03	L/kg tissue	[3]
506-68-3	Cyanogen bromide									
506-77-4	Cyanogen chloride									
51-28-5	2,4-Dinitrophenol									
51-79-6	Ethyl carbamate (Urethane)									
510-15-6	Chlorobenzilate									
51207-31-9	2,3,7,8-Tetrachlorodibenzo-furan	1.27E+00	kg dry soil / kg tissue	[2]	2.64E+03	kg dry sediment / kg tissue	[2]	1.25E+03	L/kg tissue	[2]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl				1.00E+02	kg dry sediment / kg tissue	[4]			
528-29-0	o-Dinitrobenzene									
53-70-3	Dibenz[a,h]anthracene	7.00E-02	kg dry soil / kg tissue	[3]	1.61E+00	kg dry sediment / kg tissue	[3]	7.10E+02	L/kg tissue	[3]
532-27-4	2-Chloroacetophenone									
534-52-1	4,6-Dinitro-o-cresol									
5385-75-1	Dibenzo[a,e]fluor-anthene									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
540-59-0	1,2-Dichloroethylene									
540-73-8	1,2-Dimethylhydrazine									
540-84-1	2,2,4-Trimethylpentane									
541-73-1	1,3-Dichlorobenzene									
542-75-6	1,3-Dichloropropene									
542-88-1	Dichloromethyl ether									
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzo-furan	6.20E-01	kg dry soil / kg tissue	[2]	7.64E+03	kg dry sediment / kg tissue	[2]	6.08E+02	L/kg tissue	[2]
56-23-5	Carbon tetrachloride									
56-49-5	3-Methylcholanthrene									
56-55-3	Benzo[a]anthracene	3.00E-02	kg dry soil / kg tissue	[3]	1.45E+00	kg dry sediment / kg tissue	[3]	1.23E+04	L/kg tissue	[3]
57-12-5	Cyanide	1.12E+00	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	4.07E+03	L/kg tissue	[3]
57-24-9	Strychnine									
57-74-9	Chlordane				2.32E+01	kg dry sediment / kg tissue	[6]			
57117-31-4	2,3,4,7,8-Pentachlorodibenzo-furan	2.54E+00	kg dry soil / kg tissue	[2]	3.14E+04	kg dry sediment / kg tissue	[2]	2.50E+03	L/kg tissue	[2]
57117-41-6	1,2,3,7,8-Pentachlorodibenzo-furan	3.20E-01	kg dry soil / kg tissue	[2]	4.31E+03	kg dry sediment / kg tissue	[2]	3.43E+02	L/kg tissue	[2]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzo-furan	3.00E-01	kg dry soil / kg tissue	[2]	3.72E+03	kg dry sediment / kg tissue	[2]	2.96E+02	L/kg tissue	[2]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo (p)dioxin	1.90E-01	kg dry soil / kg tissue	[2]	2.35E+03	kg dry sediment / kg tissue	[2]	1.87E+02	L/kg tissue	[2]
58-89-9	gamma-BHC (Lindane)									
58-90-2	2,3,4,6-Tetrachlorophenol									
581-42-0	2,6-Dimethylnaphthalene									
584-84-9	2,4-Toluene diisocyanate									
589-38-8	3-Hexanone									
59-50-7	4-Chloro-3-methylphenol									
59-89-2	N-Nitrosomorpholine									
591-50-4	Benzene, iodo-									
591-78-6	2-Hexanone									
593-60-2	Bromoethene									
593-74-8	Dimethyl Mercury									
60-11-7	Dimethyl aminoazobenzene									
60-29-7	Ethyl ether									
60-35-5	Acetamide									
602-87-9	5-Nitroacenaphthene									
606-20-2	2,6-Dinitrotoluene							1.30E+01	L/kg tissue	[3]
608-93-5	Pentachlorobenzene				3.20E-01	kg dry sediment / kg tissue	[3]	2.60E+03	L/kg tissue	[3]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzo-furan	1.07E+00	kg dry soil / kg tissue	[2]	1.31E+04	kg dry sediment / kg tissue	[2]	1.05E+03	L/kg tissue	[2]
61626-71-9	Dichloropentadiene									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
62-50-0	Ethyl methanesulfonate									
62-53-3	Aniline									
62-75-9	N-Nitroso-N,N-dimethylamine									
621-64-7	Di-n-propylnitrosamine									
624-83-9	Methyl isocyanate									
628-73-9	Hexanenitrile									
630-08-0	Carbon monoxide	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
630-20-6	1,1,1,2-Tetrachloroethane									
64-18-6	Formic acid									
65-85-0	Benzoic acid									
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl									
67-56-1	Methyl alcohol									
67-63-0	2-Propyl alcohol									
67-64-1	2-Propanone (Acetone)									
67-66-3	Chloroform									
67-72-1	Hexachloroethane									
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzo-furan	1.70E-02	kg dry soil / kg tissue	[2]	2.16E+02	kg dry sediment / kg tissue	[2]	1.72E+01	L/kg tissue	[2]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl				1.00E+02	kg dry sediment / kg tissue	[5]			
70-30-4	Hexachlorophene							9.70E+02	L/kg tissue	[3]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzo-furan	1.21E-01	kg dry soil / kg tissue	[2]	1.49E+03	kg dry sediment / kg tissue	[2]	1.19E+02	L/kg tissue	[2]
71-36-3	n-Butyl alcohol									
71-43-2	Benzene									
71-55-6	1,1,1-Trichloroethane									
72-43-5	Methoxychlor				2.00E+00	kg dry sediment / kg tissue	[6]			
72-55-9	4,4'-DDE	1.26E+00	kg dry soil / kg tissue	[3]	9.50E-01	kg dry sediment / kg tissue	[3]	1.19E+04	L/kg tissue	[3]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzo-furan	1.00E+00	kg dry soil / kg tissue	[2]	1.23E+04	kg dry sediment / kg tissue	[2]	9.83E+02	L/kg tissue	[2]
74-83-9	Bromomethane									
74-87-3	Chloromethane									
74-88-4	Iodomethane									
74-95-3	Methylene bromide									
74-97-5	Bromochloromethane									
7429-90-5	Aluminum	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	4.07E+03	L/kg tissue	[3]
7439-89-6	Iron	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7439-92-1	Lead	3.00E-02	kg dry soil / kg tissue	[3]	6.30E-01	kg dry sediment / kg tissue	[3]	5.06E+03	L/kg tissue	[3]
7439-93-2	Lithium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7439-95-4	Magnesium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
7439-96-5	Manganese	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7439-97-6	Mercury									
7439-98-7	Molybdenum	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-02-0	Nickel	2.00E-02	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	2.80E+01	L/kg tissue	[3]
7440-16-6	Rhodium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-22-4	Silver	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	2.98E+02	L/kg tissue	[3]
7440-23-5	Sodium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-24-6	Strontium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-25-7	Tantalum	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-28-0	Thallium	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	1.50E+04	L/kg tissue	[3]
7440-29-1	Thorium-232	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-31-5	Tin	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
7440-33-7	Tungsten	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-36-0	Antimony	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	7.00E+00	L/kg tissue	[3]
7440-38-2	Arsenic	1.10E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	7.30E+01	L/kg tissue	[3]
7440-39-3	Barium	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	2.00E+02	L/kg tissue	[3]
7440-41-7	Beryllium	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	4.50E+01	L/kg tissue	[3]
7440-43-9	Cadmium	9.60E-01	kg dry soil / kg tissue	[3]	3.40E+00	kg dry sediment / kg tissue	[3]	3.46E+03	L/kg tissue	[3]
7440-47-3	Chromium									
7440-48-4	Cobalt	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-50-8	Copper	4.00E-02	kg dry soil / kg tissue	[3]	3.00E-01	kg dry sediment / kg tissue	[3]	3.72E+03	L/kg tissue	[3]
7440-61-1	Uranium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-61-1R	Uranium-238	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-62-2	Vanadium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
7440-65-5	Yttrium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7440-66-6	Zinc	5.60E-01	kg dry soil / kg tissue	[3]	5.70E-01	kg dry sediment / kg tissue	[3]	4.58E+03	L/kg tissue	[3]
7440-67-7	Zirconium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7446-09-5	Sulfur dioxide	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl									
7487-94-7	Mercury (Hg^{+2})									
75-00-3	Chloroethane									
75-01-4	1-Chloroethene									
75-02-5	Fluoroethene (Vinyl fluoride)									
75-05-8	Acetonitrile									
75-07-0	Acetaldehyde									
75-09-2	Dichloromethane									
75-15-0	Carbon disulfide									
75-21-8	Oxirane									
75-25-2	Bromoform									
75-27-4	Bromodichloro-methane									
75-29-6	2-Chloropropane									
75-34-3	1,1-Dichloroethane									
75-35-4	1,1-Dichloroethene									
75-44-5	Phosgene									
75-45-6	Chlorodifluoro-methane									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
75-50-3	Trimethylamine									
75-69-4	Trichlorofluoro-methane									
75-71-8	Dichlorodifluoro-methane									
76-01-7	Pentachloroethane									
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane									
76-44-8	Heptachlor	1.40E+00	kg dry soil / kg tissue	[3]	1.67E+00	kg dry sediment / kg tissue	[3]	3.81E+03	L/kg tissue	[3]
764-41-0	1,4-Dichloro-2-butene									
7647-01-0	Hydrogen chloride	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
765-34-4	Glycidylaldehyde	-								
7664-39-3	Hydrogen fluoride	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7664-41-7	Ammonia/Ammonium	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
77-47-4	Hexachlorocyclopenta diene	7.45E+02	kg dry soil / kg tissue	[3]				1.23E+03	L/kg tissue	[3]
77-78-1	Dimethyl sulfate									
7704-34-9	Total Sulfur (thermodynamically stable)									
7723-14-0	Phosphorus	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
7782-41-4	Fluorine gas (F_2)									
7782-49-2	Selenium	2.20E-01	kg dry soil / kg tissue	[3]	9.00E-01	kg dry sediment / kg tissue	[3]	1.26E+03	L/kg tissue	[3]

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
7782-50-5	Chlorine	2.21E-01	kg dry soil / kg tissue	[1]	8.93E-01	kg dry sediment / kg tissue	[1]	4.07E+03	L/kg tissue	[1]
78-83-1	2-Methylpropyl alcohol									
78-87-5	1,2-Dichloropropane									
78-93-3	2-Butanone									
79-00-5	1,1,2-Trichloroethane									
79-01-6	1,1,2-Trichloroethylene									
79-10-7	2-Propenoic acid									
79-34-5	1,1,2,2-Tetrachloroethane									
79-46-9	2-Nitropropane									
80-62-6	Methyl methacrylate									
82-68-8	Pentachloronitro-benzene	4.51E+02	kg dry soil / kg tissue	[3]				1.30E+01	L/kg tissue	[3]
822-06-0	Hexamethylene-1,5-diisocyanate									
823-40-5	Toluene-2,6-diamine									
83-32-9	Acenaphthene				2.04E+00	kg dry sediment / kg tissue	[6]			
832-69-9	1-Methylphenanthrene									
84-66-2	Diethyl phthalate									
84-74-2	Dibutyl phthalate									
85-01-8	Phenanthrene				2.92E+00	kg dry sediment / kg tissue	[6]			
85-44-9	Phthalic anhydride									
85-68-7	Butylbenzyl phthalate									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
86-73-7	Fluorene				1.36E+00	kg dry sediment / kg tissue	[6]			
87-61-6	1,2,3-Trichlorobenzene									
87-68-3	Hexachlorobutadiene				4.40E-01	kg dry sediment / kg tissue	[3]	1.05E+01	L/kg tissue	[3]
87-86-5	Pentachlorophenol	1.03E+03	kg dry soil / kg tissue	[3]				5.20E+01	L/kg tissue	[3]
88-06-2	2,4,6-Trichlorophenol									
88-74-4	o-Nitroaniline									
88-75-5	2-Nitrophenol									
90-04-0	o-Anisidine									
90-12-0	1-Methylnaphthalene									
91-20-3	Naphthalene				8.80E+00	kg dry sediment / kg tissue	[6]			
91-22-5	Quinoline									
91-57-6	2-Methyl naphthalene				6.70E+00	kg dry sediment / kg tissue	[6]			
91-58-7	2-Chloronaphthalene									
91-94-1	3,3'-Dichlorobenzidine									
92-52-4	1,1'-Biphenyl									
924-16-3	N-Nitrosodi-n-butylamine									
94-59-7	Safrole									
94-75-7	2,4-D and esters									
95-48-7	o-Cresol									
95-49-8	2-Chlorotoluene									
95-50-1	1,2-Dichlorobenzene									
95-53-4	o-Toluidine									

Table 6-2 Media-to-Terrestrial and Aquatic Invertebrate Bioconcentration Factors

CAS Registry Number	Constituent	Soil-to-Invertebrate Bioconcentration Factor ($BCF_{s\text{-}inv}$)	Units for Soil-to-Invertebrate Bioconcentration Factor	Reference	Sediment-to-Benthic Invertebrate Transfer Factor ($BCF_{s\text{-}binv}$)	Units for Sediment-to-Benthic Invertebrate Transfer Factor	Reference	Water-to-Invertebrate Transfer Factor ($BCF_{w\text{-}inv}$)	Units for Water-to-Invertebrate Transfer Factor	Reference
95-57-8	2-Chlorophenol									
95-63-6	1,2,4-Trimethyl benzene									
95-94-3	1,2,4,5-Tetrachlorobenzene									
95-95-4	2,4,5-Trichlorophenol									
96-12-8	1,2-Dibromo-3-chloropropane									
96-18-4	1,2,3-Trichloropropane									
96-45-7	Ethylene thiourea									
97-63-2	Ethyl methacrylate									
98-01-1	Furfural									
98-06-6	tert-Butyl benzene									
98-07-7	Benzotrichloride									
98-82-8	Cumene									
98-83-9	alpha-Methylstyrene									
98-86-2	Acetophenone									
98-95-3	Nitrobenzene									
99-35-4	1,3,5-Trinitrobenzene									
99-65-0	1,3-Dinitrobenzene							1.30E+01	L/kg tissue	[3]
99-87-6	p-Cymene									

Reference	Reference (source) for Soil-to-Invertebrate Bioconcentration Factor
[1]	Arithmetic average of the available BCF values for other inorganics (arsenic, cadmium, chromium, copper, lead, mercury (Hg+2), nickel, and zinc).
[2]	Calculated value per Eq. 2-6 (BCF_TCDD × BEF) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Soil-to-Invertebrate Bioconcentration Factor
[3]	Table C-1 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Sediment-to-Benthic Invertebrate Transfer Factor
[1]	Arithmetic average of the available BCF values for other inorganics (cadmium, chromium, copper, lead, mercury (Hg^{+2}), and zinc).
[2]	Calculated value per Eq. 2-6 (BCF_TCDD × BEF) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[3]	Table C-6 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[4]	USACE. 2004. BSAF Database, U.S. Army Corps of Engineers, Engineer Research and Development Center (http://el.erdc.usace.army.mil/bsaf/bsaf.html) (log Kow of 3,3',4,4',5,5'-hexachloro-biphenyl used as surrogate)
[5]	USACE. 2004. BSAF Database, U.S. Army Corps of Engineers, Engineer Research and Development Center (http://el.erdc.usace.army.mil/bsaf/bsaf.html) (log Kow of 3,3',4,4',5,5'-hexachloro-biphenyl used as surrogate, maximum reported BSAF)
[6]	USACE. 2004. BSAF Database, U.S. Army Corps of Engineers, Engineer Research and Development Center (http://el.erdc.usace.army.mil/bsaf/bsaf.html) (maximum reported BSAF)

Reference	Reference (source) for Water-to-Aquatic Invertebrate Transfer Factor
[1]	Arithmetic average of the available BCF values for other inorganics (antimony, arsenic, barium, berylium, cadmium, chromium, copper, lead, mercury (Hg^{+2}), nickel, selenium, silver, thallium, and zinc).
[2]	Calculated value per Eq. 2-6 (BCF_TCDD × BEF) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[3]	Table C-3 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (Ba)	Units for Ingestion-to-Tissue Transfer Factor	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene						
100-42-5	Styrene						
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde						
10028-15-6	Ozone	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
10028-17-8	Tritium						
10045-97-3	Cesium-137	2.00E+03	L/kg tissue	[3]	2.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	2.50E+01	L/kg tissue	[3]	3.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
10098-97-2	Strontium-90	5.00E+01	L/kg tissue	[3]	3.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
10198-40-0	Cobalt-60	3.30E+02	L/kg tissue	[3]	2.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol						
10595-95-6	n-Nitrosomethylethylamine						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						
106-47-8	p-Chloroaniline						
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane						
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	4.80E+01	L/kg tissue	[4]			
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone						
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene						
108-90-7	Chlorobenzene						
108-94-1	Cyclohexanone						
108-95-2	Phenol						
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	bis(2-Chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	bis(2-Chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	7.00E+01	L/kg tissue	[4]			
117-84-0	n-Dioctyl phthalate	9.40E+03	L/kg tissue	[4]			
118-74-1	Hexachlorobenzene	2.53E+02	L/kg tissue	[4]			
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene						
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol						
121-14-2	2,4-Dinitrotoluene	2.10E+01	L/kg tissue	[4]			
122-39-4	N,N-Diphenylamine						
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane						
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene						
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)						
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
13967-48-1	Ruthenium-106	1.00E+02	L/kg tissue	[3]	2.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
13967-70-9	Cesium-134	2.00E+03	L/kg tissue	[3]	2.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
13968-55-3	Uranium-233	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
13981-15-2	Curium-244	2.50E+02	L/kg tissue	[3]	3.50E-06	[mg/kg tissue] / [mg ingested/day]	[2]
13981-16-3	Plutonium-238	2.50E+02	L/kg tissue	[3]	5.00E-07	[mg/kg tissue] / [mg ingested/day]	[2]
13981-37-8	Nickel-63	7.80E+01	L/kg tissue	[4]	6.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
13982-10-0	Plutonium-242	2.50E+02	L/kg tissue	[3]	5.00E-07	[mg/kg tissue] / [mg ingested/day]	[2]
13982-63-3	Radium-226	7.00E+01	L/kg tissue	[3]	2.50E-04	[mg/kg tissue] / [mg ingested/day]	[2]
13982-70-2	Uranium-236	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
13994-20-2	Neptunium-237	2.50E+02	L/kg tissue	[3]	5.50E-05	[mg/kg tissue] / [mg ingested/day]	[2]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	2.50E+02	L/kg tissue	[3]	5.00E-07	[mg/kg tissue] / [mg ingested/day]	[2]
14119-33-6	Plutonium-240	2.50E+02	L/kg tissue	[3]	5.00E-07	[mg/kg tissue] / [mg ingested/day]	[2]
14133-76-7	Technetium-99	1.50E+01	L/kg tissue	[3]	8.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
14158-29-3	Uranium-232	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
14234-35-6	Antimony-125	4.00E+01	L/kg tissue	[4]	1.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
14265-44-2	Phosphate	2.12E+03	L/kg tissue	[1]	5.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
14331-85-2	Protactinium-231	1.10E+01	L/kg tissue	[3]	1.00E-05	[mg/kg tissue] / [mg ingested/day]	[2]
14336-70-0	Nickel-59	7.80E+01	L/kg tissue	[4]	6.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
14391-16-3	Europium-155	2.50E+01	L/kg tissue	[3]	5.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
145-73-3	Endothall						
14596-10-2	Americium-241	2.50E+02	L/kg tissue	[3]	3.50E-06	[mg/kg tissue] / [mg ingested/day]	[2]
14683-23-9	Europium-152	2.50E+01	L/kg tissue	[3]	5.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
14762-75-5	Carbon-14						
14797-55-8	Nitrate	2.12E+03	L/kg tissue	[1]	7.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
14797-65-0	Nitrite	2.12E+03	L/kg tissue	[1]	7.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
14808-79-8	Sulfate	2.12E+03	L/kg tissue	[1]	1.00E-01	[mg/kg tissue] / [mg ingested/day]	[2]
14952-40-0	Actinium-227	2.50E+01	L/kg tissue	[3]	2.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
14993-75-0	Americium-243	2.50E+02	L/kg tissue	[3]	3.50E-06	[mg/kg tissue] / [mg ingested/day]	[2]
15046-84-1	Iodine-129	5.00E+02	L/kg tissue	[3]	7.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
15117-48-3	Plutonium-239	2.50E+02	L/kg tissue	[3]	5.00E-07	[mg/kg tissue] / [mg ingested/day]	[2]
15117-96-1	Uranium-235	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
15262-20-1	Radium-228	7.00E+01	L/kg tissue	[3]	2.50E-04	[mg/kg tissue] / [mg ingested/day]	[2]
15510-73-3	Curium-242	2.50E+02	L/kg tissue	[3]	3.50E-06	[mg/kg tissue] / [mg ingested/day]	[2]
15585-10-1	Europium-154	2.50E+01	L/kg tissue	[3]	5.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
15594-54-4	Thorium-229	1.00E+02	L/kg tissue	[3]	6.00E-06	[mg/kg tissue] / [mg ingested/day]	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	2.50E+01	L/kg tissue	[3]	5.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
15751-77-6	Zirconium-93	2.00E+02	L/kg tissue	[3]	5.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
15757-87-6	Curium-243	2.50E+02	L/kg tissue	[3]	3.50E-06	[mg/kg tissue] / [mg ingested/day]	[2]
15758-45-9	Selenium-79	1.29E+02	L/kg tissue	[4]	1.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
15832-50-5	Tin-126	3.00E+03	L/kg tissue	[3]	8.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
1634-04-4	Methyl tert-butyl ether						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
16887-00-6	Chloride	5.00E+01	L/kg tissue	[3]	8.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
16984-48-8	Fluoride	1.00E+01	L/kg tissue	[3]	1.50E-01	[mg/kg tissue] / [mg ingested/day]	[2]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	4.24E+03	L/kg tissue	[4]			
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene	5.00E+02	L/kg tissue	[4]			
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	5.93E+02	L/kg tissue	[2]	7.61E-03	[mg/kg tissue] / [mg ingested/day]	[3]
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene	5.00E+02	L/kg tissue	[4]			
206-44-0	Fluoranthene						
207-08-9	Benzo[k]fluoranthene	5.00E+02	L/kg tissue	[4]			
208-96-8	Acenaphthylene						
218-01-9	Chrysene	5.00E+02	L/kg tissue	[4]			
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	1.12E+04	L/kg tissue	[4]	7.80E-04	[mg/kg tissue] / [mg ingested/day]	[5]
23950-58-5	Pronamide						
24959-67-9	Bromide	4.20E+02	L/kg tissue	[3]	2.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin	5.08E+01	L/kg tissue	[2]	6.52E-04	[mg/kg tissue] / [mg ingested/day]	[3]
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	2.16E+02	L/kg tissue	[2]	2.77E-03	[mg/kg tissue] / [mg ingested/day]	[3]
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran	6.78E+01	L/kg tissue	[2]	8.70E-04	[mg/kg tissue] / [mg ingested/day]	[3]
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	1.31E+03	L/kg tissue	[2]	1.68E-02	[mg/kg tissue] / [mg ingested/day]	[3]
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	3.90E+03	L/kg tissue	[2]	5.00E-02	[mg/kg tissue] / [mg ingested/day]	[3]
4170-30-3	2-Butenaldehyde (2-Butenal)						
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde						
50-32-8	Benzo[a]pyrene	5.00E+02	L/kg tissue	[4]			
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol						
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	3.39E+03	L/kg tissue	[2]	4.34E-02	[mg/kg tissue] / [mg ingested/day]	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	5.00E+02	L/kg tissue	[4]			
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene						
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene						
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.65E+03	L/kg tissue	[2]	2.12E-02	[mg/kg tissue] / [mg ingested/day]	[3]
56-23-5	Carbon tetrachloride	3.00E+01	L/kg tissue	[4]			
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	5.00E+02	L/kg tissue	[4]			
57-12-5	Cyanide	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
57-24-9	Strychnine						
57-74-9	Chlordane						
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	6.78E+03	L/kg tissue	[2]	8.70E-02	[mg/kg tissue] / [mg ingested/day]	[3]
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	9.32E+02	L/kg tissue	[2]	1.20E-02	[mg/kg tissue] / [mg ingested/day]	[3]
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	8.05E+02	L/kg tissue	[2]	1.03E-02	[mg/kg tissue] / [mg ingested/day]	[3]
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	5.08E+02	L/kg tissue	[2]	6.52E-03	[mg/kg tissue] / [mg ingested/day]	[3]
58-89-9	gamma-BHC (Lindane)						
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene	2.10E+01	L/kg tissue	[4]			
608-93-5	Pentachlorobenzene	1.27E+04	L/kg tissue	[4]			
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2.84E+03	L/kg tissue	[2]	3.64E-02	[mg/kg tissue] / [mg ingested/day]	[3]
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)						
67-66-3	Chloroform	3.59E+00	L/kg tissue	[4]			

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
67-72-1	Hexachloroethane						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	4.66E+01	L/kg tissue	[2]	5.98E-04	[mg/kg tissue] / [mg ingested/day]	[3]
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	2.78E+02	L/kg tissue	[4]			
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	3.22E+02	L/kg tissue	[2]	4.13E-03	[mg/kg tissue] / [mg ingested/day]	[3]
71-36-3	n-Butyl alcohol						
71-43-2	Benzene						
71-55-6	1,1,1-Trichloroethane						
72-43-5	Methoxychlor						
72-55-9	4,4'-DDE	2.55E+04	L/kg tissue	[4]			
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	2.67E+03	L/kg tissue	[2]	3.42E-02	[mg/kg tissue] / [mg ingested/day]	[3]
74-83-9	Bromomethane						
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	2.70E+00	L/kg tissue	[4]	1.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7439-89-6	Iron	2.00E+03	L/kg tissue	[3]	2.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7439-92-1	Lead	9.00E-02	L/kg tissue	[4]	3.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7439-93-2	Lithium	2.12E+03	L/kg tissue	[1]	1.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7439-95-4	Magnesium	2.12E+03	L/kg tissue	[1]	5.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7439-96-5	Manganese	4.00E+02	L/kg tissue	[3]	4.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7439-97-6	Mercury						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
7439-98-7	Molybdenum	1.27E+03	L/kg tissue	[3]	6.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-02-0	Nickel	7.80E+01	L/kg tissue	[4]	6.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-16-6	Rhodium	1.00E+01	L/kg tissue	[3]	2.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-22-4	Silver	8.77E+01	L/kg tissue	[4]	3.00E-03	[mg/kg tissue] / [mg ingested/day]	[4]
7440-23-5	Sodium	1.00E+02	L/kg tissue	[3]	5.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7440-24-6	Strontium	5.00E+01	L/kg tissue	[3]	3.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-25-7	Tantalum	2.12E+03	L/kg tissue	[1]	6.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-28-0	Thallium	1.00E+04	L/kg tissue	[4]	4.00E-02	[mg/kg tissue] / [mg ingested/day]	[4]
7440-29-1	Thorium-232	1.00E+02	L/kg tissue	[3]	6.00E-06	[mg/kg tissue] / [mg ingested/day]	[2]
7440-31-5	Tin	3.00E+03	L/kg tissue	[3]	8.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7440-33-7	Tungsten	1.20E+03	L/kg tissue	[3]	4.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7440-36-0	Antimony	4.00E+01	L/kg tissue	[4]	1.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-38-2	Arsenic	1.14E+02	L/kg tissue	[4]	2.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-39-3	Barium	2.00E+02	L/kg tissue	[3]	1.50E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-41-7	Beryllium	6.20E+01	L/kg tissue	[4]	1.00E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-43-9	Cadmium	9.07E+02	L/kg tissue	[4]	1.20E-04	[mg/kg tissue] / [mg ingested/day]	[6]
7440-47-3	Chromium						
7440-48-4	Cobalt	3.30E+02	L/kg tissue	[3]	2.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7440-50-8	Copper	7.10E+02	L/kg tissue	[4]	1.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
7440-61-1	Uranium	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-61-1R	Uranium-238	5.00E+01	L/kg tissue	[3]	2.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-62-2	Vanadium	2.12E+03	L/kg tissue	[1]	2.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7440-65-5	Yttrium	2.50E+01	L/kg tissue	[3]	3.00E-04	[mg/kg tissue] / [mg ingested/day]	[2]
7440-66-6	Zinc	2.06E+03	L/kg tissue	[4]	1.00E-01	[mg/kg tissue] / [mg ingested/day]	[4]
7440-67-7	Zirconium	2.00E+02	L/kg tissue	[3]	5.50E-03	[mg/kg tissue] / [mg ingested/day]	[2]
7446-09-5	Sulfur dioxide	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene						
75-02-5	Fluoroethene (Vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane						
75-15-0	Carbon disulfide						
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene						
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane						
75-71-8	Dichlorodifluoromethane						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	5.52E+03	L/kg tissue	[4]			
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride	2.12E+03	L/kg tissue	[1]	8.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride	2.12E+03	L/kg tissue	[1]	1.50E-01	[mg/kg tissue] / [mg ingested/day]	[2]
7664-41-7	Ammonia/Ammonium	2.12E+03	L/kg tissue	[1]	1.95E-02	[mg/kg tissue] / [mg ingested/day]	[1]
77-47-4	Hexachlorocyclopentadiene	1.65E+02	L/kg tissue	[4]			
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus	7.00E+04	L/kg tissue	[3]	5.50E-02	[mg/kg tissue] / [mg ingested/day]	[2]
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	1.29E+02	L/kg tissue	[4]	2.26E-03	[mg/kg tissue] / [mg ingested/day]	[4]
7782-50-5	Chlorine	5.00E+01	L/kg tissue	[3]	8.00E-02	[mg/kg tissue] / [mg ingested/day]	[2]
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone						
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene						
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						
82-68-8	Pentachloronitrobenzene	2.14E+02	L/kg tissue	[4]			
822-06-0	Hexamethylene-1,5-diisocyanate						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (*Ba*)	Units for Ingestion-to-Tissue Transfer Factor	Reference
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene						
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate						
84-74-2	Dibutyl phthalate						
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene						
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	7.83E+02	L/kg tissue	[4]			
87-86-5	Pentachlorophenol	1.09E+02	L/kg tissue	[4]			
88-06-2	2,4,6-Trichlorophenol						
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene						
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl						
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol						
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene						
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						

Table 6-3 Water-to-Fish Bioconcentration Factors and Mammal Ingestion-to-Tissue Transfer Factors

CAS Registry Number	Constituent	Water-to-Fish Bioconcentration Factor ($BCF_{w\text{-}fish}$)	Units for Water-to-Fish Bioconcentration Factor	Reference	Mammal Ingestion-to-Tissue Transfer Factor (Ba)	Units for Ingestion-to-Tissue Transfer Factor	Reference
95-94-3	1,2,4,5-Tetrachlorobenzene						
95-95-4	2,4,5-Trichlorophenol						
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						
98-95-3	Nitrobenzene	2.10E+01	L/kg tissue	[4]			
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene	7.40E+01	L/kg tissue	[4]			
99-87-6	p-Cymene						

Reference	Reference (source) for Water-to-Fish Bioconcentration Factor
[1]	Arithmetic average of the available BCF values for other inorganics (actinium, aluminum, antimony, arsenic, barium, beryllium, bismuth, bromine, cadmium, calcium, chlorine, chromium, cobalt, copper, curium, europium, fluorine, iodine, iron, lead, manganese, mercury (Hg^{+2}), molybdenum, neptunium, nickel, niobium, phosphorus, plutonium, potassium, protactinium, radium, rhodium, ruthenium, samarium, selenium, silver, sodium, strontium, sulfur, technitium, thallium, thorium, tin, tungsten, yttrium, zinc, and zirconium.)
[2]	Calculated value per Eq. 2-6 ($BCF_{TCDD} \times BEF$) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[3]	NRC. 1992. *Residual Radioactive Contamination from Decomissioning - Technical Basis for Translating Contamination Levels to Annual Total Effective Dose Equivalant: Final Report*, NUREG/CR-5512V1, PNL-7994, Pacifica Northwest Laboratory, Richland, Washington.
[4]	Table C-5 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Mammal Ingestion-to-Tissue Transfer Factor
[1]	Arithmetic average of the available BCF values for other inorganics without double counting elements (e.g., isotopes of a stable element).
[2]	Baes CF, III, Sharp RD, Sjoreen AL, and Shor RW. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides Through Agriculture*, ORNL-5786. Oak Ridge National Laboratory, Oak Ridge, TN.
[3]	Calculated value per Eq. 2-6 ($BCF_{TCDD} \times BEF$) from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[4]	EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001A. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC.
[5]	Section D-1.1 of EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[6]	Table 5-1 and D-2 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm) (Deer Mouse BCF divided by IR, see Sect. D-1.1)

Table 6-4 Bio-Equivalence Factors, and Bird and Fish Toxicity Equivalence Factors

CAS Registry Number	Constituent	Bio-Equivalence Factor	Bird Toxicity Equivalence Factor	Fish Toxicity Equivalence Factor
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1		
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	0.14	0.1	0.01
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl		0.00001	5E-6
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl		0.05	0.0001
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl		0.0001	5E-6
3268-87-9	Octachlorodibenzo(p)dioxin	0.012		
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl		0.001	0.00005
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	0.051	0.001	0.001
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl		0.0001	5E-6
39001-02-0	Octachlorodibenzofuran	0.016	0.0001	0.0001
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	0.31	0.05	0.5
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl		0.00001	5E-6
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	0.92	1	1
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.8	1	0.05
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl		0.00001	5E-6
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.39	0.01	0.01
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.6	1	0.5
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.22	0.1	0.05
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	0.19	0.1	0.1
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl		0.1	0.005
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	0.12	0.01	0.01
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	0.67	0.1	0.1
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl		0.00001	5E-6
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.011	0.01	0.01
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl		0.0001	5E-6
70362-50-4	3,4,4',5-Tetrachlorobiphenyl		0.1	0.0005
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	0.076	0.1	0.1
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	0.63	0.1	0.1
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl		0.0001	5E-6

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
100-02-7	4-Nitrophenol	1	1	1
100-21-0	p-Phthalic acid	1	1	1
100-25-4	1,4-Dinitrobenzene	1	1	1
100-40-3	4-Ethenylcyclohexene			
100-41-4	Ethyl benzene	1	1	1
100-42-5	Styrene	1	1	1
100-44-7	Benzyl chloride	1	1	1
100-47-0	Benzonitrile			
100-51-6	Benzyl alcohol	1	1	1
100-52-7	Benzaldehyde	1	1	1
10028-15-6	Ozone	1	1	1
10061-01-5	cis-1,3-Dichloropropene	1	1	1
10061-02-6	trans-1,3-Dichloropropene	1	1	1
101-55-3	4-Bromophenylphenyl ether	1	3.2	2.6
101-77-9	4,4'-Methylenedianiline	1	1	1
10102-44-0	Nitrogen dioxide	1	1	1
103-33-3	Azobenzene	1	1.2	1
103-65-1	n-Propyl benzene	1	1.1	1
104-51-8	n-Butyl benzene	1	1.5	1.2
104-76-7	2-Ethyl-1-hexanol			
105-67-9	2,4-Dimethylphenol	1	1	1
10595-95-6	n-Nitrosomethylethylamine			
106-43-4	4-Chlorotoluene	1	1.1	1
106-44-5	p-Cresol	1	1	1
106-46-7	1,4-Dichlorobenzene	1	1.1	1
106-47-8	p-Chloroaniline	1	1	1
106-49-0	p-Toluidine	1	1	1
106-51-4	Quinone	1	1	1
106-88-7	1,2-Epoxybutane	1	1	1
106-89-8	Epichlorohydrin	1	1	1
106-93-4	Ethylene dibromide	1	1	1
106-99-0	1,3-Butadiene	1	1	1
107-02-8	Acrolein	1	1	1
107-05-1	3-Chloropropene (Allyl chloride)	1	1	1
107-06-2	1,2-Dichloroethane	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
107-12-0	Propionitrile	1	1	1
107-13-1	Acrylonitrile	1	1	1
107-19-7	Propargyl alcohol	1	1	1
107-21-1	Ethylene glycol	1	1	1
107-98-2	Propylene glycol monomethyl ether	1	1	1
108-05-4	Vinyl acetate	1	1	1
108-10-1	4-Methyl-2-pentanone	1	1	1
108-39-4	m-Cresol	1	1	1
108-60-1	Dichloroisopropyl ether	1	1	1
108-67-8	1,3,5-Trimethyl benzene	1	1.1	1
108-86-1	Bromobenzene	1	1	1
108-87-2	Methylcyclohexane	1	1.3	1.1
108-88-3	Toluene	1	1	1
108-90-7	Chlorobenzene	1	1	1
108-94-1	Cyclohexanone	1	1	1
108-95-2	Phenol	1	1	1
109-74-0	n-Butanenitrile			
109-75-1	3-Butenenitrile			
109-77-3	Malononitrile	1	1	1
109-86-4	2-Methoxyethanol	1	1	1
109-99-9	Tetrahydrofuran	1	1	1
110-00-9	Furan			
110-54-3	n-Hexane	1	1.3	1.1
110-59-8	Pentanenitrile			
110-80-5	2-Ethoxyethanol	1	1	1
110-82-7	Cyclohexane	1	1.1	1
110-83-8	Cyclohexene	1	1	1
110-86-1	Pyridine	1	1	1
111-15-9	Ethylene glycol monoethyl ether acetate	1	1	1
111-44-4	bis(2-Chloroethyl) ether	1	1	1
111-65-9	n-Octane	1	1.3	1.1
111-76-2	Ethylene glycol monobutyl ether	1	1	1
111-84-2	n-Nonane	1	8	10
111-91-1	bis(2-Chloroethoxy)methane	1	1	1
112-30-1	1-Decanol			

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
112-31-2	Decanal			
112-40-3	Dodecane			
1120-21-4	Undecane			
1120-71-4	1,3-Propane sultone	1	1	1
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	1	4.2	3.9
117-84-0	n-Dioctyl phthalate	1	1.5	0.23
118-74-1	Hexachlorobenzene	1	6.3	7.1
119-90-4	3,3'-Dimethoxybenzidine	1	1	1
120-12-7	Anthracene	1	1.8	1.3
120-82-1	1,2,4-Trichlorobenzene	1	1.3	1.1
120-83-2	2,4-Dichlorophenol	1	1	1
121-14-2	2,4-Dinitrotoluene	1	1	1
122-39-4	N,N-Diphenylamine	1	1.1	1
122-66-7	1,2-Diphenylhydrazine	1	1	1
123-33-1	Maleic hydrazide	1	1	1
123-38-6	n-Propionaldehyde	1	1	1
123-72-8	Butanal			
123-91-1	1,4-Dioxane	1	1	1
124-18-5	Decane			
124-38-9	Carbon dioxide			
124-48-1	Chlorodibromomethane	1	1	1
126-73-8	Tributyl phosphate	1	1.3	1.1
126-98-7	2-Methyl-2-propenenitrile	1	1	1
127-18-4	1,1,2,2-Tetrachloroethene	1	1	1
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol	1	1.4	1.1
129-00-0	Pyrene	1	3.2	2.6
131-11-3	Dimethyl phthalate	1	1	1
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	1	1.8	1.3
132-64-9	Dibenzofuran	1	1.5	1.2
133-06-2	Captan	1	1	1
1330-20-7	Xylenes (mixed isomers)			
1336-36-3	Polychlorinated biphenyls (PCBs)	1	13	22
134-32-7	alpha-Naphthylamine			
135-98-8	sec-Butyl benzene	1	1.2	1.1
141-78-6	Acetic acid ethyl ester	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
14265-44-2	Phosphate	1	1	1
145-73-3	Endothall	1	1	1
14797-55-8	Nitrate	1	1	1
14797-65-0	Nitrite	1	1	1
14808-79-8	Sulfate	1	1	1
156-59-2	cis-1,2-Dichloroethene	1	1	1
156-60-5	trans-1,2-Dichloroethylene	1	1	1
1634-04-4	Methyl tert-butyl ether	1	1	1
16887-00-6	Chloride	1	1	1
16984-48-8	Fluoride	1	1	1
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1	14	26
189-55-9	Dibenzo[a,i]pyrene	1	13	23
189-64-0	Dibenzo[a,h]pyrene	1	13	23
191-24-2	Benzo[g,h,i]perylene	1	14	25
191-30-0	Benzo[a,i]pyrene	1	13	23
192-65-4	Dibenzo[a,e]pyrene	1	13	23
192-97-2	Benzo[e]pyrene	1	13	21
193-39-5	Indeno[1,2,3-cd]pyrene	1	14	27
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	1	13	23
205-82-3	Benzo[j]fluoranthene	1	13	23
205-99-2	Benzo[b]fluoranthene	1	12	20
206-44-0	Fluoranthene	1	3.6	3.2
207-08-9	Benzo[k]fluoranthene	1	12	20
208-96-8	Acenaphthylene	1	1.3	1.1
218-01-9	Chrysene	1	8	10
224-42-0	Dibenz[a,j]acridine	1	14	25
2245-38-7	2,3,5-Trimethylnaphthalene			
226-36-8	Dibenz[a,h]acridine	1	14	25
22967-92-6	Methylmercury	1	1	1
23950-58-5	Pronamide	1	1.1	1
24959-67-9	Bromide	1	1	1
27154-33-2	Trichlorofluoroethane	1	1	1
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl	1	14	25
319-84-6	alpha-BHC	1	1.2	1
319-85-7	beta-BHC	1	1.2	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl	1	14	25
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl	1	14	25
3268-87-9	Octachlorodibenzo(p)dioxin	1	12	17
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl	1	13	21
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	1	6.4	4.5
3697-24-3	5-Methylchrysene	1	11	18
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl	1	13	21
39001-02-0	Octachlorodibenzofuran	1	2.2	0.52
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	1	10	12
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl	1	5.5	3.3
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin	1	14	26
4170-30-3	2-Butenaldehyde (2-Butenal)	1	1	1
41851-50-7	Chlorocyclopentadiene	1	1	1
460-19-5	Cyanogen	1	1	1
4786-20-3	2-Butenenitrile			
50-00-0	Formaldehyde	1	1	1
50-32-8	Benzo[a]pyrene	1	11	18
506-68-3	Cyanogen bromide	1	1	1
506-77-4	Cyanogen chloride	1	1	1
51-28-5	2,4-Dinitrophenol	1	1	1
51-79-6	Ethyl carbamate (Urethane)	1	1	1
510-15-6	Chlorobenzilate	1	1.6	1.2
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	1	14	25
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl	1	13	21
528-29-0	o-Dinitrobenzene	1	1	1
53-70-3	Dibenz[a,h]anthracene	1	14	25
532-27-4	2-Chloroacetophenone	1	1	1
534-52-1	4,6-Dinitro-o-cresol	1	1	1
5385-75-1	Dibenzo[a,e]fluoranthene	1	13	23
540-59-0	1,2-Dichloroethylene	1	1	1
540-73-8	1,2-Dimethylhydrazine	1	1	1
540-84-1	2,2,4-Trimethylpentane	1	3.2	2.6
541-73-1	1,3-Dichlorobenzene	1	1.1	1
542-75-6	1,3-Dichloropropene	1	1	1
542-88-1	Dichloromethyl ether	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1	9.2	9.8
56-23-5	Carbon tetrachloride	1	1	1
56-49-5	3-Methylcholanthrene	1	14	25
56-55-3	Benzo[a]anthracene	1	8	10
57-12-5	Cyanide	1	1	1
57-24-9	Strychnine	1	1	1
57-74-9	Chlordane	1	9.7	14
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1	14	27
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1	14	27
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1	13	23
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl	1	14	25
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	1	13	23
58-89-9	gamma-BHC (Lindane)	1	1.1	1
58-90-2	2,3,4,6-Tetrachlorophenol	1	1.5	1.2
581-42-0	2,6-Dimethylnaphthalene			
584-84-9	2,4-Toluene diisocyanate	1	1.1	1
589-38-8	3-Hexanone			
59-50-7	4-Chloro-3-methylphenol	1	1	1
59-89-2	N-Nitrosomorpholine	1	1	1
591-50-4	Benzene, iodo-			
591-78-6	2-Hexanone	1	1	1
593-60-2	Bromoethene	1	1	1
593-74-8	Dimethyl Mercury			
60-11-7	Dimethyl aminoazobenzene	1	2	1.5
60-29-7	Ethyl ether	1	1	1
60-35-5	Acetamide	1	1	1
602-87-9	5-Nitroacenaphthene	1	1.3	1.1
606-20-2	2,6-Dinitrotoluene	1	1	1
608-93-5	Pentachlorobenzene	1	3.6	3.2
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	1	13	23
61626-71-9	Dichloropentadiene	1	1	1
62-50-0	Ethyl methanesulfonate	1	1	1
62-53-3	Aniline	1	1	1
62-75-9	N-Nitroso-N,N-dimethylamine	1	1	1
621-64-7	Di-n-propylnitrosamine	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
624-83-9	Methyl isocyanate	1	1	1
628-73-9	Hexanenitrile			
630-08-0	Carbon monoxide	1	1	1
630-20-6	1,1,1,2-Tetrachloroethane	1	1	1
64-18-6	Formic acid	1	1	1
65-85-0	Benzoic acid	1	1	1
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl	1	14	25
67-56-1	Methyl alcohol	1	1	1
67-63-0	2-Propyl alcohol	1	1	1
67-64-1	2-Propanone (Acetone)	1	1	1
67-66-3	Chloroform	1	1	1
67-72-1	Hexachloroethane	1	1.3	1.1
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1	9.2	9.8
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl	1	13	21
70-30-4	Hexachlorophene	1	13	19
70362-50-4	3,4,4',5-Tetrachlorobiphenyl	1	14	25
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1	13	23
71-36-3	n-Butyl alcohol	1	1	1
71-43-2	Benzene	1	1	1
71-55-6	1,1,1-Trichloroethane	1	1	1
72-43-5	Methoxychlor	1	1.8	1.3
72-55-9	4,4'-DDE	1	13	22
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1	13	23
74-83-9	Bromomethane	1	1	1
74-87-3	Chloromethane	1	1	1
74-88-4	Iodomethane	1	1	1
74-95-3	Methylene bromide	1	1	1
74-97-5	Bromochloromethane	1	1	1
7429-90-5	Aluminum	1	1	1
7439-89-6	Iron	1	1	1
7439-92-1	Lead	1	1	1
7439-93-2	Lithium	1	1	1
7439-95-4	Magnesium	1	1	1
7439-96-5	Manganese	1	1	1
7439-97-6	Mercury			

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
7439-98-7	Molybdenum	1	1	1
7440-02-0	Nickel	1	1	1
7440-16-6	Rhodium	1	1	1
7440-22-4	Silver	1	1	1
7440-23-5	Sodium	1	1	1
7440-24-6	Strontium	1	1	1
7440-25-7	Tantalum	1	1	1
7440-28-0	Thallium	1	1	1
7440-31-5	Tin	1	1	1
7440-33-7	Tungsten	1	1	1
7440-36-0	Antimony	1	1	1
7440-38-2	Arsenic	1	1	1
7440-39-3	Barium	1	1	1
7440-41-7	Beryllium	1	1	1
7440-43-9	Cadmium	1	1	1
7440-47-3	Chromium			
7440-48-4	Cobalt	1	1	1
7440-50-8	Copper	1	1	1
7440-61-1	Uranium	1	1	1
7440-62-2	Vanadium	1	1	1
7440-65-5	Yttrium	1	1	1
7440-66-6	Zinc	1	1	1
7440-67-7	Zirconium	1	1	1
7446-09-5	Sulfur dioxide	1	1	1
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl	1	14	25
7487-94-7	Mercury (Hg^{+2})			
75-00-3	Chloroethane	1	1	1
75-01-4	1-Chloroethene	1	1	1
75-02-5	Fluoroethene (vinyl fluoride)			
75-05-8	Acetonitrile	1	1	1
75-07-0	Acetaldehyde	1	1	1
75-09-2	Dichloromethane	1	1	1
75-15-0	Carbon disulfide	1	1	1
75-21-8	Oxirane	1	1	1
75-25-2	Bromoform	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
75-27-4	Bromodichloromethane	1	1	1
75-29-6	2-Chloropropane	1	1	1
75-34-3	1,1-Dichloroethane	1	1	1
75-35-4	1,1-Dichloroethene	1	1	1
75-44-5	Phosgene	1	1	1
75-45-6	Chlorodifluoromethane	1	1	1
75-50-3	Trimethylamine	1	1	1
75-69-4	Trichlorofluoromethane	1	1	1
75-71-8	Dichlorodifluoromethane	1	1	1
76-01-7	Pentachloroethane	1	1	1
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane	1	1	1
76-44-8	Heptachlor	1	3.2	2.6
764-41-0	1,4-Dichloro-2-butene	1	1	1
7647-01-0	Hydrogen chloride	1	1	1
765-34-4	Glycidylaldehyde	1	1	1
7664-39-3	Hydrogen fluoride	1	1	1
7664-41-7	Ammonia/Ammonium	1	1	1
77-47-4	Hexachlorocyclopentadiene	1	2.8	2.2
77-78-1	Dimethyl sulfate	1	1	1
7704-34-9	Total Sulfur (thermodynamically stable)			
7723-14-0	Phosphorus	1	1	1
7782-41-4	Fluorine gas (F_2)			
7782-49-2	Selenium	1	1	1
7782-50-5	Chlorine	1	1	1
78-83-1	2-Methylpropyl alcohol	1	1	1
78-87-5	1,2-Dichloropropane	1	1	1
78-93-3	2-Butanone	1	1	1
79-00-5	1,1,2-Trichloroethane	1	1	1
79-01-6	1,1,2-Trichloroethylene	1	1	1
79-10-7	2-Propenoic acid	1	1	1
79-34-5	1,1,2,2-Tetrachloroethane	1	2	1.5
79-46-9	2-Nitropropane			
80-62-6	Methyl methacrylate	1	1	1
82-68-8	Pentachloronitrobenzene	1	2	1.5
822-06-0	Hexamethylene-1,5-diisocyanate	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
823-40-5	Toluene-2,6-diamine	1	1	1
83-32-9	Acenaphthene	1	1.3	1.1
832-69-9	1-Methylphenanthrene			
84-66-2	Diethyl phthalate	1	1.6	1.2
84-74-2	Dibutyl phthalate	1	2.2	1.6
85-01-8	Phenanthrene	1	2	1.5
85-44-9	Phthalic anhydride	1	1	1
85-68-7	Butylbenzyl phthalate	1	1.6	1.2
86-73-7	Fluorene	1	1.4	1.1
87-61-6	1,2,3-Trichlorobenzene	1	1.3	1.1
87-68-3	Hexachlorobutadiene	1	2.2	1.6
87-86-5	Pentachlorophenol	1	3.6	3.2
88-06-2	2,4,6-Trichlorophenol	1	1.1	1
88-74-4	o-Nitroaniline	1	1	1
88-75-5	2-Nitrophenol	1	1	1
90-04-0	o-Anisidine	1	1	1
90-12-0	1-Methylnaphthalene			
91-20-3	Naphthalene	1	1.1	1
91-22-5	Quinoline	1	1	1
91-57-6	2-Methyl naphthalene	1	1.2	1.1
91-58-7	2-Chloronaphthalene	1	1.3	1.1
91-94-1	3,3'-Dichlorobenzidine	1	1.1	1
92-52-4	1,1'-Biphenyl	1	1.2	1.1
924-16-3	N-Nitrosodi-n-butylamine	1	1	1
94-59-7	Safrole	1	1	1
94-75-7	2,4-D and esters	1	1	1
95-48-7	o-Cresol	1	1	1
95-49-8	2-Chlorotoluene	1	1.1	1
95-50-1	1,2-Dichlorobenzene	1	1.1	1
95-53-4	o-Toluidine	1	1	1
95-57-8	2-Chlorophenol	1	1	1
95-63-6	1,2,4-Trimethyl benzene	1	1.1	1
95-94-3	1,2,4,5-Tetrachlorobenzene	1	2	1.5
95-95-4	2,4,5-Trichlorophenol	1	1.2	1.1
96-12-8	1,2-Dibromo-3-chloropropane	1	1	1

Table 6-5 Food Chain Multipliers

CAS Registry Number	Constituent	Food Chain Multipliers		
		FCM_2	FCM_3	FCM_4
96-18-4	1,2,3-Trichloropropane	1	1	1
96-45-7	Ethylene thiourea	1	1	1
97-63-2	Ethyl methacrylate	1	1	1
98-01-1	Furfural	1	1	1
98-06-6	tert-Butyl benzene	1	1.3	1.1
98-07-7	Benzotrichloride	1	1	1
98-82-8	Cumene	1	1.1	1
98-83-9	alpha-Methylstyrene	1	1.1	1
98-86-2	Acetophenone	1	1	1
98-95-3	Nitrobenzene	1	1	1
99-35-4	1,3,5-Trinitrobenzene	1	1	1
99-65-0	1,3-Dinitrobenzene	1	1	1
99-87-6	p-Cymene	1	1.3	1.1
Particulate matter		1	1	1
All radionuclides combined		1	1	1

Contents

7 Toxicity Reference Values for Ecological Receptors 7-1

Tables

Table 7-1 Plant and Invertebrate Toxicity Reference Values 7-1

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values 7-16

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values 7-30

Table 7-4 Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values 7-44

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values 7-60

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values 7-75

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values 7-90

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values 7-105

7 Toxicity Reference Values for Ecological Receptors

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
100-02-7	4-Nitrophenol				7.00E+03	µg/kg	[1]
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene						
100-42-5	Styrene	3.20E+05	µg/kg	[1]			
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde						
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
10045-97-3	Cesium-137	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
10098-97-2	Strontium-90	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol						
10595-95-6	n-Nitrosomethylethylamine						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene				2.00E+04	µg/kg	[1]
106-47-8	p-Chloroaniline				3.00E+04	µg/kg	[1]
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane						
107-12-0	Propionitrile						
107-13-1	Acrylonitrile						
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone						
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	2.00E+05	µg/kg	[1]			
108-90-7	Chlorobenzene				4.00E+04	µg/kg	[1]
108-94-1	Cyclohexanone						
108-95-2	Phenol	7.90E+04	µg/kg	[1]	3.00E+04	µg/kg	[1]
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)						
117-84-0	n-Dioctyl phthalate						
118-74-1	Hexachlorobenzene						
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene						
120-82-1	1,2,4-Trichlorobenzene				2.00E+04	µg/kg	[1]
120-83-2	2,4-Dichlorophenol						
121-14-2	2,4-Dinitrotoluene						
122-39-4	N,N-Diphenylamine						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide						
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane						
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene						
131-11-3	Dimethyl phthalate				2.00E+05	µg/kg	[1]
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	1.00E+04	µg/kg	[3]	2.51E+03	µg/kg	[4]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13967-48-1	Ruthenium-106	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13967-70-9	Cesium-134	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13968-55-3	Uranium-233	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13981-15-2	Curium-244	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13981-16-3	Plutonium-238	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13981-37-8	Nickel-63	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13982-10-0	Plutonium-242	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13982-63-3	Radium-226	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
13982-70-2	Uranium-236	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
13994-20-2	Neptunium-237	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14119-33-6	Plutonium-240	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14133-76-7	Technetium-99	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14158-29-3	Uranium-232	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14234-35-6	Antimony-125	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14336-70-0	Nickel-59	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14391-16-3	Europium-155	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
145-73-3	Endothall						
14596-10-2	Americium-241	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14683-23-9	Europium-152	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14762-75-5	Carbon-14	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
14993-75-0	Americium-243	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15046-84-1	Iodine-129	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15117-48-3	Plutonium-239	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15117-96-1	Uranium-235	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15262-20-1	Radium-228	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15510-73-3	Curium-242	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15585-10-1	Europium-154	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15594-54-4	Thorium-229	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15751-77-6	Zirconium-93	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
15757-87-6	Curium-243	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15758-45-9	Selenium-79	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
15832-50-5	Tin-126	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride						
16984-48-8	Fluoride	2.00E+02	mg/kg	[1]	3.00E+01	mg/kg	[2]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin				5.00E+02	µg/kg	[4]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
206-44-0	Fluoranthene						
207-08-9	Benzo[k]fluoranthene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
208-96-8	Acenaphthylene						
218-01-9	Chrysene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury				2.50E+00	mg/kg	[4]
23950-58-5	Pronamide						
24959-67-9	Bromide	1.00E+01	mg/kg	[1]			
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
319-85-7	beta-BHC						
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)						
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde						
50-32-8	Benzo[a]pyrene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol	2.00E+04	µg/kg	[1]			
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran						
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
53-70-3	Dibenz[a,h]anthracene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene						
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene						
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride						
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	1.20E+03	µg/kg	[3]	2.50E+04	µg/kg	[4]
57-12-5	Cyanide						
57-24-9	Strychnine						
57-74-9	Chlordane						
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran						
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran						
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)						
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene						
608-93-5	Pentachlorobenzene				1.15E+03	µg/kg	[4]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)						
67-66-3	Chloroform						
67-72-1	Hexachloroethane						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
70-30-4	Hexachlorophene						
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol						
71-43-2	Benzene						
71-55-6	1,1,1-Trichloroethane						
72-43-5	Methoxychlor						
72-55-9	4,4'-DDE						
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane						
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	5.00E+00	mg/kg	[3]			
7439-89-6	Iron						
7439-92-1	Lead	4.60E+00	mg/kg	[3]	1.00E+02	mg/kg	[4]
7439-93-2	Lithium	2.00E+00	mg/kg	[1]			
7439-95-4	Magnesium						
7439-96-5	Manganese	5.00E+02	mg/kg	[1]			
7439-97-6	Mercury						
7439-98-7	Molybdenum	2.00E+00	mg/kg	[1]			
7440-02-0	Nickel	2.50E+01	mg/kg	[3]	1.00E+02	mg/kg	[4]
7440-16-6	Rhodium						
7440-22-4	Silver	2.00E-02	mg/kg	[3]			
7440-23-5	Sodium						
7440-24-6	Strontium						
7440-25-7	Tantalum						
7440-28-0	Thallium	1.00E-02	mg/kg	[3]			
7440-29-1	Thorium-232	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
7440-31-5	Tin	5.00E+01	mg/kg	[1]			
7440-33-7	Tungsten						
7440-36-0	Antimony	5.00E-01	mg/kg	[3]			
7440-38-2	Arsenic	1.00E+00	mg/kg	[3]	2.50E-01	mg/kg	[4]
7440-39-3	Barium	5.00E+00	mg/kg	[3]			
7440-41-7	Beryllium	1.00E-01	mg/kg	[3]			
7440-43-9	Cadmium	2.00E-01	mg/kg	[3]	1.00E+01	mg/kg	[4]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.00E+01	mg/kg	[1]			
7440-50-8	Copper	1.00E+00	mg/kg	[3]	3.20E+01	mg/kg	[4]
7440-61-1	Uranium	5.00E+00	mg/kg	[1]			
7440-61-1R	Uranium-238	1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]
7440-62-2	Vanadium	2.00E+00	mg/kg	[1]			
7440-65-5	Yttrium						
7440-66-6	Zinc	9.00E-01	mg/kg	[3]	1.99E+02	mg/kg	[4]
7440-67-7	Zirconium						
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene						
75-02-5	Fluoroethene (vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane						
75-15-0	Carbon disulfide						
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
75-35-4	1,1-Dichloroethene						
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane						
75-71-8	Dichlorodifluoromethane						
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	1.00E+03	µg/kg	[3]			
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride						
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride	2.00E+02	mg/kg	[1]	3.00E+01	mg/kg	[2]
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene	1.00E+02	µg/kg	[3]			
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	5.00E-02	mg/kg	[3]	7.70E+00	mg/kg	[4]
7782-50-5	Chlorine						
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane				7.00E+05	µg/kg	[1]
78-93-3	2-Butanone						
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene						
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
82-68-8	Pentachloronitrobenzene						
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	2.00E+04	µg/kg	[1]			
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	1.34E+05	µg/kg	[1]			
84-74-2	Dibutyl phthalate	2.00E+05	µg/kg	[1]			
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene				3.06E+04	µg/kg	[1]
87-61-6	1,2,3-Trichlorobenzene				2.00E+04	µg/kg	[1]
87-68-3	Hexachlorobutadiene						
87-86-5	Pentachlorophenol	1.73E+03	µg/kg	[3]	1.00E+04	µg/kg	[4]
88-06-2	2,4,6-Trichlorophenol				1.00E+04	µg/kg	[1]
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene						
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl	6.80E+04	µg/kg	[1]			
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol						
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene						

Table 7-1 Plant and Invertebrate Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Value (*TRV*) of Plants	Units for of Direct Exposure *TRV* of Plants	Reference	Direct Exposure *TRV* of Terrestrial Invertebrates	Units for Direct Exposure *TRV* of Terrestrial Invertebrates	Reference
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						
95-95-4	2,4,5-Trichlorophenol	4.30E+03	µg/kg	[1]	9.00E+03	µg/kg	[1]
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						
98-95-3	Nitrobenzene				2.26E+03	µg/kg	[4]
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene				2.26E+03	µg/kg	[4]
99-87-6	p-Cymene						
All radionuclides combined (rad/day)		1.00E+00	rad/d	[2]	1.00E+00	rad/d	[3]

Reference — **Reference (source) for Direct Exposure Toxicity Reference Values of Plants**

[1] Efroymson RA, Will ME, Suter II GW, and Wooten AC. 1997. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision*, ES/ER/TM-85/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

[2] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[3] Table E-5 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Direct Exposure Toxicity Reference Values of Terrestrial Invertebrates
[1]	Efroymson RA, Will ME, and Suter II GW. 1997. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision*, ES/ER/TM-126/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.
[2]	Efroymson RA, Will ME, and Suter II GW. 1997. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision*, ES/ER/TM-126/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.(Value from Table 2 for soil microbial processes)
[3]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[4]	Table E-6 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene	9.71E+03	µg/kg BW /d	[5]			
100-42-5	Styrene	2.00E+04	µg/kg BW /d	[5]			
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde	1.43E+04	µg/kg BW /d	[5]			
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol	5.00E+03	µg/kg BW /d	[5]			
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						
106-47-8	p-Chloroaniline	1.25E+03	µg/kg BW /d	[5]			

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	5.00E+04	µg/kg BW /d	[4]	1.72E+04	µg/kg BW /d	[3]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	4.60E+02	µg/kg BW /d	[2]			
107-19-7	Propargyl alcohol	5.00E+02	µg/kg BW /d	[5]			
107-21-1	Ethylene glycol	2.00E+04	µg/kg BW /d	[5]			
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone	2.50E+04	µg/kg BW /d	[4]			
108-39-4	m-Cresol	5.00E+03	µg/kg BW /d	[5]			
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	2.60E+04	µg/kg BW /d	[4]			
108-90-7	Chlorobenzene	1.90E+04	µg/kg BW /d	[5]			
108-94-1	Cyclohexanone						
108-95-2	Phenol	6.00E+04	µg/kg BW /d	[5]			
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine	1.00E+02	µg/kg BW /d	[5]			
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether	5.10E+02	µg/kg BW /d	[5]			
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	6.00E+04	µg/kg BW /d	[2]	1.11E+02	µg/kg BW /d	[1]
117-84-0	n-Dioctyl phthalate	7.50E+06	µg/kg BW /d	[2]			
118-74-1	Hexachlorobenzene	1.60E+03	µg/kg BW /d	[2]	2.25E+02	µg/kg BW /d	[1]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene	1.00E+05	µg/kg BW /d	[5]			
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol	3.00E+01	µg/kg BW /d	[5]			
121-14-2	2,4-Dinitrotoluene	3.50E+04	µg/kg BW /d	[2]			
122-39-4	N,N-Diphenylamine	2.50E+02	µg/kg BW /d	[5]			
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide	5.00E+04	µg/kg BW /d	[5]			
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane	1.06E+05	µg/kg BW /d	[2]			
124-18-5	Decane						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	2.14E+03	µg/kg BW /d	[5]			
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile	3.40E+01	µg/kg BW /d	[5]			
127-18-4	1,1,2,2-Tetrachloroethene	1.40E+03	µg/kg BW /d	[5]			
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene	7.50E+03	µg/kg BW /d	[5]			
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	2.00E+01	µg/kg BW /d	[5]			
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	2.06E-01	µg/kg BW /d	[2]	7.20E+01	µg/kg BW /d	[1]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-15-2	Curium-244	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
141-78-6	Acetic acid ethyl ester	9.00E+04	µg/kg BW /d	[5]			
14119-32-5	Plutonium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14119-33-6	Plutonium-240	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
145-73-3	Endothall	2.00E+03	µg/kg BW /d	[5]			
14596-10-2	Americium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15510-73-3	Curium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene	1.70E+03	µg/kg BW /d	[5]			
15715-94-3	Samarium-151	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride						
16984-48-8	Fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-03	µg/kg BW /d	[4]	1.00E-02	µg/kg BW /d	[1]
189-55-9	Dibenzo[a,i]pyrene						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene				1.00E+00	µg/kg BW /d	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene				1.40E-01	µg/kg BW /d	[1]
206-44-0	Fluoranthene	1.25E+04	µg/kg BW /d	[5]			
207-08-9	Benzo[k]fluoranthene				1.40E-01	µg/kg BW /d	[1]
208-96-8	Acenaphthylene						
218-01-9	Chrysene				1.00E+00	µg/kg BW /d	[1]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	3.20E-02	mg/kg BW /d	[2]	6.40E-03	mg/kg BW /d	[1]
23950-58-5	Pronamide	7.50E+02	µg/kg BW /d	[5]			
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC	4.00E-01	µg/kg BW /d	[4]			
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)	8.00E+01	µg/kg BW /d	[2]			
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	2.30E+03	µg/kg BW /d	[2]			
50-32-8	Benzo[a]pyrene	1.00E+02	µg/kg BW /d	[2]	1.00E+00	µg/kg BW /d	[1]
506-68-3	Cyanogen bromide	4.40E+03	µg/kg BW /d	[5]			
506-77-4	Cyanogen chloride	2.53E+03	µg/kg BW /d	[5]			
51-28-5	2,4-Dinitrophenol	2.00E+02	µg/kg BW /d	[5]			
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran				1.00E-03	µg/kg BW /d	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	2.00E+00	µg/kg BW /d	[2]	3.90E-01	µg/kg BW /d	[1]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene	4.52E+04	µg/kg BW /d	[4]			
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene	2.50E+03	µg/kg BW /d	[5]			
542-88-1	Dichloromethyl ether						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	7.10E+01	µg/kg BW /d	[5]			
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	1.67E+02	µg/kg BW /d	[2]	7.90E-01	µg/kg BW /d	[1]
57-12-5	Cyanide	2.40E+01	mg/kg BW /d	[2]	4.00E-02	mg/kg BW /d	[1]
57-24-9	Strychnine	2.50E+01	µg/kg BW /d	[5]			
57-74-9	Chlordane	4.58E+03	µg/kg BW /d	[4]	2.14E+03	µg/kg BW /d	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.60E-02	µg/kg BW /d	[4]			
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	8.00E+03	µg/kg BW /d	[4]	2.00E+03	µg/kg BW /d	[3]
58-90-2	2,3,4,6-Tetrachlorophenol	2.50E+03	µg/kg BW /d	[5]	-	-	-
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether	5.00E+04	µg/kg BW /d	[5]			
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene	4.00E+01	µg/kg BW /d	[2]			
608-93-5	Pentachlorobenzene	7.25E+03	µg/kg BW /d	[2]			
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane	8.93E+03	µg/kg BW /d	[5]			
64-18-6	Formic acid						
65-85-0	Benzoic acid	4.00E+03	µg/kg BW /d	[5]			
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol	5.00E+04	µg/kg BW /d	[5]			
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)	1.00E+04	µg/kg BW /d	[2]	5.20E+04	µg/kg BW /d	[1]
67-66-3	Chloroform	6.00E+04	µg/kg BW /d	[2]			
67-72-1	Hexachloroethane	1.00E+02	µg/kg BW /d	[5]			
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	5.60E+03	µg/kg BW /d	[2]	5.75E+03	µg/kg BW /d	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol	1.25E+04	µg/kg BW /d	[5]			
71-43-2	Benzene	2.64E+04	µg/kg BW /d	[4]			
71-55-6	1,1,1-Trichloroethane	1.00E+06	µg/kg BW /d	[4]			
72-43-5	Methoxychlor	5.01E+03	µg/kg BW /d	[5]			
72-55-9	4,4'-DDE	1.00E+03	µg/kg BW /d	[2]	8.45E+02	µg/kg BW /d	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane	1.40E+02	µg/kg BW /d	[5]			
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.93E+00	mg/kg BW /d	[2]	1.00E+02	mg/kg BW /d	[1]
7439-89-6	Iron						
7439-92-1	Lead	3.75E-02	mg/kg BW /d	[2]	2.50E-02	mg/kg BW /d	[1]
7439-93-2	Lithium	9.39E+00	mg/kg BW /d	[4]			
7439-95-4	Magnesium						
7439-96-5	Manganese	8.80E+01	mg/kg BW /d	[4]	9.77E+02	mg/kg BW /d	[3]
7439-97-6	Mercury						
7439-98-7	Molybdenum	2.58E-01	mg/kg BW /d	[4]	3.53E+00	mg/kg BW /d	[3]
7440-02-0	Nickel	5.00E+01	mg/kg BW /d	[2]	6.50E+01	mg/kg BW /d	[1]
7440-16-6	Rhodium						
7440-22-4	Silver	3.75E-01	mg/kg BW /d	[2]	1.78E+02	mg/kg BW /d	[1]
7440-23-5	Sodium						
7440-24-6	Strontium	2.63E+02	mg/kg BW /d	[4]			
7440-25-7	Tantalum						
7440-28-0	Thallium	1.31E-02	mg/kg BW /d	[2]	3.50E-01	mg/kg BW /d	[1]
7440-29-1	Thorium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
7440-31-5	Tin						
7440-33-7	Tungsten						
7440-36-0	Antimony	6.60E-02	mg/kg BW /d	[2]			
7440-38-2	Arsenic	1.25E+00	mg/kg BW /d	[2]	2.46E+00	mg/kg BW /d	[1]
7440-39-3	Barium	5.10E-01	mg/kg BW /d	[2]	2.08E+01	mg/kg BW /d	[1]
7440-41-7	Beryllium	6.60E-01	mg/kg BW /d	[2]			
7440-43-9	Cadmium	2.52E-02	mg/kg BW /d	[2]	1.45E+00	mg/kg BW /d	[1]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.86E-01	mg/kg BW /d	[1]			
7440-50-8	Copper	1.20E+01	mg/kg BW /d	[2]	4.70E+01	mg/kg BW /d	[1]
7440-61-1	Uranium	3.07E+00	mg/kg BW /d	[4]	1.60E+01	mg/kg BW /d	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
7440-62-2	Vanadium	2.10E-01	mg/kg BW /d	[4]	1.14E+01	mg/kg BW /d	[3]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.04E+01	mg/kg BW /d	[2]	1.31E+02	mg/kg BW /d	[1]

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
7440-67-7	Zirconium	1.74E+00	mg/kg BW /d	[4]			
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene	1.70E+02	µg/kg BW /d	[2]			
75-02-5	Fluoroethene (vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane	6.16E+03	µg/kg BW /d	[5]			
75-15-0	Carbon disulfide	1.10E+04	µg/kg BW /d	[5]			
75-21-8	Oxirane						
75-25-2	Bromoform	1.79E+03	µg/kg BW /d	[5]			
75-27-4	Bromodichloromethane	1.79E+03	µg/kg BW /d	[5]			
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene	3.00E+04	µg/kg BW /d	[4]			
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane	3.49E+04	µg/kg BW /d	[5]			
75-71-8	Dichlorodifluoromethane	1.50E+04	µg/kg BW /d	[5]			
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	2.50E+00	µg/kg BW /d	[2]	6.50E+01	µg/kg BW /d	[1]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride	1.44E+01	mg/kg BW /d	[5]			
765-34-4	Glycidylaldehyde	1.09E+02	µg/kg BW /d	[5]			
7664-39-3	Hydrogen fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene	3.80E+03	µg/kg BW /d	[2]			
77-78-1	Dimethyl sulfate						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	7.60E-02	mg/kg BW /d	[2]	5.00E-01	mg/kg BW /d	[1]
7782-50-5	Chlorine	1.44E+01	mg/kg BW /d	[5]			
78-83-1	2-Methylpropyl alcohol	3.16E+04	µg/kg BW /d	[5]			
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone	1.77E+06	µg/kg BW /d	[5]			
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene	7.00E+02	µg/kg BW /d	[5]			
79-10-7	2-Propenoic acid	5.30E+03	µg/kg BW /d	[5]			
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate	1.36E+05	µg/kg BW /d	[5]			
82-68-8	Pentachloronitrobenzene	4.58E+05	µg/kg BW /d	[2]	6.88E+04	µg/kg BW /d	[1]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	1.75E+04	µg/kg BW /d	[5]			
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	4.58E+06	µg/kg BW /d	[4]			
84-74-2	Dibutyl phthalate	5.50E+05	µg/kg BW /d	[4]	1.11E+02	µg/kg BW /d	[3]
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride	1.56E+05	µg/kg BW /d	[5]			
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene	1.25E+04	µg/kg BW /d	[5]			
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	2.00E+02	µg/kg BW /d	[2]	3.19E+03	µg/kg BW /d	[1]
87-86-5	Pentachlorophenol	3.00E+02	µg/kg BW /d	[2]	4.03E+03	µg/kg BW /d	[1]
88-06-2	2,4,6-Trichlorophenol						
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene	7.10E+03	µg/kg BW /d	[5]			
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene	2.50E+05	µg/kg BW /d	[5]			
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl	5.00E+04	µg/kg BW /d	[5]			
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol	5.00E+03	µg/kg BW /d	[5]			
95-49-8	2-Chlorotoluene	2.00E+04	µg/kg BW /d	[5]			
95-50-1	1,2-Dichlorobenzene	8.57E+04	µg/kg BW /d	[5]			
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene	3.40E+01	µg/kg BW /d	[5]			
95-95-4	2,4,5-Trichlorophenol	1.00E+04	µg/kg BW /d	[5]			
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane	5.71E+02	µg/kg BW /d	[5]			
96-45-7	Ethylene thiourea	2.50E+01	µg/kg BW /d	[5]			
97-63-2	Ethyl methacrylate						
98-01-1	Furfural	7.90E+01	µg/kg BW /d	[5]			
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene	1.10E+05	µg/kg BW /d	[5]			
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone	4.23E+04	µg/kg BW /d	[5]			
98-95-3	Nitrobenzene	4.60E+01	µg/kg BW /d	[5]			
99-35-4	1,3,5-Trinitrobenzene	2.68E+03	µg/kg BW /d	[5]			
99-65-0	1,3-Dinitrobenzene	1.05E+03	µg/kg BW /d	[2]	4.22E-01	µg/kg BW /d	[1]

Table 7-2 Mule Deer and Mourning Dove Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mule Deer	Units for Mule Deer Ingestion *TRV*	Reference	Ingestion *TRV* of the Mourning Dove	Units for Mourning Dove Ingestion *TRV*	Reference
99-87-6	p-Cymene						
All radionuclides combined		1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Mule Deer
[1]	Clayton, GD and Clayton, FE. 1981. *Patty's Industrial Hygiene and Toxicology, Vol. 2A: Toxicology*, 3rd Revised Edition. John Wiley & Sons, New York.
[2]	EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[3]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[4]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.
[5]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed 2004.

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Mourning Dove
[1]	EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[2]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[3]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene	9.71E+03	µg/kg BW /d	[5]			
100-42-5	Styrene	2.00E+04	µg/kg BW /d	[5]			
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde	1.43E+04	µg/kg BW /d	[5]			
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol	5.00E+03	µg/kg BW /d	[5]			
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						
106-47-8	p-Chloroaniline	1.25E+03	µg/kg BW /d	[5]			

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	5.00E+04	µg/kg BW /d	[4]	1.72E+04	µg/kg BW /d	[3]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	4.60E+02	µg/kg BW /d	[2]			
107-19-7	Propargyl alcohol	5.00E+02	µg/kg BW /d	[5]			
107-21-1	Ethylene glycol	2.00E+04	µg/kg BW /d	[5]			
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone	2.50E+04	µg/kg BW /d	[4]			
108-39-4	m-Cresol	5.00E+03	µg/kg BW /d	[5]			
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	2.60E+04	µg/kg BW /d	[4]			
108-90-7	Chlorobenzene	1.90E+04	µg/kg BW /d	[5]			
108-94-1	Cyclohexanone						
108-95-2	Phenol	6.00E+04	µg/kg BW /d	[5]			
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine	1.00E+02	µg/kg BW /d	[5]			
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether	5.10E+02	µg/kg BW /d	[5]			
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	6.00E+04	µg/kg BW /d	[2]	1.11E+02	µg/kg BW /d	[1]
117-84-0	n-Dioctyl phthalate	7.50E+06	µg/kg BW /d	[2]			
118-74-1	Hexachlorobenzene	1.60E+03	µg/kg BW /d	[2]	2.25E+02	µg/kg BW /d	[1]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene	1.00E+05	µg/kg BW /d	[5]			
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol	3.00E+01	µg/kg BW /d	[5]			
121-14-2	2,4-Dinitrotoluene	3.50E+04	µg/kg BW /d	[2]			
122-39-4	N,N-Diphenylamine	2.50E+02	µg/kg BW /d	[5]			
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide	5.00E+04	µg/kg BW /d	[5]			
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane	1.06E+05	µg/kg BW /d	[2]			
124-18-5	Decane						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	2.14E+03	µg/kg BW /d	[5]			
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile	3.40E+01	µg/kg BW /d	[5]			
127-18-4	1,1,2,2-Tetrachloroethene	1.40E+03	µg/kg BW /d	[5]			
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene	7.50E+03	µg/kg BW /d	[5]			
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	2.00E+01	µg/kg BW /d	[5]			
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	2.06E-01	µg/kg BW /d	[2]	7.20E+01	µg/kg BW /d	[1]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-15-2	Curium-244	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
141-78-6	Acetic acid ethyl ester	9.00E+04	µg/kg BW /d	[5]			
14119-32-5	Plutonium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14119-33-6	Plutonium-240	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
145-73-3	Endothall	2.00E+03	µg/kg BW /d	[5]			
14596-10-2	Americium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15510-73-3	Curium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene	1.70E+03	µg/kg BW /d	[5]			
15715-94-3	Samarium-151	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride						
16984-48-8	Fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-03	µg/kg BW /d	[4]	1.00E-02	µg/kg BW /d	[1]
189-55-9	Dibenzo[a,i]pyrene						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene				1.00E+00	µg/kg BW /d	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene				1.40E-01	µg/kg BW /d	[1]
206-44-0	Fluoranthene	1.25E+04	µg/kg BW /d	[5]			
207-08-9	Benzo[k]fluoranthene				1.40E-01	µg/kg BW /d	[1]
208-96-8	Acenaphthylene						
218-01-9	Chrysene				1.00E+00	µg/kg BW /d	[1]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	3.20E-02	mg/kg BW /d	[2]	6.40E-03	mg/kg BW /d	[1]
23950-58-5	Pronamide	7.50E+03	µg/kg BW /d	[5]			
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC	4.00E-01	µg/kg BW /d	[4]			
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)	8.00E+01	µg/kg BW /d	[2]			
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	2.30E+03	µg/kg BW /d	[2]			
50-32-8	Benzo[a]pyrene	1.00E+02	µg/kg BW /d	[2]	1.00E+00	µg/kg BW /d	[1]
506-68-3	Cyanogen bromide	4.40E+03	µg/kg BW /d	[5]			
506-77-4	Cyanogen chloride	2.53E+03	µg/kg BW /d	[5]			
51-28-5	2,4-Dinitrophenol	2.00E+02	µg/kg BW /d	[5]			
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran				1.00E-03	µg/kg BW /d	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	2.00E+00	µg/kg BW /d	[2]	3.90E-01	µg/kg BW /d	[1]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene	4.52E+04	µg/kg BW /d	[4]			
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene	2.50E+03	µg/kg BW /d	[5]			
542-88-1	Dichloromethyl ether						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	7.10E+01	µg/kg BW /d	[5]			
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	1.67E+02	µg/kg BW /d	[2]	7.90E-01	µg/kg BW /d	[1]
57-12-5	Cyanide	2.40E+01	mg/kg BW /d	[2]	4.00E-02	mg/kg BW /d	[1]
57-24-9	Strychnine	2.50E+01	µg/kg BW /d	[5]			
57-74-9	Chlordane	4.58E+03	µg/kg BW /d	[4]	2.14E+03	µg/kg BW /d	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.60E-02	µg/kg BW /d	[4]			
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	8.00E+03	µg/kg BW /d	[4]	2.00E+03	µg/kg BW /d	[3]
58-90-2	2,3,4,6-Tetrachlorophenol	2.50E+03	µg/kg BW /d	[5]			
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether	5.00E+04	µg/kg BW /d	[5]			
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene	4.00E+01	µg/kg BW /d	[2]			
608-93-5	Pentachlorobenzene	7.25E+03	µg/kg BW /d	[2]			
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane	8.93E+03	µg/kg BW /d	[5]			
64-18-6	Formic acid						
65-85-0	Benzoic acid	4.00E+03	µg/kg BW /d	[5]			
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol	5.00E+04	µg/kg BW /d	[5]			
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)	1.00E+04	µg/kg BW /d	[2]	5.20E+04	µg/kg BW /d	[1]
67-66-3	Chloroform	6.00E+04	µg/kg BW /d	[2]			
67-72-1	Hexachloroethane	1.00E+02	µg/kg BW /d	[5]			
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	5.60E+03	µg/kg BW /d	[2]	5.75E+03	µg/kg BW /d	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol	1.25E+04	µg/kg BW /d	[5]			
71-43-2	Benzene	2.64E+04	µg/kg BW /d	[4]			
71-55-6	1,1,1-Trichloroethane	1.00E+06	µg/kg BW /d	[4]			
72-43-5	Methoxychlor	5.01E+03	µg/kg BW /d	[5]			
72-55-9	4,4'-DDE	1.00E+03	µg/kg BW /d	[2]	8.45E+02	µg/kg BW /d	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane	1.40E+02	µg/kg BW /d	[5]			
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.93E+00	mg/kg BW /d	[2]	1.00E+02	mg/kg BW /d	[1]
7439-89-6	Iron						
7439-92-1	Lead	3.75E-02	mg/kg BW /d	[2]	2.50E-02	mg/kg BW /d	[1]
7439-93-2	Lithium	9.39E+00	mg/kg BW /d	[4]			
7439-95-4	Magnesium						
7439-96-5	Manganese	8.80E+01	mg/kg BW /d	[4]	9.77E+02	mg/kg BW /d	[3]
7439-97-6	Mercury						
7439-98-7	Molybdenum	2.58E-01	mg/kg BW /d	[4]	3.53E+00	mg/kg BW /d	[3]
7440-02-0	Nickel	5.00E+01	mg/kg BW /d	[2]	6.50E+01	mg/kg BW /d	[1]
7440-16-6	Rhodium						
7440-22-4	Silver	3.75E-01	mg/kg BW /d	[2]	1.78E+02	mg/kg BW /d	[1]
7440-23-5	Sodium						
7440-24-6	Strontium	2.63E+02	mg/kg BW /d	[4]			
7440-25-7	Tantalum						
7440-28-0	Thallium	1.31E-02	mg/kg BW /d	[2]	3.50E-01	mg/kg BW /d	[1]
7440-29-1	Thorium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
7440-31-5	Tin						
7440-33-7	Tungsten						
7440-36-0	Antimony	6.60E-02	mg/kg BW /d	[2]			
7440-38-2	Arsenic	1.25E+00	mg/kg BW /d	[2]	2.46E+00	mg/kg BW /d	[1]
7440-39-3	Barium	5.10E-01	mg/kg BW /d	[2]	2.08E+01	mg/kg BW /d	[1]
7440-41-7	Beryllium	6.60E-01	mg/kg BW /d	[2]			
7440-43-9	Cadmium	2.52E-02	mg/kg BW /d	[2]	1.45E+00	mg/kg BW /d	[1]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.86E-01	mg/kg BW /d	[1]			
7440-50-8	Copper	1.20E+01	mg/kg BW /d	[2]	4.70E+01	mg/kg BW /d	[1]
7440-61-1	Uranium	3.07E+00	mg/kg BW /d	[4]	1.60E+01	mg/kg BW /d	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]
7440-62-2	Vanadium	2.10E-01	mg/kg BW /d	[4]	1.14E+01	mg/kg BW /d	[3]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.04E+01	mg/kg BW /d	[2]	1.31E+02	mg/kg BW /d	[1]

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
7440-67-7	Zirconium	1.74E+00	mg/kg BW /d	[4]			
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene	1.70E+02	µg/kg BW /d	[2]			
75-02-5	Fluoroethene (vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane	6.16E+03	µg/kg BW /d	[5]			
75-15-0	Carbon disulfide	1.10E+04	µg/kg BW /d	[5]			
75-21-8	Oxirane						
75-25-2	Bromoform	1.79E+03	µg/kg BW /d	[5]			
75-27-4	Bromodichloromethane	1.79E+03	µg/kg BW /d	[5]			
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene	3.00E+04	µg/kg BW /d	[4]			
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane	3.49E+04	µg/kg BW /d	[5]			
75-71-8	Dichlorodifluoromethane	1.50E+04	µg/kg BW /d	[5]			
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	2.50E+00	µg/kg BW /d	[2]	6.50E+01	µg/kg BW /d	[1]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride	1.44E+01	mg/kg BW /d	[5]			
765-34-4	Glycidylaldehyde	1.09E+02	µg/kg BW /d	[5]			
7664-39-3	Hydrogen fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene	3.80E+03	µg/kg BW /d	[2]			
77-78-1	Dimethyl sulfate						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas F2						
7782-49-2	Selenium	7.60E-02	mg/kg BW /d	[2]	5.00E-01	mg/kg BW /d	[1]
7782-50-5	Chlorine	1.44E+01	mg/kg BW /d	[5]			
78-83-1	2-Methylpropyl alcohol	3.16E+04	µg/kg BW /d	[5]			
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone	1.77E+06	µg/kg BW /d	[5]			
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene	7.00E+02	µg/kg BW /d	[5]			
79-10-7	2-Propenoic acid	5.30E+03	µg/kg BW /d	[5]			
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate	1.36E+05	µg/kg BW /d	[5]			
82-68-8	Pentachloronitrobenzene	4.58E+05	µg/kg BW /d	[2]	6.88E+04	µg/kg BW /d	[1]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	1.75E+04	µg/kg BW /d	[5]			
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	4.58E+06	µg/kg BW /d	[4]			
84-74-2	Dibutyl phthalate	5.50E+05	µg/kg BW /d	[4]	1.11E+02	µg/kg BW /d	[3]
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride	1.56E+05	µg/kg BW /d	[5]			
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene	1.25E+04	µg/kg BW /d	[5]			
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	2.00E+02	µg/kg BW /d	[2]	3.19E+03	µg/kg BW /d	[1]
87-86-5	Pentachlorophenol	3.00E+02	µg/kg BW /d	[2]	4.03E+03	µg/kg BW /d	[1]
88-06-2	2,4,6-Trichlorophenol						
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene	7.10E+03	µg/kg BW /d	[5]			
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene	2.50E+05	µg/kg BW /d	[5]			
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl	5.00E+04	µg/kg BW /d	[5]			
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol	5.00E+03	µg/kg BW /d	[5]			
95-49-8	2-Chlorotoluene	2.00E+04	µg/kg BW /d	[5]			
95-50-1	1,2-Dichlorobenzene	8.57E+04	µg/kg BW /d	[5]			
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene	3.40E+01	µg/kg BW /d	[5]			
95-95-4	2,4,5-Trichlorophenol	1.00E+04	µg/kg BW /d	[5]			
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane	5.71E+02	µg/kg BW /d	[5]			
96-45-7	Ethylene thiourea	2.50E+01	µg/kg BW /d	[5]			
97-63-2	Ethyl methacrylate						
98-01-1	Furfural	7.90E+01	µg/kg BW /d	[5]			
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene	1.10E+05	µg/kg BW /d	[5]			
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone	4.23E+04	µg/kg BW /d	[5]			
98-95-3	Nitrobenzene	4.60E+01	µg/kg BW /d	[5]			
99-35-4	1,3,5-Trinitrobenzene	2.68E+03	µg/kg BW /d	[5]			
99-65-0	1,3-Dinitrobenzene	1.05E+03	µg/kg BW /d	[2]	4.22E-01	µg/kg BW /d	[1]

Table 7-3 Great Basin Pocket Mouse and Western Meadowlark Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Pocket Mouse	Units for Pocket Mouse Ingestion *TRV*	Reference	Ingestion *TRV* of the Meadowlark	Units for Meadowlark Ingestion *TRV*	Reference
99-87-6	p-Cymene	-	-	-	-	-	-
All radionuclides combined (rad/day)		1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Great Basin Pocket Mouse**

[1] Clayton, GD and Clayton, FE. 1981. *Patty's Industrial Hygiene and Toxicology, Vol. 2A: Toxicology*, 3rd Revised Edition. John Wiley & Sons, New York.

[2] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[3] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[4] Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

[5] EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed 2004.

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Western Meadowlark**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[2] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[3] Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
100-02-7	4-Nitrophenol									
100-21-0	p-Phthalic acid									
100-25-4	1,4-Dinitrobenzene									
100-40-3	4-Ethenylcyclohexene									
100-41-4	Ethyl benzene	9.71E+03	µg/kg BW /d	[5]						
100-42-5	Styrene	2.00E+04	µg/kg BW /d	[5]						
100-44-7	Benzyl chloride									
100-47-0	Benzonitrile									
100-51-6	Benzyl alcohol									
100-52-7	Benzaldehyde	1.43E+04	µg/kg BW /d	[5]						
10028-15-6	Ozone									
10028-17-8	Tritium	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene									
10061-02-6	trans-1,3-Dichloropropene									
10098-91-6	Yttrium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether									
101-77-9	4,4'-Methylenedianiline									
10102-44-0	Nitrogen dioxide									
10198-40-0	Cobalt-60	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
103-33-3	Azobenzene									
103-65-1	n-Propyl benzene									
104-51-8	n-Butyl benzene									
104-76-7	2-Ethyl-1-hexanol									
105-67-9	2,4-Dimethylphenol	5.00E+03	µg/kg BW /d	[5]						
10595-95-6	n-Nitrosomethylethylamine									
106-43-4	4-Chlorotoluene									
106-44-5	p-Cresol									

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
106-46-7	1,4-Dichlorobenzene									
106-47-8	p-Chloroaniline	1.25E+03	µg/kg BW /d	[5]						
106-49-0	p-Toluidine									
106-51-4	Quinone									
106-88-7	1,2-Epoxybutane									
106-89-8	Epichlorohydrin									
106-93-4	Ethylene dibromide									
106-99-0	1,3-Butadiene									
107-02-8	Acrolein									
107-05-1	3-Chloropropene (Allyl chloride)									
107-06-2	1,2-Dichloroethane	5.00E+04	µg/kg BW /d	[4]	1.72E+04	µg/kg BW /d	[3]	1.72E+04	µg/kg BW /d	[3]
107-12-0	Propionitrile									
107-13-1	Acrylonitrile	4.60E+02	µg/kg BW /d	[2]						
107-19-7	Propargyl alcohol	5.00E+02	µg/kg BW /d	[5]						
107-21-1	Ethylene glycol	2.00E+04	µg/kg BW /d	[5]						
107-98-2	Propylene glycol monomethyl ether									
108-05-4	Vinyl acetate									
108-10-1	4-Methyl-2-pentanone	2.50E+04	µg/kg BW /d	[4]						
108-39-4	m-Cresol	5.00E+03	µg/kg BW /d	[5]						
108-60-1	Dichloroisopropyl ether									
108-67-8	1,3,5-Trimethyl benzene									
108-86-1	Bromobenzene									
108-87-2	Methylcyclohexane									
108-88-3	Toluene	2.60E+04	µg/kg BW /d	[4]						
108-90-7	Chlorobenzene	1.90E+04	µg/kg BW /d	[5]						
108-94-1	Cyclohexanone									
108-95-2	Phenol	6.00E+04	µg/kg BW /d	[5]						
109-74-0	n-Butanenitrile									

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
109-75-1	3-Butenenitrile									
109-77-3	Malononitrile									
109-86-4	2-Methoxyethanol									
109-99-9	Tetrahydrofuran									
110-00-9	Furan									
110-54-3	n-Hexane									
110-59-8	Pentanenitrile									
110-80-5	2-Ethoxyethanol									
110-82-7	Cyclohexane									
110-83-8	Cyclohexene									
110-86-1	Pyridine	1.00E+02	µg/kg BW /d	[5]						
111-15-9	Ethylene glycol monoethyl ether acetate									
111-44-4	Bis(2-chloroethyl) ether									
111-65-9	n-Octane									
111-76-2	Ethylene glycol monobutyl ether	5.10E+02	µg/kg BW /d	[5]						
111-84-2	n-Nonane									
111-91-1	Bis(2-chloroethoxy)methane									
112-30-1	1-Decanol									
112-31-2	Decanal									
112-40-3	Dodecane									
1120-21-4	Undecane									
1120-71-4	1,3-Propane sultone									
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	6.00E+04	µg/kg BW /d	[2]	1.11E+02	µg/kg BW /d	[1]	1.11E+02	µg/kg BW /d	[1]
117-84-0	n-Dioctyl phthalate	7.50E+06	µg/kg BW /d	[2]						
118-74-1	Hexachlorobenzene	1.60E+03	µg/kg BW /d	[2]	2.25E+02	µg/kg BW /d	[1]	2.25E+02	µg/kg BW /d	[1]
119-90-4	3,3'-Dimethoxybenzidine									
120-12-7	Anthracene	1.00E+05	µg/kg BW /d	[5]						
120-82-1	1,2,4-Trichlorobenzene									

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
120-83-2	2,4-Dichlorophenol	3.00E+01	µg/kg BW /d	[5]						
121-14-2	2,4-Dinitrotoluene	3.50E+04	µg/kg BW /d	[2]						
122-39-4	N,N-Diphenylamine	2.50E+02	µg/kg BW /d	[5]						
122-66-7	1,2-Diphenylhydrazine									
123-33-1	Maleic hydrazide	5.00E+04	µg/kg BW /d	[5]						
123-38-6	n-Propionaldehyde									
123-72-8	Butanal									
123-91-1	1,4-Dioxane	1.06E+05	µg/kg BW /d	[2]						
124-18-5	Decane									
124-38-9	Carbon dioxide									
124-48-1	Chlorodibromomethane	2.14E+03	µg/kg BW /d	[5]						
126-73-8	Tributyl phosphate									
126-98-7	2-Methyl-2-propenenitrile	3.40E+01	µg/kg BW /d	[5]						
127-18-4	1,1,2,2-Tetrachloroethene	1.40E+03	µg/kg BW /d	[5]						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol									
129-00-0	Pyrene	7.50E+03	µg/kg BW /d	[5]						
131-11-3	Dimethyl phthalate									
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	2.00E+01	µg/kg BW /d	[5]						
132-64-9	Dibenzofuran									
133-06-2	Captan									
1330-20-7	Xylenes (mixed isomers)									
1336-36-3	Polychlorinated biphenyls (PCBs)	2.06E-01	µg/kg BW /d	[2]	7.20E+01	µg/kg BW /d	[1]	7.20E+01	µg/kg BW /d	[1]
134-32-7	alpha-Naphthylamine									
135-98-8	sec-Butyl benzene									
13966-29-5	Uranium-234	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
13981-15-2	Curium-244	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
141-78-6	Acetic acid ethyl ester	9.00E+04	µg/kg BW /d	[5]						
14119-32-5	Plutonium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14119-33-6	Plutonium-240	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14265-44-2	Phosphate									
14331-85-2	Protactinium-231	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
145-73-3	Endothall	2.00E+03	µg/kg BW /d	[5]						
14596-10-2	Americium-241	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14797-55-8	Nitrate									
14797-65-0	Nitrite									
14808-79-8	Sulfate									
14952-40-0	Actinium-227	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
15510-73-3	Curium-242	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene									
156-60-5	trans-1,2-Dichloroethylene	1.70E+03	µg/kg BW /d	[5]						
15715-94-3	Samarium-151	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
1634-04-4	Methyl tert-butyl ether									
16887-00-6	Chloride									
16984-48-8	Fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-03	µg/kg BW /d	[4]	1.00E-02	µg/kg BW /d	[1]	1.00E-02	µg/kg BW /d	[1]
189-55-9	Dibenzo[a,i]pyrene									
189-64-0	Dibenzo[a,h]pyrene									
191-24-2	Benzo[g,h,i]perylene									
191-30-0	Benzo[a,i]pyrene									
192-65-4	Dibenzo[a,e]pyrene									
192-97-2	Benzo[e]pyrene									
193-39-5	Indeno[1,2,3-cd]pyrene				1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin									
205-82-3	Benzo[j]fluoranthene									
205-99-2	Benzo[b]fluoranthene				1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
206-44-0	Fluoranthene	1.25E+04	µg/kg BW /d	[5]						
207-08-9	Benzo[k]fluoranthene				1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
208-96-8	Acenaphthylene									
218-01-9	Chrysene				1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
224-42-0	Dibenz[a,j]acridine									
2245-38-7	2,3,5-Trimethylnaphthalene									
226-36-8	Dibenz[a,h]acridine									
22967-92-6	Methylmercury	3.20E-02	mg/kg BW /d	[2]	6.40E-03	mg/kg BW /d	[1]	6.40E-03	mg/kg BW /d	[1]
23950-58-5	Pronamide	7.50E+02	µg/kg BW /d	[5]						
24959-67-9	Bromide									
27154-33-2	Trichlorofluoroethane									
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl									
319-84-6	alpha-BHC									
319-85-7	beta-BHC	4.00E-01	µg/kg BW /d	[4]						
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl									
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl									
3268-87-9	Octachlorodibenzo(p)dioxin									
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl									
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin									
3697-24-3	5-Methylchrysene									
378253-40-8	Barium-137m									
378253-44-2	Cadmium-113m									
378782-82-2	Niobium-93m									
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl									
39001-02-0	Octachlorodibenzofuran									
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin									
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl									

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin									
4170-30-3	2-Butenaldehyde (2-Butenal)	8.00E+01	µg/kg BW /d	[2]						
41851-50-7	Chlorocyclopentadiene									
460-19-5	Cyanogen									
4786-20-3	2-Butenenitrile									
50-00-0	Formaldehyde	2.30E+03	µg/kg BW /d	[2]						
50-32-8	Benzo[a]pyrene	1.00E+02	µg/kg BW /d	[2]	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
506-68-3	Cyanogen bromide	4.40E+03	µg/kg BW /d	[5]						
506-77-4	Cyanogen chloride	2.53E+03	µg/kg BW /d	[5]						
51-28-5	2,4-Dinitrophenol	2.00E+02	µg/kg BW /d	[5]						
51-79-6	Ethyl carbamate (Urethane)									
510-15-6	Chlorobenzilate									
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran				1.00E-03	µg/kg BW /d	[3]	1.00E-03	µg/kg BW /d	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl									
528-29-0	o-Dinitrobenzene									
53-70-3	Dibenz[a,h]anthracene	2.00E+00	µg/kg BW /d	[2]	3.90E-01	µg/kg BW /d	[1]	3.90E-01	µg/kg BW /d	[1]
532-27-4	2-Chloroacetophenone									
534-52-1	4,6-Dinitro-o-cresol									
5385-75-1	Dibenzo[a,e]fluoranthene									
540-59-0	1,2-Dichloroethylene	4.52E+04	µg/kg BW /d	[4]						
540-73-8	1,2-Dimethylhydrazine									
540-84-1	2,2,4-Trimethylpentane									
541-73-1	1,3-Dichlorobenzene									
542-75-6	1,3-Dichloropropene	2.50E+03	µg/kg BW /d	[5]						
542-88-1	Dichloromethyl ether									
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran									
56-23-5	Carbon tetrachloride	7.10E+01	µg/kg BW /d	[5]						

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
56-49-5	3-Methylcholanthrene									
56-55-3	Benzo[a]anthracene	1.67E+02	µg/kg BW /d	[2]	7.90E-01	µg/kg BW /d	[1]	7.90E-01	µg/kg BW /d	[1]
57-12-5	Cyanide	2.40E+01	mg/kg BW /d	[2]	4.00E-02	mg/kg BW /d	[1]	4.00E-02	mg/kg BW /d	[1]
57-24-9	Strychnine	2.50E+01	µg/kg BW /d	[5]						
57-74-9	Chlordane	4.58E+03	µg/kg BW /d	[4]	2.14E+03	µg/kg BW /d	[3]	2.14E+03	µg/kg BW /d	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.60E-02	µg/kg BW /d	[4]						
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]						
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl									
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin									
58-89-9	gamma-BHC (Lindane)	8.00E+03	µg/kg BW /d	[4]	2.00E+03	µg/kg BW /d	[3]	2.00E+03	µg/kg BW /d	[3]
58-90-2	2,3,4,6-Tetrachlorophenol	2.50E+03	µg/kg BW /d	[5]						
581-42-0	2,6-Dimethylnaphthalene									
584-84-9	2,4-Toluene diisocyanate									
589-38-8	3-Hexanone									
59-50-7	4-Chloro-3-methylphenol									
59-89-2	N-Nitrosomorpholine									
591-50-4	Benzene, iodo-									
591-78-6	2-Hexanone									
593-60-2	Bromoethene									
593-74-8	Dimethyl Mercury									
60-11-7	Dimethyl aminoazobenzene									
60-29-7	Ethyl ether	5.00E+04	µg/kg BW /d	[5]						
60-35-5	Acetamide									
602-87-9	5-Nitroacenaphthene									
606-20-2	2,6-Dinitrotoluene	4.00E+01	µg/kg BW /d	[2]						

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
608-93-5	Pentachlorobenzene	7.25E+03	µg/kg BW /d	[2]						
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran									
61626-71-9	Dichloropentadiene									
62-50-0	Ethyl methanesulfonate									
62-53-3	Aniline									
62-75-9	N-Nitroso-N,N-dimethylamine									
621-64-7	Di-n-propylnitrosamine									
624-83-9	Methyl isocyanate									
628-73-9	Hexanenitrile									
630-08-0	Carbon monoxide									
630-20-6	1,1,1,2-Tetrachloroethane	8.93E+03	µg/kg BW /d	[5]						
64-18-6	Formic acid									
65-85-0	Benzoic acid	4.00E+03	µg/kg BW /d	[5]						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl									
67-56-1	Methyl alcohol	5.00E+04	µg/kg BW /d	[5]						
67-63-0	2-Propyl alcohol									
67-64-1	2-Propanone (Acetone)	1.00E+04	µg/kg BW /d	[2]	5.20E+04	µg/kg BW /d	[1]	5.20E+04	µg/kg BW /d	[1]
67-66-3	Chloroform	6.00E+04	µg/kg BW /d	[2]						
67-72-1	Hexachloroethane	1.00E+02	µg/kg BW /d	[5]						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran									
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl									
70-30-4	Hexachlorophene	5.60E+03	µg/kg BW /d	[2]	5.75E+03	µg/kg BW /d	[1]	5.75E+03	µg/kg BW /d	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl									
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran									
71-36-3	n-Butyl alcohol	1.25E+04	µg/kg BW /d	[5]						
71-43-2	Benzene	2.64E+04	µg/kg BW /d	[4]						

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
71-55-6	1,1,1-Trichloroethane	1.00E+06	µg/kg BW /d	[4]						
72-43-5	Methoxychlor	5.01E+03	µg/kg BW /d	[5]						
72-55-9	4,4'-DDE	1.00E+03	µg/kg BW /d	[2]	8.45E+02	µg/kg BW /d	[1]	8.45E+02	µg/kg BW /d	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran									
74-83-9	Bromomethane	1.40E+02	µg/kg BW /d	[5]						
74-87-3	Chloromethane									
74-88-4	Iodomethane									
74-95-3	Methylene bromide									
74-97-5	Bromochloromethane									
7429-90-5	Aluminum	1.93E+00	mg/kg BW /d	[2]	1.00E+02	mg/kg BW /d	[1]	1.00E+02	mg/kg BW /d	[1]
7439-89-6	Iron									
7439-92-1	Lead	3.75E-02	mg/kg BW /d	[2]	2.50E-02	mg/kg BW /d	[1]	2.50E-02	mg/kg BW /d	[1]
7439-93-2	Lithium	9.39E+00	mg/kg BW /d	[4]						
7439-95-4	Magnesium									
7439-96-5	Manganese	8.80E+01	mg/kg BW /d	[4]	9.77E+02	mg/kg BW /d	[3]	9.77E+02	mg/kg BW /d	[3]
7439-97-6	Mercury									
7439-98-7	Molybdenum	2.58E-01	mg/kg BW /d	[4]	3.53E+00	mg/kg BW /d	[3]	3.53E+00	mg/kg BW /d	[3]
7440-02-0	Nickel	5.00E+01	mg/kg BW /d	[2]	6.50E+01	mg/kg BW /d	[1]	6.50E+01	mg/kg BW /d	[1]
7440-16-6	Rhodium									
7440-22-4	Silver	3.75E-01	mg/kg BW /d	[2]	1.78E+02	mg/kg BW /d	[1]	1.78E+02	mg/kg BW /d	[1]
7440-23-5	Sodium									
7440-24-6	Strontium	2.63E+02	mg/kg BW /d	[4]						
7440-25-7	Tantalum									
7440-28-0	Thallium	1.31E-02	mg/kg BW /d	[2]	3.50E-01	mg/kg BW /d	[1]	3.50E-01	mg/kg BW /d	[1]
7440-29-1	Thorium-232	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-31-5	Tin									
7440-33-7	Tungsten									
7440-36-0	Antimony	6.60E-02	mg/kg BW /d	[2]						
7440-38-2	Arsenic	1.25E+00	mg/kg BW /d	[2]	2.46E+00	mg/kg BW /d	[1]	2.46E+00	mg/kg BW /d	[1]

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
7440-39-3	Barium	5.10E-01	mg/kg BW /d	[2]	2.08E+01	mg/kg BW /d	[1]	2.08E+01	mg/kg BW /d	[1]
7440-41-7	Beryllium	6.60E-01	mg/kg BW /d	[2]						
7440-43-9	Cadmium	2.52E-02	mg/kg BW /d	[2]	1.45E+00	mg/kg BW /d	[1]	1.45E+00	mg/kg BW /d	[1]
7440-47-3	Chromium									
7440-48-4	Cobalt	2.86E-01	mg/kg BW /d	[1]						
7440-50-8	Copper	1.20E+01	mg/kg BW /d	[2]	4.70E+01	mg/kg BW /d	[1]	4.70E+01	mg/kg BW /d	[1]
7440-61-1	Uranium	3.07E+00	mg/kg BW /d	[4]	1.60E+01	mg/kg BW /d	[3]	1.60E+01	mg/kg BW /d	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-62-2	Vanadium	2.10E-01	mg/kg BW /d	[4]	1.14E+01	mg/kg BW /d	[3]	1.14E+01	mg/kg BW /d	[3]
7440-65-5	Yttrium									
7440-66-6	Zinc	1.04E+01	mg/kg BW /d	[2]	1.31E+02	mg/kg BW /d	[1]	1.31E+02	mg/kg BW /d	[1]
7440-67-7	Zirconium	1.74E+00	mg/kg BW /d	[4]						
7446-09-5	Sulfur dioxide									
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl									
7487-94-7	Mercury (Hg^{+2})									
75-00-3	Chloroethane									
75-01-4	1-Chloroethene	1.70E+02	µg/kg BW /d	[2]						
75-02-5	Fluoroethene (vinyl fluoride)									
75-05-8	Acetonitrile									
75-07-0	Acetaldehyde									
75-09-2	Dichloromethane	6.16E+03	µg/kg BW /d	[5]						
75-15-0	Carbon disulfide	1.10E+04	µg/kg BW /d	[5]						
75-21-8	Oxirane									
75-25-2	Bromoform	1.79E+03	µg/kg BW /d	[5]						
75-27-4	Bromodichloromethane	1.79E+03	µg/kg BW /d	[5]						
75-29-6	2-Chloropropane									
75-34-3	1,1-Dichloroethane									
75-35-4	1,1-Dichloroethene	3.00E+04	µg/kg BW /d	[4]						
75-44-5	Phosgene									

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
75-45-6	Chlorodifluoromethane									
75-50-3	Trimethylamine									
75-69-4	Trichlorofluoromethane	3.49E+04	µg/kg BW /d	[5]						
75-71-8	Dichlorodifluoromethane	1.50E+04	µg/kg BW /d	[5]						
76-01-7	Pentachloroethane									
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane									
76-44-8	Heptachlor	2.50E+00	µg/kg BW /d	[2]	6.50E+01	µg/kg BW /d	[1]	6.50E+01	µg/kg BW /d	[1]
764-41-0	1,4-Dichloro-2-butene									
7647-01-0	Hydrogen chloride	1.44E+01	mg/kg BW /d	[5]						
765-34-4	Glycidylaldehyde	1.09E+02	µg/kg BW /d	[5]						
7664-39-3	Hydrogen fluoride	3.14E+01	mg/kg BW /d	[4]	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
7664-41-7	Ammonia/Ammonium									
77-47-4	Hexachlorocyclopentadiene	3.80E+03	µg/kg BW /d	[2]						
77-78-1	Dimethyl sulfate									
7704-34-9	Total Sulfur (thermodynamically stable)									
7723-14-0	Phosphorus									
7782-41-4	Fluorine gas (F_2)									
7782-49-2	Selenium	7.60E-02	mg/kg BW /d	[2]	5.00E-01	mg/kg BW /d	[1]	5.00E-01	mg/kg BW /d	[1]
7782-50-5	Chlorine	1.44E+01	mg/kg BW /d	[5]						
78-83-1	2-Methylpropyl alcohol	3.16E+04	µg/kg BW /d	[5]						
78-87-5	1,2-Dichloropropane									
78-93-3	2-Butanone	1.77E+06	µg/kg BW /d	[5]						
79-00-5	1,1,2-Trichloroethane									
79-01-6	1,1,2-Trichloroethylene	7.00E+02	µg/kg BW /d	[5]						
79-10-7	2-Propenoic acid	5.30E+03	µg/kg BW /d	[5]						
79-34-5	1,1,2,2-Tetrachloroethane									
79-46-9	2-Nitropropane									
80-62-6	Methyl methacrylate	1.36E+05	µg/kg BW /d	[5]						

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
82-68-8	Pentachloronitrobenzene	4.58E+05	µg/kg BW /d	[2]	6.88E+04	µg/kg BW /d	[1]	6.88E+04	µg/kg BW /d	[1]
822-06-0	Hexamethylene-1,5-diisocyanate									
823-40-5	Toluene-2,6-diamine									
83-32-9	Acenaphthene	1.75E+04	µg/kg BW /d	[5]						
832-69-9	1-Methylphenanthrene									
84-66-2	Diethyl phthalate	4.58E+06	µg/kg BW /d	[4]						
84-74-2	Dibutyl phthalate	5.50E+05	µg/kg BW /d	[4]	1.11E+02	µg/kg BW /d	[3]	1.11E+02	µg/kg BW /d	[3]
85-01-8	Phenanthrene									
85-44-9	Phthalic anhydride	1.56E+05	µg/kg BW /d	[5]						
85-68-7	Butylbenzyl phthalate									
86-73-7	Fluorene	1.25E+04	µg/kg BW /d	[5]						
87-61-6	1,2,3-Trichlorobenzene									
87-68-3	Hexachlorobutadiene	2.00E+02	µg/kg BW /d	[2]	3.19E+03	µg/kg BW /d	[1]	3.19E+03	µg/kg BW /d	[1]
87-86-5	Pentachlorophenol	3.00E+02	µg/kg BW /d	[2]	4.03E+03	µg/kg BW /d	[1]	4.03E+03	µg/kg BW /d	[1]
88-06-2	2,4,6-Trichlorophenol									
88-74-4	o-Nitroaniline									
88-75-5	2-Nitrophenol									
90-04-0	o-Anisidine									
90-12-0	1-Methylnaphthalene									
91-20-3	Naphthalene	7.10E+03	µg/kg BW /d	[5]						
91-22-5	Quinoline									
91-57-6	2-Methyl naphthalene									
91-58-7	2-Chloronaphthalene	2.50E+05	µg/kg BW /d	[5]						
91-94-1	3,3'-Dichlorobenzidine									
92-52-4	1,1'-Biphenyl	5.00E+04	µg/kg BW /d	[5]						
924-16-3	N-Nitrosodi-n-butylamine									
94-59-7	Safrole									
94-75-7	2,4-D and esters									
95-48-7	o-Cresol	5.00E+03	µg/kg BW /d	[5]						

Coyote, Red-Tailed Hawk, and Burrowing Owl Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Coyote	Units for Coyote Ingestion *TRV*	Reference	Ingestion *TRV* of Red-the Tailed Hawk	Units for Red-Tailed Hawk Ingestion *TRV*	Reference	Ingestion *TRV* of the Burrowing Owl	Units for Burrowing Owl Ingestion *TRV*	Reference
95-49-8	2-Chlorotoluene	2.00E+04	µg/kg BW /d	[5]						
95-50-1	1,2-Dichlorobenzene	8.57E+04	µg/kg BW /d	[5]						
95-53-4	o-Toluidine									
95-57-8	2-Chlorophenol									
95-63-6	1,2,4-Trimethyl benzene									
95-94-3	1,2,4,5-Tetrachlorobenzene	3.40E+01	µg/kg BW /d	[5]						
95-95-4	2,4,5-Trichlorophenol	1.00E+04	µg/kg BW /d	[5]						
96-12-8	1,2-Dibromo-3-chloropropane									
96-18-4	1,2,3-Trichloropropane	5.71E+02	µg/kg BW /d	[5]						
96-45-7	Ethylene thiourea	2.50E+01	µg/kg BW /d	[5]						
97-63-2	Ethyl methacrylate									
98-01-1	Furfural	7.90E+01	µg/kg BW /d	[5]						
98-06-6	tert-Butyl benzene									
98-07-7	Benzotrichloride									
98-82-8	Cumene	1.10E+05	µg/kg BW /d	[5]						
98-83-9	alpha-Methylstyrene									
98-86-2	Acetophenone	4.23E+04	µg/kg BW /d	[5]						
98-95-3	Nitrobenzene	4.60E+01	µg/kg BW /d	[5]						
99-35-4	1,3,5-Trinitrobenzene	2.68E+03	µg/kg BW /d	[5]						
99-65-0	1,3-Dinitrobenzene	1.05E+03	µg/kg BW /d	[2]	4.22E-01	µg/kg BW /d	[1]	4.22E-01	µg/kg BW /d	[1]
99-87-6	p-Cymene									
All radionuclides combined		1.00E-01	rad/d	[3]	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Reference — **Reference (source) for Ingestion Toxicity Reference Values of the Coyote**

[1] Clayton, G. D. and Clayton, F. E. 1981. *Patty's Industrial Hygiene and Toxicology, Vol. 2A: Toxicology*, 3rd Revised Edition. John Wiley & Sons, New York.

[2] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Coyote
[3]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[4]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.
[5]	EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed 2004.

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Red Tailed Hawk
[1]	EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC, USA. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[2]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[3]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Burrowing Owl
[1]	EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)
[2]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[3]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
100-02-7	4-Nitrophenol	5.24E+02	µg/L	[5]	3.00E+02	µg/L	[6]
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene	5.96E+01	µg/L	[5]	7.30E+00	µg/L	[6]
100-42-5	Styrene						
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol	3.51E+00	µg/L	[5]	8.60E+00	µg/L	[6]
100-52-7	Benzaldehyde						
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
10045-97-3	Cesium-137	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
10098-97-2	Strontium-90	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether				1.50E+00	µg/L	[6]
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol				2.12E+01	µg/L	[1]
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene	3.70E+02	µg/L	[5]	1.50E+01	µg/L	[6]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
106-47-8	p-Chloroaniline						
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein	1.17E-01	µg/L	[5]	2.10E+00	µg/L	[1]
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	7.13E+02	µg/L	[5]	9.10E+02	µg/L	[6]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	2.31E+01	µg/L	[8]	2.60E+02	µg/L	[7]
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate	3.18E+00	µg/L	[5]	1.60E+01	µg/L	[6]
108-10-1	4-Methyl-2-pentanone	8.16E+01	µg/L	[5]	1.70E+02	µg/L	[6]
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	5.49E+01	µg/L	[5]	9.80E+00	µg/L	[6]
108-90-7	Chlorobenzene	5.73E+02	µg/L	[5]	6.40E+01	µg/L	[6]
108-94-1	Cyclohexanone						
108-95-2	Phenol	4.80E+01	µg/L	[2]	1.10E+02	µg/L	[3]
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
110-00-9	Furan						
110-54-3	n-Hexane				5.80E-01	µg/L	[6]
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	1.33E+04	µg/L	[8]	3.00E+00	µg/L	[7]
117-84-0	n-Dioctyl phthalate	1.16E+10	µg/L	[8]	3.20E+02	µg/L	[7]
118-74-1	Hexachlorobenzene	2.00E+01	µg/L	[8]	3.68E+00	µg/L	[7]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene	2.20E+02	µg/L	[7]	7.30E-01	µg/L	[6]
120-82-1	1,2,4-Trichlorobenzene	7.30E+03	µg/L	[5]	1.10E+02	µg/L	[6]
120-83-2	2,4-Dichlorophenol				3.65E+01	µg/L	[1]
121-14-2	2,4-Dinitrotoluene	4.69E+01	µg/L	[8]	2.30E+01	µg/L	[7]
122-39-4	N,N-Diphenylamine						
122-66-7	1,2-Diphenylhydrazine				2.70E+00	µg/L	[1]
123-33-1	Maleic hydrazide						
123-38-6	n-Propionaldehyde						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
123-72-8	Butanal						
123-91-1	1,4-Dioxane	2.17E+03	µg/L	[8]	6.21E+04	µg/L	[7]
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene	1.04E+03	µg/L	[5]	9.80E+01	µg/L	[6]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene	4.90E+02	µg/L	[7]			
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran	3.20E+04	µg/L	[2]	3.70E+00	µg/L	[6]
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	7.00E+01	µg/L	[7]	1.40E-01	µg/L	[6]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13967-70-9	Cesium-134	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13968-55-3	Uranium-233	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13981-15-2	Curium-244	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13981-16-3	Plutonium-238	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13981-37-8	Nickel-63	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13982-10-0	Plutonium-242	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13982-63-3	Radium-226	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13982-70-2	Uranium-236	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
13994-20-2	Neptunium-237	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
14119-33-6	Plutonium-240	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14133-76-7	Technetium-99	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14158-29-3	Uranium-232	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14234-35-6	Antimony-125	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14336-70-0	Nickel-59	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14391-16-3	Europium-155	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
145-73-3	Endothall						
14596-10-2	Americium-241	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14683-23-9	Europium-152	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14762-75-5	Carbon-14	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
14993-75-0	Americium-243	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15046-84-1	Iodine-129	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15117-48-3	Plutonium-239	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15117-96-1	Uranium-235	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15262-20-1	Radium-228	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15510-73-3	Curium-242	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15585-10-1	Europium-154	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15594-54-4	Thorium-229	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15751-77-6	Zirconium-93	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15757-87-6	Curium-243	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15758-45-9	Selenium-79	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
15832-50-5	Tin-126	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride				2.30E+02	mg/L	[4]
16984-48-8	Fluoride						
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	4.10E-01	µg/L	[8]	3.80E-06	µg/L	[7]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene	1.70E+02	µg/L	[7]			
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene	3.00E+01	µg/L	[8]	2.70E-02	µg/L	[7]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene	3.70E+01	µg/L	[8]	2.70E-02	µg/L	[7]
206-44-0	Fluoranthene	7.50E+02	µg/L	[7]	6.16E+00	µg/L	[3]
207-08-9	Benzo[k]fluoranthene	3.70E+01	µg/L	[8]	2.70E-02	µg/L	[7]
208-96-8	Acenaphthylene	4.40E+01	µg/L	[4]			
218-01-9	Chrysene	3.00E+01	µg/L	[8]	2.70E-02	µg/L	[7]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	2.00E-01	mg/L	[8]	2.80E-06	mg/L	[7]
23950-58-5	Pronamide						
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC	6.00E+00	µg/L	[7]	2.20E+00	µg/L	[6]
319-85-7	beta-BHC	5.00E+00	µg/L	[7]	2.20E+00	µg/L	[6]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)				3.50E+01	µg/L	[7]
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	5.20E+00	µg/L	[8]	4.96E+01	µg/L	[7]
50-32-8	Benzo[a]pyrene	8.40E+01	µg/L	[8]	1.40E-02	µg/L	[7]
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol						
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran						
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	1.00E+01	µg/L	[8]	2.70E-02	µg/L	[7]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene	6.78E+01	µg/L	[5]	5.90E+02	µg/L	[6]
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene	2.28E+03	µg/L	[5]	7.10E+01	µg/L	[6]
542-75-6	1,3-Dichloropropene	5.94E-02	µg/L	[5]	5.50E-02	µg/L	[6]
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	5.96E+01	µg/L	[5]	9.80E+00	µg/L	[6]
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	1.90E+01	µg/L	[8]	2.70E-02	µg/L	[7]
57-12-5	Cyanide	1.00E-01	mg/L	[8]	5.20E-03	mg/L	[7]
57-24-9	Strychnine						
57-74-9	Chlordane	7.00E+00	µg/L	[7]	1.70E-01	µg/L	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran						
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran						
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	3.00E+00	µg/L	[7]	8.00E-02	µg/L	[3]
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol	4.45E+00	µg/L	[5]	3.00E-01	µg/L	[1]
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone	8.42E+00	µg/L	[5]	9.90E+01	µg/L	[6]
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene	1.01E+02	µg/L	[8]	6.00E+01	µg/L	[7]
608-93-5	Pentachlorobenzene	6.04E+02	µg/L	[8]	4.70E-01	µg/L	[7]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid				4.20E+01	µg/L	[6]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol				7.50E+00	µg/L	[6]
67-64-1	2-Propanone (Acetone)	5.71E+01	µg/L	[8]	1.50E+03	µg/L	[7]
67-66-3	Chloroform	5.94E+01	µg/L	[8]	2.80E+01	µg/L	[7]
67-72-1	Hexachloroethane	8.74E+02	µg/L	[5]	1.20E+01	µg/L	[6]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	6.34E+04	µg/L	[8]	8.80E-01	µg/L	[7]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol						
71-43-2	Benzene	3.22E+02	µg/L	[5]	1.30E+02	µg/L	[6]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
71-55-6	1,1,1-Trichloroethane	5.94E+04	µg/L	[5]	1.10E+01	µg/L	[6]
72-43-5	Methoxychlor	6.08E+01	µg/L	[5]	1.90E-02	µg/L	[3]
72-55-9	4,4'-DDE	5.00E+00	µg/L	[8]	1.05E+01	µg/L	[7]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane						
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.40E+04	mg/L	[8]	8.70E-02	mg/L	[7]
7439-89-6	Iron	2.00E+04	mg/L	[7]	1.00E+00	mg/L	[6]
7439-92-1	Lead	3.10E+01	mg/L	[8]	2.50E-03	mg/L	[7]
7439-93-2	Lithium				1.40E-02	mg/L	[6]
7439-95-4	Magnesium						
7439-96-5	Manganese	4.60E+02	mg/L	[7]	1.20E-01	mg/L	[6]
7439-97-6	Mercury						
7439-98-7	Molybdenum				3.70E-01	mg/L	[6]
7440-02-0	Nickel	1.60E+01	mg/L	[8]	5.20E-02	mg/L	[7]
7440-16-6	Rhodium						
7440-22-4	Silver	4.50E+00	mg/L	[8]	1.20E-04	mg/L	[7]
7440-23-5	Sodium						
7440-24-6	Strontium				1.50E+00	mg/L	[6]
7440-25-7	Tantalum						
7440-28-0	Thallium				4.00E-03	mg/L	[7]
7440-29-1	Thorium-232	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
7440-31-5	Tin				7.30E-02	mg/L	[6]
7440-33-7	Tungsten						
7440-36-0	Antimony	6.40E+01	mg/L	[8]	3.00E-02	mg/L	[7]
7440-38-2	Arsenic	6.00E+00	mg/L	[8]	1.50E-01	mg/L	[7]
7440-39-3	Barium	2.00E+01	mg/L	[8]	4.00E-03	mg/L	[6]
7440-41-7	Beryllium				6.60E-04	mg/L	[7]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
7440-43-9	Cadmium	6.00E-01	mg/L	[8]	2.20E-03	mg/L	[7]
7440-47-3	Chromium						
7440-48-4	Cobalt				2.30E-02	mg/L	[6]
7440-50-8	Copper	1.60E+01	mg/L	[8]	9.00E-03	mg/L	[7]
7440-61-1	Uranium				2.60E-03	mg/L	[6]
7440-61-1R	Uranium-238	1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]
7440-62-2	Vanadium				2.00E-02	mg/L	[6]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.10E+02	mg/L	[8]	1.18E-01	mg/L	[7]
7440-67-7	Zirconium				1.70E-02	mg/L	[6]
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene	1.72E+03	µg/L	[1]	3.88E+03	µg/L	[7]
75-02-5	Fluoroethene (vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane	8.80E+02	µg/L	[5]	2.20E+03	µg/L	[6]
75-15-0	Carbon disulfide	1.89E+00	µg/L	[5]	9.20E-01	µg/L	[6]
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane	9.96E+01	µg/L	[5]	4.70E+01	µg/L	[6]
75-35-4	1,1-Dichloroethene	6.50E+01	µg/L	[5]	2.50E+01	µg/L	[6]
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane						
75-71-8	Dichlorodifluoromethane						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
76-01-7	Pentachloroethane				3.90E+01	µg/L	[1]
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	3.08E-01	µg/L	[8]	3.80E-03	µg/L	[7]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride				2.30E+02	mg/L	[5]
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride						
7664-41-7	Ammonia/Ammonium	9.30E+02	mg/L	[3]			
77-47-4	Hexachlorocyclopentadiene	1.98E+02	µg/L	[8]	5.20E-01	µg/L	[7]
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	1.00E-01	mg/L	[8]	5.00E-03	mg/L	[7]
7782-50-5	Chlorine				1.10E-02	mg/L	[4]
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone	1.31E+03	µg/L	[5]	1.40E+04	µg/L	[6]
79-00-5	1,1,2-Trichloroethane	3.60E+03	µg/L	[5]	1.20E+03	µg/L	[6]
79-01-6	1,1,2-Trichloroethylene	1.77E+02	µg/L	[5]	4.70E+01	µg/L	[6]
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane	1.93E+03	µg/L	[5]	6.10E+02	µg/L	[6]
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						
82-68-8	Pentachloronitrobenzene	2.36E+03	µg/L	[8]	1.00E+01	µg/L	[7]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	4.60E+01	µg/L	[4]	2.30E+01	µg/L	[3]
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	6.89E+02	µg/L	[5]	2.10E+02	µg/L	[6]

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
84-74-2	Dibutyl phthalate	2.20E+03	µg/L	[8]	3.50E+01	µg/L	[6]
85-01-8	Phenanthrene	5.60E+02	µg/L	[7]	6.30E+00	µg/L	[3]
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate	1.04E+04	µg/L	[5]	1.90E+01	µg/L	[6]
86-73-7	Fluorene	1.90E+02	µg/L	[7]	3.90E+00	µg/L	[6]
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	2.58E+02	µg/L	[8]	9.30E-01	µg/L	[7]
87-86-5	Pentachlorophenol	7.00E+03	µg/L	[8]	1.50E+01	µg/L	[7]
88-06-2	2,4,6-Trichlorophenol				9.70E+00	µg/L	[1]
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene	1.60E+02	µg/L	[4]	1.20E+01	µg/L	[6]
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene	7.00E+01	µg/L	[4]			
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl				1.40E+01	µg/L	[6]
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol	2.78E+01	µg/L	[5]	1.30E+01	µg/L	[6]
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene	2.12E+02	µg/L	[5]	1.40E+01	µg/L	[6]
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						
95-95-4	2,4,5-Trichlorophenol						
96-12-8	1,2-Dibromo-3-chloropropane						

Table 7-5 Benthic Invertebrate and Aquatic Biota Direct Exposure Toxicity Reference Values

CAS Registry Number	Constituent	Direct Exposure Toxicity Reference Values (*TRV*) of Benthic Invertebrate	Units for Benthic Invert. Direct Exposure *TRV*	Reference	Direct Exposure Toxicity Reference Values (*TRV*) of Aquatic Biota	Units for Aquatic Biota Direct Exposure *TRV*	Reference
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						
98-95-3	Nitrobenzene	1.28E+03	µg/L	[8]	2.70E+02	µg/L	[7]
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene	2.14E+01	µg/L	[8]	2.60E+01	µg/L	[7]
99-87-6	p-Cymene						
All radionuclides combined		1.00E+00	rad/d	[6]	1.00E+00	rad/d	[2]

Reference **Reference (source) for Direct Exposure Toxicity Reference Values of Benthic Invertebrates**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm) (equilibrium partitioning approach used per Eq. E-1)

[2] Ecology. 1994. *Creation of Freshwater Sediment Quality Database and Preliminary Analysis of Freshwater Apparent Effects Thresholds*, June 1994. Washington State Department of Ecology, Olympia, WA.

[3] Ecology. 1997. *1997 Model Toxics Control Act Annual Report*, Publication 97-606. Washington State Department of Ecology, Olympia,WA.

[4] Jones DS, Suter G W II, and Hull RN. 1997. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Sediment-Associated Biota*, 1997 Revision, ES/ER/TM-95/R3. Oak Ridge National Laboratory, Oak Ridge, TN.

[5] Jones DS, Suter G W II, and Hull RN. 1997. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Sediment-Associated Biota*, 1997 Revision, ES/ER/TM-95/R3. Oak Ridge National Laboratory, Oak Ridge, TN. (equilibrium partitioning approach used per Eq. E-1)

[6] NCRP. 1991. *Effects of Ionizing Radiation on Aquatic Organisms*, NCRP Report No. 109. National Council on Radiation Protection and Measurements, Bethesda, MD.

Reference	Reference (source) for Direct Exposure Toxicity Reference Values of Benthic Invertebrates
[7]	Persaud D, Jaagumagi R, and Hayton A. 1993. *Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario*. Ontario Ministry of the Environment and Energy, Ontario, Canada.
[8]	Table E-3 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Ingestion Toxicity Reference Values of Aquatic Receptors
[1]	EPA. 1987. *Quality Criteria for Water 1986 and Update no. 1 and Update no. 2 (May 1, 1987)*, EPA-440/5-86-001. US Environmental Protection Agency, Washington, DC.
[2]	NCRP. 1991. *Effects of Ionizing Radiation on Aquatic Organisms*, NCRP Report No. 109. National Council on Radiation Protection and Measurements, Bethesda, MD.
[3]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (NAWQC chronic value)
[4]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Region IV chronic screening value)
[5]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (TRV for chloride used as surrogate, Region IV chronic screening value)
[6]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Tier II Chronic)
[7]	Table E-1 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene						
100-42-5	Styrene						
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde						
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol						
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
106-47-8	p-Chloroaniline						
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	1.72E+04	µg/kg BW /d	[3]	1.72E+04	µg/kg BW /d	[3]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile						
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone						
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene						
108-90-7	Chlorobenzene						
108-94-1	Cyclohexanone						
108-95-2	Phenol						
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	1.11E+02	µg/kg BW /d	[1]	1.11E+02	µg/kg BW /d	[1]
117-84-0	n-Dioctyl phthalate						
118-74-1	Hexachlorobenzene	2.25E+02	µg/kg BW /d	[1]	2.25E+02	µg/kg BW /d	[1]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene						
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol						
121-14-2	2,4-Dinitrotoluene						
122-39-4	N,N-Diphenylamine						
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide						
123-38-6	n-Propionaldehyde						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
123-72-8	Butanal						
123-91-1	1,4-Dioxane						
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene						
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	7.20E+01	µg/kg BW /d	[1]	7.20E+01	µg/kg BW /d	[1]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-15-2	Curium-244	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
14119-33-6	Plutonium-240	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
145-73-3	Endothall						
14596-10-2	Americium-241	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15510-73-3	Curium-242	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride						
16984-48-8	Fluoride	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-02	µg/kg BW /d	[1]	1.00E-02	µg/kg BW /d	[1]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene	1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
206-44-0	Fluoranthene						
207-08-9	Benzo[k]fluoranthene	1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
208-96-8	Acenaphthylene						
218-01-9	Chrysene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	6.40E-03	mg/kg BW /d	[1]	6.40E-03	mg/kg BW /d	[1]
23950-58-5	Pronamide						
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC						
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)						
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde						
50-32-8	Benzo[a]pyrene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol						
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	1.00E-03	µg/kg BW /d	[3]	1.00E-03	µg/kg BW /d	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	3.90E-01	µg/kg BW /d	[1]	3.90E-01	µg/kg BW /d	[1]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene						
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene						
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride						
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	7.90E-01	µg/kg BW /d	[1]	7.90E-01	µg/kg BW /d	[1]
57-12-5	Cyanide	4.00E-02	mg/kg BW /d	[1]	4.00E-02	mg/kg BW /d	[1]
57-24-9	Strychnine						
57-74-9	Chlordane	2.14E+03	µg/kg BW /d	[3]	2.14E+03	µg/kg BW /d	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran						
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran						
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	2.00E+03	µg/kg BW /d	[3]	2.00E+03	µg/kg BW /d	[3]
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene						
608-93-5	Pentachlorobenzene						
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)	5.20E+04	µg/kg BW /d	[1]	5.20E+04	µg/kg BW /d	[1]
67-66-3	Chloroform						
67-72-1	Hexachloroethane						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	5.75E+03	µg/kg BW /d	[1]	5.75E+03	µg/kg BW /d	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
71-36-3	n-Butyl alcohol						
71-43-2	Benzene						
71-55-6	1,1,1-Trichloroethane						
72-43-5	Methoxychlor						
72-55-9	4,4'-DDE	8.45E+02	µg/kg BW /d	[1]	8.45E+02	µg/kg BW /d	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane						
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.00E+02	mg/kg BW /d	[1]	1.00E+02	mg/kg BW /d	[1]
7439-89-6	Iron						
7439-92-1	Lead	2.50E-02	mg/kg BW /d	[1]	2.50E-02	mg/kg BW /d	[1]
7439-93-2	Lithium						
7439-95-4	Magnesium						
7439-96-5	Manganese	9.77E+02	mg/kg BW /d	[3]	9.77E+02	mg/kg BW /d	[3]
7439-97-6	Mercury						
7439-98-7	Molybdenum	3.53E+00	mg/kg BW /d	[3]	3.53E+00	mg/kg BW /d	[3]
7440-02-0	Nickel	6.50E+01	mg/kg BW /d	[1]	6.50E+01	mg/kg BW /d	[1]
7440-16-6	Rhodium						
7440-22-4	Silver	1.78E+02	mg/kg BW /d	[1]	1.78E+02	mg/kg BW /d	[1]
7440-23-5	Sodium						
7440-24-6	Strontium						
7440-25-7	Tantalum						
7440-28-0	Thallium	3.50E-01	mg/kg BW /d	[1]	3.50E-01	mg/kg BW /d	[1]
7440-29-1	Thorium-232	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-31-5	Tin						
7440-33-7	Tungsten						
7440-36-0	Antimony						
7440-38-2	Arsenic	2.46E+00	mg/kg BW /d	[1]	2.46E+00	mg/kg BW /d	[1]

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
7440-39-3	Barium	2.08E+01	mg/kg BW /d	[1]	2.08E+01	mg/kg BW /d	[1]
7440-41-7	Beryllium						
7440-43-9	Cadmium	1.45E+00	mg/kg BW /d	[1]	1.45E+00	mg/kg BW /d	[1]
7440-47-3	Chromium						
7440-48-4	Cobalt						
7440-50-8	Copper	4.70E+01	mg/kg BW /d	[1]	4.70E+01	mg/kg BW /d	[1]
7440-61-1	Uranium	1.60E+01	mg/kg BW /d	[3]	1.60E+01	mg/kg BW /d	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-62-2	Vanadium	1.14E+01	mg/kg BW /d	[3]	1.14E+01	mg/kg BW /d	[3]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.31E+02	mg/kg BW /d	[1]	1.31E+02	mg/kg BW /d	[1]
7440-67-7	Zirconium						
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene						
75-02-5	Fluoroethene (Vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane						
75-15-0	Carbon disulfide						
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene						
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
75-69-4	Trichlorofluoromethane						
75-71-8	Dichlorodifluoromethane						
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	6.50E+01	µg/kg BW /d	[1]	6.50E+01	µg/kg BW /d	[1]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride						
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene						
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	5.00E-01	mg/kg BW /d	[1]	5.00E-01	mg/kg BW /d	[1]
7782-50-5	Chlorine						
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone						
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene						
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						
82-68-8	Pentachloronitrobenzene	6.88E+04	µg/kg BW /d	[1]	6.88E+04	µg/kg BW /d	[1]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate						
84-74-2	Dibutyl phthalate	1.11E+02	µg/kg BW /d	[3]	1.11E+02	µg/kg BW /d	[3]
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene						
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	3.19E+03	µg/kg BW /d	[1]	3.19E+03	µg/kg BW /d	[1]
87-86-5	Pentachlorophenol	4.03E+03	µg/kg BW /d	[1]	4.03E+03	µg/kg BW /d	[1]
88-06-2	2,4,6-Trichlorophenol						
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene						
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl						
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol						
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene						
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						

Table 7-6 Canadian Goose and Spotted Sandpiper Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Canadian Goose	Units for Canadian Goose Ingestion *TRV*	Reference	Ingestion *TRV* of the Spotted Sandpiper	Units for Spotted Sandpiper Ingestion *TRV*	Reference
95-95-4	2,4,5-Trichlorophenol						
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						
98-95-3	Nitrobenzene						
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene	4.22E-01	µg/kg BW /d	[1]	4.22E-01	µg/kg BW /d	[1]
99-87-6	p-Cymene						
All radionuclides combined		1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Canadian Goose**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[2] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[3] Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Spotted Sandpiper**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Reference	Reference (source) for Ingestion Toxicity Reference Values of the Spotted Sandpiper
[2]	IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.
[3]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
100-02-7	4-Nitrophenol						
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene						
100-42-5	Styrene						
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol						
100-52-7	Benzaldehyde						
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether						
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol						
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
106-47-8	p-Chloroaniline						
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein						
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	1.72E+04	µg/kg BW /d	[3]	1.72E+04	µg/kg BW /d	[3]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile						
107-19-7	Propargyl alcohol						
107-21-1	Ethylene glycol						
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate						
108-10-1	4-Methyl-2-pentanone						
108-39-4	m-Cresol						
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene						
108-90-7	Chlorobenzene						
108-94-1	Cyclohexanone						
108-95-2	Phenol						
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
110-00-9	Furan						
110-54-3	n-Hexane						
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine						
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether						
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	1.11E+02	µg/kg BW /d	[1]	1.11E+02	µg/kg BW /d	[1]
117-84-0	n-Dioctyl phthalate						
118-74-1	Hexachlorobenzene	2.25E+02	µg/kg BW /d	[1]	2.25E+02	µg/kg BW /d	[1]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene						
120-82-1	1,2,4-Trichlorobenzene						
120-83-2	2,4-Dichlorophenol						
121-14-2	2,4-Dinitrotoluene						
122-39-4	N,N-Diphenylamine						
122-66-7	1,2-Diphenylhydrazine						
123-33-1	Maleic hydrazide						
123-38-6	n-Propionaldehyde						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
123-72-8	Butanal						
123-91-1	1,4-Dioxane						
124-18-5	Decane						
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane						
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile						
127-18-4	1,1,2,2-Tetrachloroethene						
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene						
131-11-3	Dimethyl phthalate						
131-89-5	2-Cyclohexyl-4,6-dinitrophenol						
132-64-9	Dibenzofuran						
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	7.20E+01	µg/kg BW /d	[1]	7.20E+01	µg/kg BW /d	[1]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-15-2	Curium-244	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
141-78-6	Acetic acid ethyl ester						
14119-32-5	Plutonium-241	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
14119-33-6	Plutonium-240	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
145-73-3	Endothall						
14596-10-2	Americium-241	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15510-73-3	Curium-242	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene						
15715-94-3	Samarium-151	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride						
16984-48-8	Fluoride	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-02	µg/kg BW /d	[1]	1.00E-02	µg/kg BW /d	[1]
189-55-9	Dibenzo[a,i]pyrene						
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene	1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
206-44-0	Fluoranthene						
207-08-9	Benzo[k]fluoranthene	1.40E-01	µg/kg BW /d	[1]	1.40E-01	µg/kg BW /d	[1]
208-96-8	Acenaphthylene						
218-01-9	Chrysene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	6.40E-03	mg/kg BW /d	[1]	6.40E-03	mg/kg BW /d	[1]
23950-58-5	Pronamide						
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC						
319-85-7	beta-BHC						
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)						
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde						
50-32-8	Benzo[a]pyrene	1.00E+00	µg/kg BW /d	[1]	1.00E+00	µg/kg BW /d	[1]
506-68-3	Cyanogen bromide						
506-77-4	Cyanogen chloride						
51-28-5	2,4-Dinitrophenol						
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	1.00E-03	µg/kg BW /d	[3]	1.00E-03	µg/kg BW /d	[3]
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	3.90E-01	µg/kg BW /d	[1]	3.90E-01	µg/kg BW /d	[1]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene						
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene						
542-75-6	1,3-Dichloropropene						
542-88-1	Dichloromethyl ether						
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride						
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	7.90E-01	µg/kg BW /d	[1]	7.90E-01	µg/kg BW /d	[1]
57-12-5	Cyanide	4.00E-02	mg/kg BW /d	[1]	4.00E-02	mg/kg BW /d	[1]
57-24-9	Strychnine						
57-74-9	Chlordane	2.14E+03	µg/kg BW /d	[3]	2.14E+03	µg/kg BW /d	[3]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran						
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran						
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran						
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	2.00E+03	µg/kg BW /d	[3]	2.00E+03	µg/kg BW /d	[3]
58-90-2	2,3,4,6-Tetrachlorophenol						
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol						
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone						
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether						
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene						
608-93-5	Pentachlorobenzene						
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane						
64-18-6	Formic acid						
65-85-0	Benzoic acid						
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol						
67-63-0	2-Propyl alcohol						
67-64-1	2-Propanone (Acetone)	5.20E+04	µg/kg BW /d	[1]	5.20E+04	µg/kg BW /d	[1]
67-66-3	Chloroform						
67-72-1	Hexachloroethane						
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	5.75E+03	µg/kg BW /d	[1]	5.75E+03	µg/kg BW /d	[1]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
71-43-2	Benzene						
71-55-6	1,1,1-Trichloroethane						
72-43-5	Methoxychlor						
72-55-9	4,4'-DDE	8.45E+02	µg/kg BW /d	[1]	8.45E+02	µg/kg BW /d	[1]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane						
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.00E+02	mg/kg BW /d	[1]	1.00E+02	mg/kg BW /d	[1]
7439-89-6	Iron						
7439-92-1	Lead	2.50E-02	mg/kg BW /d	[1]	2.50E-02	mg/kg BW /d	[1]
7439-93-2	Lithium						
7439-95-4	Magnesium						
7439-96-5	Manganese	9.77E+02	mg/kg BW /d	[3]	9.77E+02	mg/kg BW /d	[3]
7439-97-6	Mercury						
7439-98-7	Molybdenum	3.53E+00	mg/kg BW /d	[3]	3.53E+00	mg/kg BW /d	[3]
7440-02-0	Nickel	6.50E+01	mg/kg BW /d	[1]	6.50E+01	mg/kg BW /d	[1]
7440-16-6	Rhodium						
7440-22-4	Silver	1.78E+02	mg/kg BW /d	[1]	1.78E+02	mg/kg BW /d	[1]
7440-23-5	Sodium						
7440-24-6	Strontium						
7440-25-7	Tantalum						
7440-28-0	Thallium	3.50E-01	mg/kg BW /d	[1]	3.50E-01	mg/kg BW /d	[1]
7440-29-1	Thorium-232	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-31-5	Tin						
7440-33-7	Tungsten						
7440-36-0	Antimony						
7440-38-2	Arsenic	2.46E+00	mg/kg BW /d	[1]	2.46E+00	mg/kg BW /d	[1]
7440-39-3	Barium	2.08E+01	mg/kg BW /d	[1]	2.08E+01	mg/kg BW /d	[1]

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
7440-41-7	Beryllium						
7440-43-9	Cadmium	1.45E+00	mg/kg BW /d	[1]	1.45E+00	mg/kg BW /d	[1]
7440-47-3	Chromium						
7440-48-4	Cobalt						
7440-50-8	Copper	4.70E+01	mg/kg BW /d	[1]	4.70E+01	mg/kg BW /d	[1]
7440-61-1	Uranium	1.60E+01	mg/kg BW /d	[3]	1.60E+01	mg/kg BW /d	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]
7440-62-2	Vanadium	1.14E+01	mg/kg BW /d	[3]	1.14E+01	mg/kg BW /d	[3]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.31E+02	mg/kg BW /d	[1]	1.31E+02	mg/kg BW /d	[1]
7440-67-7	Zirconium						
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene						
75-02-5	Fluoroethene (vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane						
75-15-0	Carbon disulfide						
75-21-8	Oxirane						
75-25-2	Bromoform						
75-27-4	Bromodichloromethane						
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane						
75-35-4	1,1-Dichloroethene						
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
75-71-8	Dichlorodifluoromethane						
76-01-7	Pentachloroethane						
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	6.50E+01	µg/kg BW /d	[1]	6.50E+01	µg/kg BW /d	[1]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride						
765-34-4	Glycidylaldehyde						
7664-39-3	Hydrogen fluoride	7.80E+00	mg/kg BW /d	[3]	7.80E+00	mg/kg BW /d	[3]
7664-41-7	Ammonia/Ammonium						
77-47-4	Hexachlorocyclopentadiene						
77-78-1	Dimethyl sulfate						
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	5.00E-01	mg/kg BW /d	[1]	5.00E-01	mg/kg BW /d	[1]
7782-50-5	Chlorine						
78-83-1	2-Methylpropyl alcohol						
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone						
79-00-5	1,1,2-Trichloroethane						
79-01-6	1,1,2-Trichloroethylene						
79-10-7	2-Propenoic acid						
79-34-5	1,1,2,2-Tetrachloroethane						
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate						
82-68-8	Pentachloronitrobenzene	6.88E+04	µg/kg BW /d	[1]	6.88E+04	µg/kg BW /d	[1]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene						
832-69-9	1-Methylphenanthrene						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
84-66-2	Diethyl phthalate						
84-74-2	Dibutyl phthalate	1.11E+02	µg/kg BW /d	[3]	1.11E+02	µg/kg BW /d	[3]
85-01-8	Phenanthrene						
85-44-9	Phthalic anhydride						
85-68-7	Butylbenzyl phthalate						
86-73-7	Fluorene						
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	3.19E+03	µg/kg BW /d	[1]	3.19E+03	µg/kg BW /d	[1]
87-86-5	Pentachlorophenol	4.03E+03	µg/kg BW /d	[1]	4.03E+03	µg/kg BW /d	[1]
88-06-2	2,4,6-Trichlorophenol						
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene						
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene						
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl						
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol						
95-49-8	2-Chlorotoluene						
95-50-1	1,2-Dichlorobenzene						
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						
95-95-4	2,4,5-Trichlorophenol						

Table 7-7 Bald Eagle and Great Blue Heron Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Bald Eagle	Units for Bald Eagle Ingestion *TRV*	Reference	Ingestion *TRV* of the Great Blue Heron	Units for Great Blue Heron Ingestion *TRV*	Reference
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane						
96-45-7	Ethylene thiourea						
97-63-2	Ethyl methacrylate						
98-01-1	Furfural						
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene						
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone						
98-95-3	Nitrobenzene						
99-35-4	1,3,5-Trinitrobenzene						
99-65-0	1,3-Dinitrobenzene	4.22E-01	µg/kg BW /d	[1]	4.22E-01	µg/kg BW /d	[1]
99-87-6	p-Cymene						
All radionuclides combined		1.00E-01	rad/d	[2]	1.00E-01	rad/d	[2]

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Bald Eagle**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[2] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[3] Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Great Blue Heron**

[1] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[2] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

Reference	**Reference (source) for Ingestion Toxicity Reference Values of the Great Blue Heron**
[3]	Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision,* ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
100-02-7	4-Nitrophenol				6.31E+00	µg/L	[9]
100-21-0	p-Phthalic acid						
100-25-4	1,4-Dinitrobenzene						
100-40-3	4-Ethenylcyclohexene						
100-41-4	Ethyl benzene	9.71E+03	µg/kg BW /d	[5]	7.30E+00	µg/L	[3]
100-42-5	Styrene	2.00E+04	µg/kg BW /d	[5]			
100-44-7	Benzyl chloride						
100-47-0	Benzonitrile						
100-51-6	Benzyl alcohol				8.60E+00	µg/L	[3]
100-52-7	Benzaldehyde	1.43E+04	µg/kg BW /d	[5]			
10028-15-6	Ozone						
10028-17-8	Tritium	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
10045-97-3	Cesium-137	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
10061-01-5	cis-1,3-Dichloropropene						
10061-02-6	trans-1,3-Dichloropropene						
10098-91-6	Yttrium-90	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
10098-97-2	Strontium-90	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
101-55-3	4-Bromophenylphenyl ether				1.50E+00	µg/L	[3]
101-77-9	4,4'-Methylenedianiline						
10102-44-0	Nitrogen dioxide						
10198-40-0	Cobalt-60	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
103-33-3	Azobenzene						
103-65-1	n-Propyl benzene						
104-51-8	n-Butyl benzene						
104-76-7	2-Ethyl-1-hexanol						
105-67-9	2,4-Dimethylphenol	5.00E+03	µg/kg BW /d	[5]	2.12E+01	µg/L	[1]
10595-95-6	n-Nitrosomethylethylamine						
106-43-4	4-Chlorotoluene						
106-44-5	p-Cresol						
106-46-7	1,4-Dichlorobenzene				1.50E+01	µg/L	[3]
106-47-8	p-Chloroaniline	1.25E+03	µg/kg BW /d	[5]			

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
106-49-0	p-Toluidine						
106-51-4	Quinone						
106-88-7	1,2-Epoxybutane						
106-89-8	Epichlorohydrin						
106-93-4	Ethylene dibromide						
106-99-0	1,3-Butadiene						
107-02-8	Acrolein				2.10E+00	µg/L	[1]
107-05-1	3-Chloropropene (Allyl chloride)						
107-06-2	1,2-Dichloroethane	5.00E+04	µg/kg BW /d	[4]	9.10E+02	µg/L	[3]
107-12-0	Propionitrile						
107-13-1	Acrylonitrile	4.60E+02	µg/kg BW /d	[2]	2.60E+02	µg/L	[10]
107-19-7	Propargyl alcohol	5.00E+02	µg/kg BW /d	[5]			
107-21-1	Ethylene glycol	2.00E+04	µg/kg BW /d	[5]			
107-98-2	Propylene glycol monomethyl ether						
108-05-4	Vinyl acetate				1.60E+01	µg/L	[3]
108-10-1	4-Methyl-2-pentanone	2.50E+04	µg/kg BW /d	[4]	1.70E+02	µg/L	[3]
108-39-4	m-Cresol	5.00E+03	µg/kg BW /d	[5]			
108-60-1	Dichloroisopropyl ether						
108-67-8	1,3,5-Trimethyl benzene						
108-86-1	Bromobenzene						
108-87-2	Methylcyclohexane						
108-88-3	Toluene	2.60E+04	µg/kg BW /d	[4]	9.80E+00	µg/L	[3]
108-90-7	Chlorobenzene	1.90E+04	µg/kg BW /d	[5]	6.40E+01	µg/L	[3]
108-94-1	Cyclohexanone						
108-95-2	Phenol	6.00E+04	µg/kg BW /d	[5]	1.10E+02	µg/L	[4]
109-74-0	n-Butanenitrile						
109-75-1	3-Butenenitrile						
109-77-3	Malononitrile						
109-86-4	2-Methoxyethanol						
109-99-9	Tetrahydrofuran						
110-00-9	Furan						
110-54-3	n-Hexane				5.80E-01	µg/L	[3]

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
110-59-8	Pentanenitrile						
110-80-5	2-Ethoxyethanol						
110-82-7	Cyclohexane						
110-83-8	Cyclohexene						
110-86-1	Pyridine	1.00E+02	µg/kg BW /d	[5]			
111-15-9	Ethylene glycol monoethyl ether acetate						
111-44-4	Bis(2-chloroethyl) ether						
111-65-9	n-Octane						
111-76-2	Ethylene glycol monobutyl ether	5.10E+02	µg/kg BW /d	[5]			
111-84-2	n-Nonane						
111-91-1	Bis(2-chloroethoxy)methane						
112-30-1	1-Decanol						
112-31-2	Decanal						
112-40-3	Dodecane						
1120-21-4	Undecane						
1120-71-4	1,3-Propane sultone						
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	6.00E+04	µg/kg BW /d	[2]	3.00E+00	µg/L	[10]
117-84-0	n-Dioctyl phthalate	7.50E+06	µg/kg BW /d	[2]	3.20E+02	µg/L	[10]
118-74-1	Hexachlorobenzene	1.60E+03	µg/kg BW /d	[2]	3.68E+00	µg/L	[10]
119-90-4	3,3'-Dimethoxybenzidine						
120-12-7	Anthracene	1.00E+05	µg/kg BW /d	[5]	7.30E-01	µg/L	[3]
120-82-1	1,2,4-Trichlorobenzene	-	-	-	1.10E+02	µg/L	[3]
120-83-2	2,4-Dichlorophenol	3.00E+01	µg/kg BW /d	[5]	3.65E+01	µg/L	[1]
121-14-2	2,4-Dinitrotoluene	3.50E+04	µg/kg BW /d	[2]	2.30E+01	µg/L	[10]
122-39-4	N,N-Diphenylamine	2.50E+02	µg/kg BW /d	[5]			
122-66-7	1,2-Diphenylhydrazine				2.70E+00	µg/L	[1]
123-33-1	Maleic hydrazide	5.00E+04	µg/kg BW /d	[5]			
123-38-6	n-Propionaldehyde						
123-72-8	Butanal						
123-91-1	1,4-Dioxane	1.06E+05	µg/kg BW /d	[2]	6.21E+04	µg/L	[10]
124-18-5	Decane						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
124-38-9	Carbon dioxide						
124-48-1	Chlorodibromomethane	2.14E+03	µg/kg BW /d	[5]			
126-73-8	Tributyl phosphate						
126-98-7	2-Methyl-2-propenenitrile	3.40E+01	µg/kg BW /d	[5]			
127-18-4	1,1,2,2-Tetrachloroethene	1.40E+03	µg/kg BW /d	[5]	3.16E+00	µg/L	[9]
128-37-0	2,6-Bis(tert-butyl)-4-methylphenol						
129-00-0	Pyrene	7.50E+03	µg/kg BW /d	[5]			
131-11-3	Dimethyl phthalate				4.00E-03	µg/L	[9]
131-89-5	2-Cyclohexyl-4,6-dinitrophenol	2.00E+01	µg/kg BW /d	[5]			
132-64-9	Dibenzofuran				3.70E+00	µg/L	[3]
133-06-2	Captan						
1330-20-7	Xylenes (mixed isomers)						
1336-36-3	Polychlorinated biphenyls (PCBs)	2.06E-01	µg/kg BW /d	[2]	1.40E-01	µg/L	[3]
134-32-7	alpha-Naphthylamine						
135-98-8	sec-Butyl benzene						
13966-29-5	Uranium-234	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13967-48-1	Ruthenium-106	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13967-70-9	Cesium-134	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13968-55-3	Uranium-233	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13981-15-2	Curium-244	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13981-16-3	Plutonium-238	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13981-37-8	Nickel-63	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13982-10-0	Plutonium-242	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13982-63-3	Radium-226	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13982-70-2	Uranium-236	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
13994-20-2	Neptunium-237	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
141-78-6	Acetic acid ethyl ester	9.00E+04	µg/kg BW /d	[5]			
14119-32-5	Plutonium-241	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14119-33-6	Plutonium-240	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14133-76-7	Technetium-99	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14158-29-3	Uranium-232	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14234-35-6	Antimony-125	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
14265-44-2	Phosphate						
14331-85-2	Protactinium-231	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14336-70-0	Nickel-59	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14391-16-3	Europium-155	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
145-73-3	Endothall	2.00E+03	µg/kg BW /d	[5]			
14596-10-2	Americium-241	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14683-23-9	Europium-152	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14762-75-5	Carbon-14	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14797-55-8	Nitrate						
14797-65-0	Nitrite						
14808-79-8	Sulfate						
14952-40-0	Actinium-227	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
14993-75-0	Americium-243	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15046-84-1	Iodine-129	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15117-48-3	Plutonium-239	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15117-96-1	Uranium-235	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15262-20-1	Radium-228	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15510-73-3	Curium-242	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15585-10-1	Europium-154	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15594-54-4	Thorium-229	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
156-59-2	cis-1,2-Dichloroethene						
156-60-5	trans-1,2-Dichloroethylene	1.70E+03	µg/kg BW /d	[5]			
15715-94-3	Samarium-151	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15751-77-6	Zirconium-93	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15757-87-6	Curium-243	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15758-45-9	Selenium-79	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
15832-50-5	Tin-126	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
1634-04-4	Methyl tert-butyl ether						
16887-00-6	Chloride				2.30E+02	mg/L	[8]
16984-48-8	Fluoride	3.14E+01	mg/kg BW /d	[4]			
1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin	1.00E-03	µg/kg BW /d	[4]	3.80E-06	µg/L	[10]
189-55-9	Dibenzo[a,i]pyrene						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
189-64-0	Dibenzo[a,h]pyrene						
191-24-2	Benzo[g,h,i]perylene						
191-30-0	Benzo[a,i]pyrene						
192-65-4	Dibenzo[a,e]pyrene						
192-97-2	Benzo[e]pyrene						
193-39-5	Indeno[1,2,3-cd]pyrene				2.70E-02	µg/L	[10]
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin						
205-82-3	Benzo[j]fluoranthene						
205-99-2	Benzo[b]fluoranthene				2.70E-02	µg/L	[10]
206-44-0	Fluoranthene	1.25E+04	µg/kg BW /d	[5]	6.16E+00	µg/L	[4]
207-08-9	Benzo[k]fluoranthene				2.70E-02	µg/L	[10]
208-96-8	Acenaphthylene						
218-01-9	Chrysene				2.70E-02	µg/L	[10]
224-42-0	Dibenz[a,j]acridine						
2245-38-7	2,3,5-Trimethylnaphthalene						
226-36-8	Dibenz[a,h]acridine						
22967-92-6	Methylmercury	3.20E-02	mg/kg BW /d	[2]	2.80E-06	mg/L	[10]
23950-58-5	Pronamide	7.50E+02	µg/kg BW /d	[5]			
24959-67-9	Bromide						
27154-33-2	Trichlorofluoroethane						
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl						
319-84-6	alpha-BHC				2.20E+00	µg/L	[3]
319-85-7	beta-BHC	4.00E-01	µg/kg BW /d	[4]	2.20E+00	µg/L	[3]
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl						
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl						
3268-87-9	Octachlorodibenzo(p)dioxin						
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl						
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin						
3697-24-3	5-Methylchrysene						
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
378782-82-2	Niobium-93m						
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl						
39001-02-0	Octachlorodibenzofuran						
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin						
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl						
40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin						
4170-30-3	2-Butenaldehyde (2-Butenal)	8.00E+01	µg/kg BW /d	[2]	3.50E+01	µg/L	[10]
41851-50-7	Chlorocyclopentadiene						
460-19-5	Cyanogen						
4786-20-3	2-Butenenitrile						
50-00-0	Formaldehyde	2.30E+03	µg/kg BW /d	[2]	4.96E+01	µg/L	[10]
50-32-8	Benzo[a]pyrene	1.00E+02	µg/kg BW /d	[2]	1.40E-02	µg/L	[10]
506-68-3	Cyanogen bromide	4.40E+03	µg/kg BW /d	[5]			
506-77-4	Cyanogen chloride	2.53E+03	µg/kg BW /d	[5]			
51-28-5	2,4-Dinitrophenol	2.00E+02	µg/kg BW /d	[5]			
51-79-6	Ethyl carbamate (Urethane)						
510-15-6	Chlorobenzilate						
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran						
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl						
528-29-0	o-Dinitrobenzene						
53-70-3	Dibenz[a,h]anthracene	2.00E+00	µg/kg BW /d	[2]	2.70E-02	µg/L	[10]
532-27-4	2-Chloroacetophenone						
534-52-1	4,6-Dinitro-o-cresol						
5385-75-1	Dibenzo[a,e]fluoranthene						
540-59-0	1,2-Dichloroethylene	4.52E+04	µg/kg BW /d	[4]	5.90E+02	µg/L	[3]
540-73-8	1,2-Dimethylhydrazine						
540-84-1	2,2,4-Trimethylpentane						
541-73-1	1,3-Dichlorobenzene				7.10E+01	µg/L	[3]
542-75-6	1,3-Dichloropropene	2.50E+03	µg/kg BW /d	[5]	5.50E-02	µg/L	[3]
542-88-1	Dichloromethyl ether						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran						
56-23-5	Carbon tetrachloride	7.10E+01	µg/kg BW /d	[5]	9.80E+00	µg/L	[3]
56-49-5	3-Methylcholanthrene						
56-55-3	Benzo[a]anthracene	1.67E+02	µg/kg BW /d	[2]	2.70E-02	µg/L	[10]
57-12-5	Cyanide	2.40E+01	mg/kg BW /d	[2]	1.17E-03	mg/L	[6]
57-24-9	Strychnine	2.50E+01	µg/kg BW /d	[5]			
57-74-9	Chlordane	4.58E+03	µg/kg BW /d	[4]	1.70E-01	µg/L	[4]
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1.60E-02	µg/kg BW /d	[4]			
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1.60E-01	µg/kg BW /d	[4]			
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl						
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin						
58-89-9	gamma-BHC (Lindane)	8.00E+03	µg/kg BW /d	[4]	8.00E-02	µg/L	[4]
58-90-2	2,3,4,6-Tetrachlorophenol	2.50E+03	µg/kg BW /d	[5]			
581-42-0	2,6-Dimethylnaphthalene						
584-84-9	2,4-Toluene diisocyanate						
589-38-8	3-Hexanone						
59-50-7	4-Chloro-3-methylphenol				3.00E-01	µg/L	[1]
59-89-2	N-Nitrosomorpholine						
591-50-4	Benzene, iodo-						
591-78-6	2-Hexanone				9.90E+01	µg/L	[3]
593-60-2	Bromoethene						
593-74-8	Dimethyl Mercury						
60-11-7	Dimethyl aminoazobenzene						
60-29-7	Ethyl ether	5.00E+04	µg/kg BW /d	[5]			
60-35-5	Acetamide						
602-87-9	5-Nitroacenaphthene						
606-20-2	2,6-Dinitrotoluene	4.00E+01	µg/kg BW /d	[2]	6.00E+01	µg/L	[10]
608-93-5	Pentachlorobenzene	7.25E+03	µg/kg BW /d	[2]	4.70E-01	µg/L	[10]
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran						
61626-71-9	Dichloropentadiene						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
62-50-0	Ethyl methanesulfonate						
62-53-3	Aniline						
62-75-9	N-Nitroso-N,N-dimethylamine						
621-64-7	Di-n-propylnitrosamine						
624-83-9	Methyl isocyanate						
628-73-9	Hexanenitrile						
630-08-0	Carbon monoxide						
630-20-6	1,1,1,2-Tetrachloroethane	8.93E+03	µg/kg BW /d	[5]			
64-18-6	Formic acid						
65-85-0	Benzoic acid	4.00E+03	µg/kg BW /d	[5]	4.20E+01	µg/L	[3]
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl						
67-56-1	Methyl alcohol	5.00E+04	µg/kg BW /d	[5]			
67-63-0	2-Propyl alcohol				7.50E+00	µg/L	[3]
67-64-1	2-Propanone (Acetone)	1.00E+04	µg/kg BW /d	[2]	1.26E+03	µg/L	[9]
67-66-3	Chloroform	6.00E+04	µg/kg BW /d	[2]	2.80E+01	µg/L	[10]
67-72-1	Hexachloroethane	1.00E+02	µg/kg BW /d	[5]	1.20E+01	µg/L	[3]
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran						
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl						
70-30-4	Hexachlorophene	5.60E+03	µg/kg BW /d	[2]	8.80E-01	µg/L	[10]
70362-50-4	3,4,4',5-Tetrachlorobiphenyl						
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran						
71-36-3	n-Butyl alcohol	1.25E+04	µg/kg BW /d	[5]			
71-43-2	Benzene	2.64E+04	µg/kg BW /d	[4]	3.16E+00	µg/L	[9]
71-55-6	1,1,1-Trichloroethane	1.00E+06	µg/kg BW /d	[4]	1.10E+01	µg/L	[3]
72-43-5	Methoxychlor	5.01E+03	µg/kg BW /d	[5]	1.90E-02	µg/L	[4]
72-55-9	4,4'-DDE	1.00E+03	µg/kg BW /d	[2]	1.05E+01	µg/L	[10]
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran						
74-83-9	Bromomethane	1.40E+02	µg/kg BW /d	[5]			
74-87-3	Chloromethane						
74-88-4	Iodomethane						
74-95-3	Methylene bromide						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
74-97-5	Bromochloromethane						
7429-90-5	Aluminum	1.93E+00	mg/kg BW /d	[2]	7.50E-02	mg/L	[6]
7439-89-6	Iron				1.00E+00	mg/L	[3]
7439-92-1	Lead	3.75E-02	mg/kg BW /d	[2]	3.50E-04	mg/L	[6]
7439-93-2	Lithium	9.39E+00	mg/kg BW /d	[4]	1.40E-02	mg/L	[3]
7439-95-4	Magnesium						
7439-96-5	Manganese	8.80E+01	mg/kg BW /d	[4]	1.20E-01	mg/L	[3]
7439-97-6	Mercury						
7439-98-7	Molybdenum	2.58E-01	mg/kg BW /d	[4]	3.70E-01	mg/L	[3]
7440-02-0	Nickel	5.00E+01	mg/kg BW /d	[2]	1.10E-02	mg/L	[6]
7440-16-6	Rhodium						
7440-22-4	Silver	3.75E-01	mg/kg BW /d	[2]	1.20E-04	mg/L	[10]
7440-23-5	Sodium						
7440-24-6	Strontium	2.63E+02	mg/kg BW /d	[4]	1.50E+00	mg/L	[3]
7440-25-7	Tantalum						
7440-28-0	Thallium	1.31E-02	mg/kg BW /d	[2]	4.00E-03	mg/L	[10]
7440-29-1	Thorium-232	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
7440-31-5	Tin				7.30E-02	mg/L	[3]
7440-33-7	Tungsten						
7440-36-0	Antimony	6.60E-02	mg/kg BW /d	[2]	3.00E-02	mg/L	[10]
7440-38-2	Arsenic	1.25E+00	mg/kg BW /d	[2]	5.50E-02	mg/L	[6]
7440-39-3	Barium	5.10E-01	mg/kg BW /d	[2]	4.00E-03	mg/L	[3]
7440-41-7	Beryllium	6.60E-01	mg/kg BW /d	[2]	6.60E-04	mg/L	[10]
7440-43-9	Cadmium	2.52E-02	mg/kg BW /d	[2]	1.30E-05	mg/L	[6]
7440-47-3	Chromium						
7440-48-4	Cobalt	2.86E-01	mg/kg BW /d	[1]	2.30E-02	mg/L	[3]
7440-50-8	Copper	1.20E+01	mg/kg BW /d	[2]	2.60E-04	mg/L	[6]
7440-61-1	Uranium	3.07E+00	mg/kg BW /d	[4]	2.60E-03	mg/L	[3]
7440-61-1R	Uranium-238	1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]
7440-62-2	Vanadium	2.10E-01	mg/kg BW /d	[4]	2.00E-02	mg/L	[3]
7440-65-5	Yttrium						
7440-66-6	Zinc	1.04E+01	mg/kg BW /d	[2]	2.10E-02	mg/L	[6]

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
7440-67-7	Zirconium	1.74E+00	mg/kg BW /d	[4]	1.70E-02	mg/L	[3]
7446-09-5	Sulfur dioxide						
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl						
7487-94-7	Mercury (Hg^{+2})						
75-00-3	Chloroethane						
75-01-4	1-Chloroethene	1.70E+02	µg/kg BW /d	[2]	3.88E+03	µg/L	[10]
75-02-5	Fluoroethene (Vinyl fluoride)						
75-05-8	Acetonitrile						
75-07-0	Acetaldehyde						
75-09-2	Dichloromethane	6.16E+03	µg/kg BW /d	[5]	2.20E+03	µg/L	[3]
75-15-0	Carbon disulfide	1.10E+04	µg/kg BW /d	[5]	9.20E-01	µg/L	[3]
75-21-8	Oxirane						
75-25-2	Bromoform	1.79E+03	µg/kg BW /d	[5]			
75-27-4	Bromodichloromethane	1.79E+03	µg/kg BW /d	[5]			
75-29-6	2-Chloropropane						
75-34-3	1,1-Dichloroethane				4.70E+01	µg/L	[3]
75-35-4	1,1-Dichloroethene	3.00E+04	µg/kg BW /d	[4]	2.50E+01	µg/L	[3]
75-44-5	Phosgene						
75-45-6	Chlorodifluoromethane						
75-50-3	Trimethylamine						
75-69-4	Trichlorofluoromethane	3.49E+04	µg/kg BW /d	[5]			
75-71-8	Dichlorodifluoromethane	1.50E+04	µg/kg BW /d	[5]			
76-01-7	Pentachloroethane				3.90E+01	µg/L	[1]
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane						
76-44-8	Heptachlor	2.50E+00	µg/kg BW /d	[2]	3.80E-03	µg/L	[10]
764-41-0	1,4-Dichloro-2-butene						
7647-01-0	Hydrogen chloride	1.44E+01	mg/kg BW /d	[5]	2.30E+02	mg/L	[7]
765-34-4	Glycidylaldehyde	1.09E+02	µg/kg BW /d	[5]			
7664-39-3	Hydrogen fluoride	3.14E+01	mg/kg BW /d	[4]			
7664-41-7	Ammonia/Ammonium				1.70E-03	mg/L	[5]
77-47-4	Hexachlorocyclopentadiene	3.80E+03	µg/kg BW /d	[2]	5.20E-01	µg/L	[10]
77-78-1	Dimethyl sulfate						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
7704-34-9	Total Sulfur (thermodynamically stable)						
7723-14-0	Phosphorus						
7782-41-4	Fluorine gas (F_2)						
7782-49-2	Selenium	7.60E-02	mg/kg BW /d	[2]	2.60E-03	mg/L	[6]
7782-50-5	Chlorine	1.44E+01	mg/kg BW /d	[5]	1.10E-02	mg/L	[8]
78-83-1	2-Methylpropyl alcohol	3.16E+04	µg/kg BW /d	[5]			
78-87-5	1,2-Dichloropropane						
78-93-3	2-Butanone	1.77E+06	µg/kg BW /d	[5]	1.40E+04	µg/L	[3]
79-00-5	1,1,2-Trichloroethane				1.20E+03	µg/L	[3]
79-01-6	1,1,2-Trichloroethylene	7.00E+02	µg/kg BW /d	[5]	4.70E+01	µg/L	[3]
79-10-7	2-Propenoic acid	5.30E+03	µg/kg BW /d	[5]			
79-34-5	1,1,2,2-Tetrachloroethane				6.10E+02	µg/L	[3]
79-46-9	2-Nitropropane						
80-62-6	Methyl methacrylate	1.36E+05	µg/kg BW /d	[5]			
82-68-8	Pentachloronitrobenzene	4.58E+05	µg/kg BW /d	[2]	1.00E+01	µg/L	[10]
822-06-0	Hexamethylene-1,5-diisocyanate						
823-40-5	Toluene-2,6-diamine						
83-32-9	Acenaphthene	1.75E+04	µg/kg BW /d	[5]	2.30E+01	µg/L	[4]
832-69-9	1-Methylphenanthrene						
84-66-2	Diethyl phthalate	4.58E+06	µg/kg BW /d	[4]	2.10E+02	µg/L	[3]
84-74-2	Dibutyl phthalate	5.50E+05	µg/kg BW /d	[4]	3.50E+01	µg/L	[3]
85-01-8	Phenanthrene				6.30E+00	µg/L	[4]
85-44-9	Phthalic anhydride	1.56E+05	µg/kg BW /d	[5]			
85-68-7	Butylbenzyl phthalate				1.90E+01	µg/L	[3]
86-73-7	Fluorene	1.25E+04	µg/kg BW /d	[5]	3.90E+00	µg/L	[3]
87-61-6	1,2,3-Trichlorobenzene						
87-68-3	Hexachlorobutadiene	2.00E+02	µg/kg BW /d	[2]	9.30E-01	µg/L	[10]
87-86-5	Pentachlorophenol	3.00E+02	µg/kg BW /d	[2]	1.58E+00	µg/L	[9]
88-06-2	2,4,6-Trichlorophenol				9.70E+00	µg/L	[1]
88-74-4	o-Nitroaniline						
88-75-5	2-Nitrophenol						

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
90-04-0	o-Anisidine						
90-12-0	1-Methylnaphthalene						
91-20-3	Naphthalene	7.10E+03	µg/kg BW /d	[5]	1.20E+01	µg/L	[3]
91-22-5	Quinoline						
91-57-6	2-Methyl naphthalene						
91-58-7	2-Chloronaphthalene	2.50E+05	µg/kg BW /d	[5]			
91-94-1	3,3'-Dichlorobenzidine						
92-52-4	1,1'-Biphenyl	5.00E+04	µg/kg BW /d	[5]	1.40E+01	µg/L	[3]
924-16-3	N-Nitrosodi-n-butylamine						
94-59-7	Safrole						
94-75-7	2,4-D and esters						
95-48-7	o-Cresol	5.00E+03	µg/kg BW /d	[5]	6.31E+00	µg/L	[9]
95-49-8	2-Chlorotoluene	2.00E+04	µg/kg BW /d	[5]			
95-50-1	1,2-Dichlorobenzene	8.57E+04	µg/kg BW /d	[5]	1.40E+01	µg/L	[3]
95-53-4	o-Toluidine						
95-57-8	2-Chlorophenol						
95-63-6	1,2,4-Trimethyl benzene						
95-94-3	1,2,4,5-Tetrachlorobenzene	3.40E+01	µg/kg BW /d	[5]			
95-95-4	2,4,5-Trichlorophenol	1.00E+04	µg/kg BW /d	[5]			
96-12-8	1,2-Dibromo-3-chloropropane						
96-18-4	1,2,3-Trichloropropane	5.71E+02	µg/kg BW /d	[5]			
96-45-7	Ethylene thiourea	2.50E+01	µg/kg BW /d	[5]			
97-63-2	Ethyl methacrylate						
98-01-1	Furfural	7.90E+01	µg/kg BW /d	[5]			
98-06-6	tert-Butyl benzene						
98-07-7	Benzotrichloride						
98-82-8	Cumene	1.10E+05	µg/kg BW /d	[5]			
98-83-9	alpha-Methylstyrene						
98-86-2	Acetophenone	4.23E+04	µg/kg BW /d	[5]			
98-95-3	Nitrobenzene	4.60E+01	µg/kg BW /d	[5]	2.70E+02	µg/L	[10]
99-35-4	1,3,5-Trinitrobenzene	2.68E+03	µg/kg BW /d	[5]	1.30E+01	µg/L	[9]
99-65-0	1,3-Dinitrobenzene	1.05E+03	µg/kg BW /d	[2]	2.60E+01	µg/L	[10]

Table 7-8 Mink, Chinook Salmon, and Other Salmonids Ingestion Toxicity Reference Values

CAS Registry Number	Constituent	Ingestion *TRV* of the Mink	Units for Mink Ingestion *TRV*	Reference	Direct Exposure *TRV* of the Chinook Salmon and Other Salmonids	Units for Salmon Direct Exposure *TRV*	Reference
99-87-6	p-Cymene						
All radionuclides combined		1.00E-01	rad/d	[3]	1.00E+00	rad/d	[2]

Reference **Reference (source) for Ingestion Toxicity Reference Values of the Mink**

[1] Clayton, GD and Clayton, FE. 1981. *Patty's Industrial Hygiene and Toxicology, Vol. 2A: Toxicology*, 3rd Revised Edition. John Wiley & Sons, New York.

[2] EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

[3] IAEA. 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards*, IAEA Technical Report Series 332. International Commission on Radiological Protection, Vienna, Austria.

[4] Sample BE, Opresko DM, and Suter II GW. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*, ES/ER/TM-86/R3. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

[5] U.S. EPA. 2005. Integrated Risk Information System (IRIS). Office of Research and Development, National Center for Environmental Assessment, Washington, DC (http://www.epa.gov/iris/). Accessed 2004.

Reference **Reference (source) for Ingestion Toxicity Reference Values of Chinook Salmon and Other Salmonids**

[1] EPA. 1987. *Quality criteria for water 1986 and update No. 1 and update No. 2 (May 1, 1987)*, EPA-440/5-86-001. US Environmental Protection Agency, Washington, DC.

[2] NCRP. 1991. *Effects of Ionizing Radiation on Aquatic Organisms*, NCRP Report No. 109. National Council on Radiation Protection and Measurements, Bethesda, MD.

[3] Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN.

[4] Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table 1, NAWQ chronic value)

[5] Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table 1, lowest chronic value for Ammonia)

[6] Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table 2, Sensitive Species EC20)

Reference	Reference (source) for Ingestion Toxicity Reference Values of Chinook Salmon and Other Salmonids
[7]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table 3, Region IV chronic value for chloride used as surrogate)
[8]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table 3, Region IV chronic value)
[9]	Suter II GW and Tsao CL. 1996. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision*, ES/ER/TM 96/R2. Lockheed Martin Energy Systems, Inc., Oak Ridge National Laboratory, Oak Ridge, TN. (Table C-1, rainbow trout, 95% LCL)
[10]	Table E-1 from EPA. 1999. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities*, Peer Review Draft, EPA 530-D-99-001. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC. (http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm)

Contents

8 Radionuclide-Specific Parameters for Ecological Risk Assessment 8-1

Tables

Table 8-1 Radionuclide Daughter Products Used for Sediment Immersion and Internal Dose 8-1

Table 8-2 Radiation Energy and Alpha/Beta Absorption Fractions 8-3

Table 8-3 Plant and Invertebrate Gamma Radiation Absorption Fractions 8-7

Table 8-4 Plant and Invertebrate Gamma Radiation Absorption Fractions 8-9

Table 8-5 Great Basin Pocket Mouse and Western Meadowlark Gamma Radiation Absorption Fractions 8-11

Table 8-6 Coyote, Red-Tailed Hawk, and Burrowing Owl Gamma Radiation Absorption Fractions 8-13

Table 8-7 Aquatic Plants, Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Radiation Absorption Fractions 8-15

Table 8-8 Canadian Goose and Spotted Sandpiper Gamma Radiation Absorption Fractions 8-19

Table 8-9 Bald Eagle, Great Blue Heron, and Mink Gamma Radiation Absorption Fractions 8-22

8 Radionuclide-Specific Parameters for Ecological Risk Assessment

Table 8-1 Radionuclide Daughter Products Used for Sediment Immersion and Internal Dose

Parent Radionuclide CAS Registry Number	Parent Isotope	Daughter Product CAS Registry Number	Daughter Product [1]
14952-40-0	Actinium-227	15229-37-5	Bismuth-211
		15756-98-6	Francium-223 (1.38 %)
		15816-77-0	Lead-211
		7440-08-6	Polonium-211 (0.27 %)
		15706-52-2	Polonium-215
		15623-45-7	Radium-223
		14835-02-0	Radon-219
		14133-67-6	Thallium-207 (99.72 %)
		15623-47-9	Thorium-227 (98.62 %)
14993-75-0	Americium-243	13968-59-7	Neptunium-239
14234-35-6	Antimony-125	14390-73-9	Tellurium-125m
14683-23-9	Europium-152	7440-54-2	Gadolinium-152
13994-20-2	Neptunium-237	13981-14-1	Protactinium-233
13982-63-3	Radium-226	14331-79-4	Bismuth-210
		14733-03-0	Bismuth-214
		14255-04-0	Lead-210
		15067-28-4	Lead-214
		13981-52-7	Polonium-210
		15735-68-8	Polonium-214
		15422-74-9	Polonium-218
		14859-67-7	Radon-222
15262-20-1	Radium-228	14331-83-0	Actinium-228
		14913-49-6	Bismuth-212
		15092-94-1	Lead-212
		15389-34-1	Polonium-212 (62.07%)
		15756-58-8	Polonium-216
		13233-32-4	Radium-224
		22481-48-7	Radon-220
		14913-50-9	Thalium-208 (35.93%)
		14274-82-9	Thorium-228
13967-48-1	Ruthenium-106	14234-34-5	Rhodium-106

Table 8-1 Radionuclide Daughter Products Used for Sediment Immersion and Internal Dose

Parent Radionuclide CAS Registry Number	Parent Isotope	Daughter Product CAS Registry Number	Daughter Product [1]
15594-54-4	Thorium-229	14265-85-1	Actinium-225
		17239-90-6	Astatine-217
		15776-20-2	Bismuth-213
		15756-41-9	Francium-221
		14119-30-3	Lead-209
		15756-57-7	Polonium-213 (97.84 %)
		13981-53-8	Radium-225
		15690-73-0	Thallium-209 (2.16 %)
15832-50-5	Tin-126	15756-32-8	Antimony-126
		15756-32-8m	Antimony-126m
14158-29-3	Uranium-232	14913-49-6	Bismuth-212
		15092-94-1	Lead-212
		15389-34-1	Polonium-212 (62.07%)
		15756-58-8	Polonium-216
		13233-32-4	Radium-224
		22481-48-7	Radon-220
		14913-50-9	Thalium-208 (35.93%)
		14274-82-9	Thorium-228
13966-29-5	Uranium-234	14269-63-7	Thorium-230
15117-96-1	Uranium-235	14932-40-2	Thorium-231
7440-61-1	Uranium-238	15100-28-4	Protactinium-234
		15100-28-4m	Protactinium-234m
		15605-10-8	Thorium-234
15751-77-6	Zirconium-93	378782-82-2	Niobium-93m

[1] Percentage shown is the yield of the daughter product from the decay of the parent isotope. If no percentage is shown, an isotope is considered equal in activity to that of its parent.

Table 8-2 Radiation Energy and Alpha/Beta Absorption Fractions

CAS Registry Number	Constituent	Internal Alpha Energy	Internal Alpha Absorbed Fraction	Internal Beta Energy	Internal Beta Absorbed Fraction	Internal Gamma Energy
10028-17-8	Tritium	0.00E+00	1	6.00E-03	1	0.00E+00
10045-97-3	Cesium-137	0.00E+00	1	1.87E-01	1	0.00E+00
10098-91-6	Yttrium-90	0.00E+00	1	9.35E-01	1	1.00E-03
10098-97-2	Strontium-90	0.00E+00	1	1.96E-01	1	0.00E+00
10198-40-0	Cobalt-60	0.00E+00	1	9.70E-02	1	2.50E+00
13233-32-4	Radium-224 (d)	5.67E+00	1	2.00E-03	1	1.00E-02
13966-29-5	Uranium-234	4.76E+00	1	1.30E-02	1	2.00E-03
13967-48-1	Ruthenium-106	0.00E+00	1	1.00E-02	1	0.00E+00
13967-70-9	Cesium-134	0.00E+00	1	1.64E-01	1	1.56E+00
13968-55-3	Uranium-233	4.82E+00	1	6.00E-03	1	1.00E-03
13968-59-7	Neptunium-239 (d)	0.00E+00	1	2.60E-01	1	1.73E-01
13981-14-1	Protactinium-233 (d)	0.00E+00	1	1.96E-01	1	2.04E-01
13981-15-2	Curium-244	5.80E+00	1	9.00E-03	1	2.00E-03
13981-16-3	Plutonium-238	5.49E+00	1	1.10E-02	1	2.00E-03
13981-37-8	Nickel-63	0.00E+00	1	1.70E-02	1	0.00E+00
13981-52-7	Polonium-210 (d)	5.30E+00	1	1.00E-03	1	1.00E-03
13981-53-8	Radium-225 (d)	0.00E+00	1	1.07E-01	1	1.40E-02
13982-10-0	Plutonium-242	4.89E+00	1	9.00E-03	1	1.00E-03
13982-63-3	Radium-226	4.77E+00	1	4.00E-03	1	7.00E-03
13982-70-2	Uranium-236	4.51E+00	1	1.10E-02	1	2.00E-03
13994-20-2	Neptunium-237	4.77E+00	1	7.00E-02	1	3.50E-02
14119-30-3	Lead-209 (d)	0.00E+00	1	1.98E-01	1	0.00E+00
14119-32-5	Plutonium-241	1.00E-03	1	5.00E-03	1	1.00E-03
14119-33-6	Plutonium-240	5.16E+00	1	1.10E-02	1	2.00E-03
14133-67-6	Thallium-207 (d)	0.00E+00	1	4.93E-01	1	2.00E-03
14133-76-7	Technetium-99	0.00E+00	1	1.01E-01	1	0.00E+00
14158-29-3	Uranium-232	5.30E+00	1	1.70E-02	1	2.00E-03
14234-34-5	Rhodium-106 (d)	0.00E+00	1	1.41E+00	0.96	2.05E-01
14234-35-6	Antimony-125	0.00E+00	1	1.00E-01	1	4.31E-01
14255-04-0	Lead-210 (d)	0.00E+00	1	3.80E-02	1	5.00E-03
14265-85-1	Actinium-225 (d)	5.79E+00	1	2.20E-02	1	1.80E-02
14269-63-7	Thorium-230 (d)	4.67E+00	1	1.50E-02	1	2.00E-03
14274-82-9	Thorium-228 (d)	5.40E+00	1	2.10E-02	1	3.00E-03

Table 8-2 Radiation Energy and Alpha/Beta Absorption Fractions

CAS Registry Number	Constituent	Internal Alpha Energy	Internal Alpha Absorbed Fraction	Internal Beta Energy	Internal Beta Absorbed Fraction	Internal Gamma Energy
14274-82-9	Thorium-228 (d)	5.40E+00	1	2.10E-02	1	3.00E-03
14331-79-4	Bismuth-210 (d)	0.00E+00	1	3.89E-01	1	0.00E+00
14331-83-0	Actinium-228 (d)	0.00E+00	1	4.75E-01	1	9.71E-01
14331-85-2	Protactinium-231	4.97E+00	1	6.50E-02	1	4.80E-02
14336-70-0	Nickel-59	0.00E+00	1	5.00E-03	1	2.00E-03
14390-73-9	Tellurium-125m (d)	0.00E+00	1	1.09E-01	1	3.60E-02
14391-16-3	Europium-155	0.00E+00	1	6.30E-02	1	6.10E-02
14596-10-2	Americium-241	5.48E+00	1	5.20E-02	1	3.30E-02
14683-23-9	Europium-152	0.00E+00	1	1.39E-01	1	1.16E+00
14733-03-0	Bismuth-214 (d)	0.00E+00	1	6.59E-01	1	1.51E+00
14762-75-5	Carbon-14	0.00E+00	1	4.90E-02	1	0.00E+00
14835-02-0	Radon-219 (d)	6.76E+00	1	6.00E-03	1	5.60E-02
14859-67-7	Radon-222 (d)	5.49E+00	1	1.00E-03	1	1.00E-03
14913-49-6	Bismuth-212 (d)	2.17E+00	1	4.72E-01	1	1.86E-01
14913-50-9	Thalium-208 (d)	0.00E+00	1	5.98E-01	1	3.38E+00
14932-40-2	Thorium-231 (d)	0.00E+00	1	1.65E-01	1	2.60E-02
14952-40-0	Actinium-227	6.80E-02	1	1.60E-02	1	1.00E-03
14993-75-0	Americium-243	5.27E+00	1	2.20E-02	1	5.60E-02
15046-84-1	Iodine-129	0.00E+00	1	6.40E-02	1	2.50E-02
15067-28-4	Lead-214 (d)	0.00E+00	1	2.93E-01	1	2.50E-01
15092-94-1	Lead-212 (d)	0.00E+00	1	1.76E-01	1	1.48E-01
15100-28-4m	Protactinium-234m (d)	0.00E+00	1	8.22E-01	1	1.20E-02
15100-28-4	Protactinium-234 (d)	0.00E+00	1	4.94E-01	1	1.92E+00
15117-48-3	Plutonium-239	5.15E+00	1	7.00E-03	1	1.00E-03
15117-96-1	Uranium-235	4.40E+00	1	4.90E-02	1	1.56E-01
15229-37-5	Bismuth-211 (d)	6.55E+00	1	1.00E-02	1	4.70E-02
15262-20-1	Radium-228	0.00E+00	1	1.70E-02	1	1.00E-03
15389-34-1	Polonium-212 (d)	8.79E+00	1	0.00E+00	1	0.00E+00
15422-74-9	Polonium-218 (d)	6.00E+00	1	1.00E-03	1	1.00E-03
15510-73-3	Curium-242	6.10E+00	1	1.00E-02	1	2.00E-03
15585-10-1	Europium-154	0.00E+00	1	2.92E-01	1	1.24E+00
15594-54-4	Thorium-229	4.87E+00	1	1.16E-01	1	9.60E-02
15605-10-8	Thorium-234 (d)	0.00E+00	1	6.00E-02	1	9.00E-03
15623-45-7	Radium-223 (d)	5.67E+00	1	7.60E-02	1	1.34E-01

Table 8-2 Radiation Energy and Alpha/Beta Absorption Fractions

CAS Registry Number	Constituent	Internal Alpha Energy	Internal Alpha Absorbed Fraction	Internal Beta Energy	Internal Beta Absorbed Fraction	Internal Gamma Energy
15623-47-9	Thorium-227 (d)	5.88E+00	1	5.30E-02	1	1.10E-01
15690-73-0	Thallium-209 (d)	0.00E+00	1	6.88E-01	1	2.03E+00
15706-52-2	Polonium-215 (d)	7.39E+00	1	1.00E-03	1	1.00E-03
15715-94-3	Samarium-151	0.00E+00	1	2.00E-02	1	1.00E-03
15735-68-8	Polonium-214 (d)	7.69E+00	1	1.00E-03	1	1.00E-03
15751-77-6	Zirconium-93	0.00E+00	1	2.00E-02	1	0.00E+00
15756-32-8	Antimony-126 (d)	0.00E+00	1	2.83E-01	1	2.83E+00
15756-32-8m	Antimony-126m (d)	0.00E+00	1	5.91E-01	1	1.55E+00
15756-41-9	Francium-221 (d)	6.30E+00	1	1.00E-02	1	3.10E-02
15756-57-7	Polonium-213 (d)	8.38E+00	1	0.00E+00	1	0.00E+00
15756-58-8	Polonium-216 (d)	6.78E+00	1	1.00E-03	1	1.00E-03
15756-98-6	Francium-223 (d)	0.00E+00	1	4.00E-01	1	5.90E-02
15757-87-6	Curium-243	5.80E+00	1	1.38E-01	1	1.34E-01
15758-45-9	Selenium-79	0.00E+00	1	5.60E-02	1	0.00E+00
15776-20-2	Bismuth-213 (d)	1.26E-01	1	4.42E-01	1	1.33E-01
15816-77-0	Lead-211 (d)	0.00E+00	1	4.56E-01	1	5.10E-02
15832-50-5	Tin-126	0.00E+00	1	1.72E-01	1	5.70E-02
17239-90-6	Astatine-217 (d)	7.07E+00	1	1.00E-03	1	1.00E-03
22481-48-7	Radon-220 (d)	6.29E+00	1	1.00E-03	1	1.00E-03
378253-40-8	Barium-137m					
378253-44-2	Cadmium-113m					
378782-82-2	Niobium-93m	0.00E+00	1	2.80E-02	1	2.00E-03
378782-82-2	Niobium-93m (d)	0.00E+00	1	2.80E-02	1	2.00E-03
7440-08-6R	Polonium-211 (d)	7.44E+00	1	1.00E-03	1	8.00E-03
7440-29-1	Thorium-232	4.00E+00	1	1.20E-02	1	1.00E-03
7440-54-2R	Gadolinium-152 (d)	2.15E+00	1	0.00E+00	1	0.00E+00
7440-61-1R	Uranium-238	4.19E+00	1	1.00E-02	1	1.00E-03

Table 8-2 Radiation Energy and Alpha/Beta Absorption Fractions

CAS Registry Number	Constituent	Internal Alpha Energy	Internal Alpha Absorbed Fraction	Internal Beta Energy	Internal Beta Absorbed Fraction	Internal Gamma Energy

Notes:

Internal alpha absorbed fraction assumed to be 1.0 for alpha radiation, internal beta absorbed fraction is from the reference(s) cited below. "(d)" indicates radionuclide is a daughter product of a radionuclide of potential concern. All energy units are in MeV/disintegration.

Reference for Internal Alpha, Beta, and Gamma Energy

Table A.1 from Eckerman KF and Ryman JC. 1993. *External Exposure to Radionuclides in Air, Water, and Soil*, EPA 402-R-93-081, Federal Guidance Report No. 12. Office of Radiation and Indoor Air, US Environmental Protection Agency, Washington, DC, USA.

Reference for Internal Beta Absorbed Fraction

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-3 Plant and Invertebrate Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Invertebrate Gamma Absorption Factor	Units for Invertebrate Gamma Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	6.30E-01	unitless	6.30E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	1.00E-02	unitless	1.00E-02	unitless
13966-29-5	Uranium-234	6.30E-01	unitless	6.30E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	8.50E-02	unitless	8.50E-02	unitless
13968-55-3	Uranium-233	6.30E-01	unitless	6.30E-01	unitless
13981-15-2	Curium-244	6.30E-01	unitless	6.30E-01	unitless
13981-16-3	Plutonium-238	6.30E-01	unitless	6.30E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless
13982-10-0	Plutonium-242	6.30E-01	unitless	6.30E-01	unitless
13982-63-3	Radium-226	6.30E-01	unitless	6.30E-01	unitless
13982-70-2	Uranium-236	6.30E-01	unitless	6.30E-01	unitless
13994-20-2	Neptunium-237	2.70E-02	unitless	2.70E-02	unitless
14119-32-5	Plutonium-241	6.30E-01	unitless	6.30E-01	unitless
14119-33-6	Plutonium-240	6.30E-01	unitless	6.30E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	6.30E-01	unitless	6.30E-01	unitless
14234-35-6	Antimony-125	1.10E-02	unitless	1.10E-02	unitless
14331-85-2	Protactinium-231	1.20E-02	unitless	1.20E-02	unitless
14336-70-0	Nickel-59	6.30E-01	unitless	6.30E-01	unitless
14391-16-3	Europium-155	1.20E-02	unitless	1.20E-02	unitless
14596-10-2	Americium-241	4.00E-02	unitless	4.00E-02	unitless
14683-23-9	Europium-152	8.50E-02	unitless	8.50E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless
14952-40-0	Actinium-227	6.30E-01	unitless	6.30E-01	unitless
14993-75-0	Americium-243	1.20E-02	unitless	1.20E-02	unitless
15046-84-1	Iodine-129	9.00E-02	unitless	9.00E-02	unitless
15117-48-3	Plutonium-239	6.30E-01	unitless	6.30E-01	unitless
15117-96-1	Uranium-235	1.00E-02	unitless	1.00E-02	unitless

Table 8-3 Plant and Invertebrate Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Invertebrate Gamma Absorption Factor	Units for Invertebrate Gamma Absorption Factor
15262-20-1	Radium-228	6.30E-01	unitless	6.30E-01	unitless
15510-73-3	Curium-242	6.30E-01	unitless	6.30E-01	unitless
15585-10-1	Europium-154	8.50E-02	unitless	8.50E-02	unitless
15594-54-4	Thorium-229	1.20E-02	unitless	1.20E-02	unitless
15715-94-3	Samarium-151	6.30E-01	unitless	6.30E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless
15757-87-6	Curium-243	1.00E-02	unitless	1.00E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless
15832-50-5	Tin-126	1.20E-02	unitless	1.20E-02	unitless
378253-40-8	Barium-137m				
378253-44-2	Cadmium-113m				
378782-82-2	Niobium-93m	6.30E-01	unitless	6.30E-01	unitless
7440-29-1	Thorium-232	6.30E-01	unitless	6.30E-01	unitless
7440-61-1R	Uranium-238	6.30E-01	unitless	6.30E-01	unitless

Reference (source) for Plant and Invertebrate Gamma Radiation Absorption Factors

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-4 Plant and Invertebrate Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Mule Deer Gamma Absorption Factor	Units for Mule Deer Gamma Absorption Factor	Mourning Dove Gamma Absorption Factor	Units for Mourning Dove Gamma Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	9.40E-01	unitless	7.90E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	1.10E-01	unitless	1.00E-02	unitless
13966-29-5	Uranium-234	9.40E-01	unitless	7.90E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	1.20E-01	unitless	1.23E-02	unitless
13968-55-3	Uranium-233	9.40E-01	unitless	7.90E-01	unitless
13981-15-2	Curium-244	9.40E-01	unitless	7.90E-01	unitless
13981-16-3	Plutonium-238	9.40E-01	unitless	7.90E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless
13982-10-0	Plutonium-242	9.40E-01	unitless	7.90E-01	unitless
13982-63-3	Radium-226	9.40E-01	unitless	7.90E-01	unitless
13982-70-2	Uranium-236	9.40E-01	unitless	7.90E-01	unitless
13994-20-2	Neptunium-237	2.90E-01	unitless	4.00E-02	unitless
14119-32-5	Plutonium-241	9.40E-01	unitless	7.90E-01	unitless
14119-33-6	Plutonium-240	9.40E-01	unitless	7.90E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	9.40E-01	unitless	7.90E-01	unitless
14234-35-6	Antimony-125	1.50E-01	unitless	1.50E-02	unitless
14331-85-2	Protactinium-231	2.00E-01	unitless	1.70E-02	unitless
14336-70-0	Nickel-59	9.40E-01	unitless	7.90E-01	unitless
14391-16-3	Europium-155	2.00E-01	unitless	1.70E-02	unitless
14596-10-2	Americium-241	3.00E-01	unitless	5.00E-02	unitless
14683-23-9	Europium-152	1.20E-01	unitless	1.23E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless
14952-40-0	Actinium-227	9.40E-01	unitless	7.90E-01	unitless
14993-75-0	Americium-243	2.00E-01	unitless	1.70E-02	unitless
15046-84-1	Iodine-129	3.60E-01	unitless	1.26E-01	unitless
15117-48-3	Plutonium-239	9.40E-01	unitless	7.90E-01	unitless
15117-96-1	Uranium-235	1.40E-01	unitless	1.15E-02	unitless
15262-20-1	Radium-228	9.40E-01	unitless	7.90E-01	unitless

Table 8-4 Plant and Invertebrate Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Mule Deer Gamma Absorption Factor	Units for Mule Deer Gamma Absorption Factor	Mourning Dove Gamma Absorption Factor	Units for Mourning Dove Gamma Absorption Factor
15510-73-3	Curium-242	9.40E-01	unitless	7.90E-01	unitless
15585-10-1	Europium-154	1.20E-01	unitless	1.23E-02	unitless
15594-54-4	Thorium-229	2.00E-01	unitless	1.70E-02	unitless
15715-94-3	Samarium-151	9.40E-01	unitless	7.90E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless
15757-87-6	Curium-243	1.50E-01	unitless	1.05E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless
15832-50-5	Tin-126	2.00E-01	unitless	1.70E-02	unitless
378253-40-8	Barium-137m				
378253-44-2	Cadmium-113m				
378782-82-2	Niobium-93m	9.40E-01	unitless	7.90E-01	unitless
7440-29-1	Thorium-232	9.40E-01	unitless	7.90E-01	unitless
7440-61-1R	Uranium-238	9.40E-01	unitless	7.90E-01	unitless

Reference for Mule Deer and Mourning Dove Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-5 Great Basin Pocket Mouse and Western Meadowlark Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Great Basin Pocket Mouse Gamma Absorption Factor	Units for Great Basin Pocket Mouse Gamma Absorption Factor	Meadowlark Gamma Absorption Factor	Units for Meadowlark Gamma Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	7.90E-01	unitless	7.90E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	1.00E-02	unitless	1.00E-02	unitless
13966-29-5	Uranium-234	7.90E-01	unitless	7.90E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	1.23E-02	unitless	1.23E-02	unitless
13968-55-3	Uranium-233	7.90E-01	unitless	7.90E-01	unitless
13981-15-2	Curium-244	7.90E-01	unitless	7.90E-01	unitless
13981-16-3	Plutonium-238	7.90E-01	unitless	7.90E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless
13982-10-0	Plutonium-242	7.90E-01	unitless	7.90E-01	unitless
13982-63-3	Radium-226	7.90E-01	unitless	7.90E-01	unitless
13982-70-2	Uranium-236	7.90E-01	unitless	7.90E-01	unitless
13994-20-2	Neptunium-237	4.00E-02	unitless	4.00E-02	unitless
14119-32-5	Plutonium-241	7.90E-01	unitless	7.90E-01	unitless
14119-33-6	Plutonium-240	7.90E-01	unitless	7.90E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	7.90E-01	unitless	7.90E-01	unitless
14234-35-6	Antimony-125	1.50E-02	unitless	1.50E-02	unitless
14331-85-2	Protactinium-231	1.70E-02	unitless	1.70E-02	unitless
14336-70-0	Nickel-59	7.90E-01	unitless	7.90E-01	unitless
14391-16-3	Europium-155	1.70E-02	unitless	1.70E-02	unitless
14596-10-2	Americium-241	5.00E-02	unitless	5.00E-02	unitless
14683-23-9	Europium-152	1.23E-02	unitless	1.23E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless
14952-40-0	Actinium-227	7.90E-01	unitless	7.90E-01	unitless
14993-75-0	Americium-243	1.70E-02	unitless	1.70E-02	unitless
15046-84-1	Iodine-129	1.26E-01	unitless	1.26E-01	unitless
15117-48-3	Plutonium-239	7.90E-01	unitless	7.90E-01	unitless

Table 8-5 Great Basin Pocket Mouse and Western Meadowlark Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Great Basin Pocket Mouse Gamma Absorption Factor	Units for Great Basin Pocket Mouse Gamma Absorption Factor	Meadowlark Gamma Absorption Factor	Units for Meadowlark Gamma Absorption Factor
15117-96-1	Uranium-235	1.15E-02	unitless	1.15E-02	unitless
15262-20-1	Radium-228	7.90E-01	unitless	7.90E-01	unitless
15510-73-3	Curium-242	7.90E-01	unitless	7.90E-01	unitless
15585-10-1	Europium-154	1.23E-02	unitless	1.23E-02	unitless
15594-54-4	Thorium-229	1.70E-02	unitless	1.70E-02	unitless
15715-94-3	Samarium-151	7.90E-01	unitless	7.90E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless
15757-87-6	Curium-243	1.05E-02	unitless	1.05E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless
15832-50-5	Tin-126	1.70E-02	unitless	1.70E-02	unitless
378253-40-8	Barium-137m				
378253-44-2	Cadmium-113m				
378782-82-2	Niobium-93m	7.90E-01	unitless	7.90E-01	unitless
7440-29-1	Thorium-232	7.90E-01	unitless	7.90E-01	unitless
7440-61-1R	Uranium-238	7.90E-01	unitless	7.90E-01	unitless

Reference (source) for Great Basin Pocket Mouse and Western Meadowlark Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-6 Coyote, Red-Tailed Hawk, and Burrowing Owl Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Coyote Absorption Factor	Units for Coyote Absorption Factor	Red-tailed Hawk Absorption Factor	Units for Red-tailed Hawk Absorption Factor	Burrowing Owl Absorption Factor	Units for Burrowing Owl Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	4.00E-02	unitless	3.00E-02	unitless	3.00E-02	unitless
13966-29-5	Uranium-234	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	5.00E-02	unitless	3.00E-02	unitless	3.00E-02	unitless
13968-55-3	Uranium-233	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-15-2	Curium-244	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-16-3	Plutonium-238	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13982-10-0	Plutonium-242	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13982-63-3	Radium-226	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13982-70-2	Uranium-236	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13994-20-2	Neptunium-237	1.50E-01	unitless	1.10E-01	unitless	1.10E-01	unitless
14119-32-5	Plutonium-241	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14119-33-6	Plutonium-240	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14234-35-6	Antimony-125	6.00E-02	unitless	4.00E-02	unitless	4.00E-02	unitless
14331-85-2	Protactinium-231	9.00E-02	unitless	6.00E-02	unitless	6.00E-02	unitless
14336-70-0	Nickel-59	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14391-16-3	Europium-155	9.00E-02	unitless	6.00E-02	unitless	6.00E-02	unitless
14596-10-2	Americium-241	1.60E-01	unitless	1.20E-01	unitless	1.20E-01	unitless
14683-23-9	Europium-152	5.00E-02	unitless	3.00E-02	unitless	3.00E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14952-40-0	Actinium-227	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14993-75-0	Americium-243	9.00E-02	unitless	6.00E-02	unitless	6.00E-02	unitless
15046-84-1	Iodine-129	2.10E-01	unitless	1.60E-01	unitless	1.60E-01	unitless
15117-48-3	Plutonium-239	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15117-96-1	Uranium-235	6.00E-02	unitless	4.00E-02	unitless	4.00E-02	unitless
15262-20-1	Radium-228	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless

Table 8-6 Coyote, Red-Tailed Hawk, and Burrowing Owl Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Coyote Absorption Factor	Units for Coyote Absorption Factor	Red-tailed Hawk Absorption Factor	Units for Red-tailed Hawk Absorption Factor	Burrowing Owl Absorption Factor	Units for Burrowing Owl Absorption Factor
15510-73-3	Curium-242	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15585-10-1	Europium-154	5.00E-02	unitless	3.00E-02	unitless	3.00E-02	unitless
15594-54-4	Thorium-229	9.00E-02	unitless	6.00E-02	unitless	6.00E-02	unitless
15715-94-3	Samarium-151	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15757-87-6	Curium-243	6.00E-02	unitless	4.00E-02	unitless	4.00E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15832-50-5	Tin-126	9.00E-02	unitless	6.00E-02	unitless	6.00E-02	unitless
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
7440-29-1	Thorium-232	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
7440-61-1R	Uranium-238	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless

Reference (source) for Coyote, Red-Tailed Hawk, and Burrowing Owl Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-7 Aquatic Plants, Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Benthic Invertebrates Absorption Factor	Units for Benthic Invertebrates Absorption Factor	Chinook Salmon and Other Salmonids Absorption Factor	Units for Chinook Salmon and Other Salmonids Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	1.00E-02	unitless	1.00E-02	unitless	7.00E-02	unitless
13233-32-4	Radium-224 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
13966-29-5	Uranium-234	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	8.50E-02	unitless	8.50E-02	unitless	8.00E-02	unitless
13968-55-3	Uranium-233	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13968-59-7	Neptunium-239 (d)	1.00E-02	unitless	1.00E-02	unitless	1.10E-02	unitless
13981-14-1	Protactinium-233 (d)	1.00E-02	unitless	1.00E-02	unitless	1.00E-02	unitless
13981-15-2	Curium-244	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13981-16-3	Plutonium-238	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13981-52-7	Polonium-210 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
13981-53-8	Radium-225 (d)	5.50E-01	unitless	5.50E-01	unitless	6.30E-01	unitless
13982-10-0	Plutonium-242	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13982-63-3	Radium-226	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13982-70-2	Uranium-236	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
13994-20-2	Neptunium-237	2.70E-02	unitless	2.70E-02	unitless	3.50E-01	unitless
14119-30-3	Lead-209 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14119-32-5	Plutonium-241	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
14119-33-6	Plutonium-240	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
14133-67-6	Thallium-207 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
14234-34-5	Rhodium-106 (d)	1.00E-02	unitless	1.00E-02	unitless	1.00E-02	unitless
14234-35-6	Antimony-125	1.10E-02	unitless	1.10E-02	unitless	9.00E-02	unitless
14255-04-0	Lead-210 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless

Table 8-7 Aquatic Plants, Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Benthic Invertebrates Absorption Factor	Units for Benthic Invertebrates Absorption Factor	Chinook Salmon and Other Salmonids Absorption Factor	Units for Chinook Salmon and Other Salmonids Absorption Factor
14265-85-1	Actinium-225 (d)	5.50E-01	unitless	5.50E-01	unitless	6.30E-01	unitless
14269-63-7	Thorium-230 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
14274-82-9	Thorium-228 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
14331-79-4	Bismuth-210 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14331-83-0	Actinium-228 (d)	1.00E-02	unitless	1.00E-02	unitless	1.27E-02	unitless
14331-85-2	Protactinium-231	1.20E-02	unitless	1.20E-02	unitless	1.80E-01	unitless
14336-70-0	Nickel-59	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
14390-73-9	Tellurium-125m (d)	2.70E-02	unitless	2.70E-02	unitless	4.00E-02	unitless
14391-16-3	Europium-155	1.20E-02	unitless	1.20E-02	unitless	1.40E-01	unitless
14596-10-2	Americium-241	4.00E-02	unitless	4.00E-02	unitless	4.80E-01	unitless
14683-23-9	Europium-152	8.50E-02	unitless	8.50E-02	unitless	1.00E-01	unitless
14733-03-0	Bismuth-214 (d)	8.50E-02	unitless	8.50E-02	unitless	1.23E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14835-02-0	Radon-219 (d)	1.20E-02	unitless	1.20E-02	unitless	1.70E-02	unitless
14859-67-7	Radon-222 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
14913-49-6	Bismuth-212 (d)	1.00E-02	unitless	1.00E-02	unitless	1.10E-02	unitless
14913-50-9	Thalium-208 (d)	1.00E-02	unitless	1.00E-02	unitless	1.00E-02	unitless
14932-40-2	Thorium-231 (d)	9.00E-02	unitless	9.00E-02	unitless	1.26E-01	unitless
14952-40-0	Actinium-227	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
14993-75-0	Americium-243	1.20E-02	unitless	1.20E-02	unitless	1.50E-01	unitless
15046-84-1	Iodine-129	9.00E-02	unitless	9.00E-02	unitless	6.00E-01	unitless
15067-28-4	Lead-214 (d)	1.00E-02	unitless	1.00E-02	unitless	1.00E-02	unitless
15092-94-1	Lead-212 (d)	1.00E-02	unitless	1.00E-02	unitless	1.10E-02	unitless
15100-28-4m	Protactinium-234m (d)	5.50E-01	unitless	5.50E-01	unitless	6.30E-01	unitless
15100-28-4	Protactinium-234 (d)	8.50E-02	unitless	8.50E-02	unitless	1.23E-02	unitless
15117-48-3	Plutonium-239	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
15117-96-1	Uranium-235	1.00E-02	unitless	1.00E-02	unitless	1.00E-01	unitless
15229-37-5	Bismuth-211 (d)	2.70E-02	unitless	2.70E-02	unitless	4.00E-02	unitless
15262-20-1	Radium-228	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
15389-34-1	Polonium-212 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15422-74-9	Polonium-218 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless

Table 8-7 Aquatic Plants, Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Benthic Invertebrates Absorption Factor	Units for Benthic Invertebrates Absorption Factor	Chinook Salmon and Other Salmonids Absorption Factor	Units for Chinook Salmon and Other Salmonids Absorption Factor
15510-73-3	Curium-242	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
15585-10-1	Europium-154	8.50E-02	unitless	8.50E-02	unitless	1.00E-01	unitless
15594-54-4	Thorium-229	1.20E-02	unitless	1.20E-02	unitless	8.00E-02	unitless
15605-10-8	Thorium-234 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
15623-45-7	Radium-223 (d)	1.00E-02	unitless	1.00E-02	unitless	1.05E-02	unitless
15623-47-9	Thorium-227 (d)	1.00E-02	unitless	1.00E-02	unitless	1.05E-02	unitless
15690-73-0	Thallium-209 (d)	8.50E-02	unitless	8.50E-02	unitless	1.23E-02	unitless
15706-52-2	Polonium-215 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
15715-94-3	Samarium-151	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
15735-68-8	Polonium-214 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15756-32-8	Antimony-126 (d)	1.00E-02	unitless	1.00E-02	unitless	1.00E-02	unitless
15756-32-8m	Antimony-126m (d)	8.50E-02	unitless	8.50E-02	unitless	1.23E-02	unitless
15756-41-9	Francium-221 (d)	4.00E-02	unitless	4.00E-02	unitless	5.00E-02	unitless
15756-57-7	Polonium-213 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15756-58-8	Polonium-216 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
15756-98-6	Francium-223 (d)	1.20E-02	unitless	1.20E-02	unitless	1.70E-02	unitless
15757-87-6	Curium-243	1.00E-02	unitless	1.00E-02	unitless	9.50E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15776-20-2	Bismuth-213 (d)	1.00E-02	unitless	1.00E-02	unitless	1.05E-02	unitless
15816-77-0	Lead-211 (d)	1.20E-02	unitless	1.20E-02	unitless	1.70E-02	unitless
15832-50-5	Tin-126	1.20E-02	unitless	1.20E-02	unitless	1.50E-01	unitless
17239-90-6	Astatine-217 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
22481-48-7	Radon-220 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless
378782-82-2	Niobium-93m (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
7440-08-6R	Polonium-211 (d)	6.30E-01	unitless	6.30E-01	unitless	7.90E-01	unitless
7440-29-1	Thorium-232	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless

Table 8-7 Aquatic Plants, Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Plant Gamma Absorption Factor	Units for Plant Gamma Absorption Factor	Benthic Invertebrates Absorption Factor	Units for Benthic Invertebrates Absorption Factor	Chinook Salmon and Other Salmonids Absorption Factor	Units for Chinook Salmon and Other Salmonids Absorption Factor
7440-54-2R	Gadolinium-152 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
7440-61-1R	Uranium-238	6.30E-01	unitless	6.30E-01	unitless	9.40E-01	unitless

Notes:

"(d)" indicates radionuclide is a daughter product of a radionuclide of potential concern (see Table 8-1).

Reference (source) for Benthic Invertebrate and Chinook Salmon and Other Salmonids Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-8 Canadian Goose and Spotted Sandpiper Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Canada Goose Absorption Factor	Canada Goose Absorption Factor	Spotted Sandpiper Absorption Factor	Spotted Sandpiper Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	9.40E-01	unitless	7.90E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	4.00E-02	unitless	1.00E-02	unitless
13233-32-4	Radium-224 (d)	3.50E-01	unitless	7.90E-01	unitless
13966-29-5	Uranium-234	9.40E-01	unitless	7.90E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	5.00E-02	unitless	1.23E-02	unitless
13968-55-3	Uranium-233	9.40E-01	unitless	7.90E-01	unitless
13968-59-7	Neptunium-239 (d)	6.00E-02	unitless	1.10E-02	unitless
13981-14-1	Protactinium-233 (d)	6.00E-02	unitless	1.00E-02	unitless
13981-15-2	Curium-244	9.40E-01	unitless	7.90E-01	unitless
13981-16-3	Plutonium-238	9.40E-01	unitless	7.90E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless
13981-52-7	Polonium-210 (d)	9.40E-01	unitless	7.90E-01	unitless
13981-53-8	Radium-225 (d)	9.30E-01	unitless	6.30E-01	unitless
13982-10-0	Plutonium-242	9.40E-01	unitless	7.90E-01	unitless
13982-63-3	Radium-226	9.40E-01	unitless	7.90E-01	unitless
13982-70-2	Uranium-236	9.40E-01	unitless	7.90E-01	unitless
13994-20-2	Neptunium-237	1.50E-01	unitless	4.00E-02	unitless
14119-30-3	Lead-209 (d)	1.00E+00	unitless	1.00E+00	unitless
14119-32-5	Plutonium-241	9.40E-01	unitless	7.90E-01	unitless
14119-33-6	Plutonium-240	9.40E-01	unitless	7.90E-01	unitless
14133-67-6	Thallium-207 (d)	9.40E-01	unitless	7.90E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	9.40E-01	unitless	7.90E-01	unitless
14234-34-5	Rhodium-106 (d)	6.00E-02	unitless	1.00E-02	unitless
14234-35-6	Antimony-125	6.00E-02	unitless	1.50E-02	unitless
14255-04-0	Lead-210 (d)	9.40E-01	unitless	7.90E-01	unitless
14265-85-1	Actinium-225 (d)	9.30E-01	unitless	6.30E-01	unitless
14269-63-7	Thorium-230 (d)	9.40E-01	unitless	7.90E-01	unitless
14274-82-9	Thorium-228 (d)	9.40E-01	unitless	7.90E-01	unitless

Table 8-8 Canadian Goose and Spotted Sandpiper Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Canada Goose Absorption Factor	Canada Goose Absorption Factor	Spotted Sandpiper Absorption Factor	Spotted Sandpiper Absorption Factor
14331-79-4	Bismuth-210 (d)	1.00E+00	unitless	1.00E+00	unitless
14331-83-0	Actinium-228 (d)	6.00E-02	unitless	1.27E-02	unitless
14331-85-2	Protactinium-231	9.00E-02	unitless	1.70E-02	unitless
14336-70-0	Nickel-59	9.40E-01	unitless	7.90E-01	unitless
14390-73-9	Tellurium-125m (d)	1.50E-01	unitless	4.00E-02	unitless
14391-16-3	Europium-155	9.00E-02	unitless	1.70E-02	unitless
14596-10-2	Americium-241	1.60E-01	unitless	5.00E-02	unitless
14683-23-9	Europium-152	5.00E-02	unitless	1.23E-02	unitless
14733-03-0	Bismuth-214 (d)	5.00E-02	unitless	1.23E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless
14835-02-0	Radon-219 (d)	9.00E-02	unitless	1.70E-02	unitless
14859-67-7	Radon-222 (d)	9.40E-01	unitless	7.90E-01	unitless
14913-49-6	Bismuth-212 (d)	6.00E-02	unitless	1.10E-02	unitless
14913-50-9	Thalium-208 (d)	4.00E-02	unitless	1.00E-02	unitless
14932-40-2	Thorium-231 (d)	2.10E-01	unitless	1.26E-01	unitless
14952-40-0	Actinium-227	9.40E-01	unitless	7.90E-01	unitless
14993-75-0	Americium-243	9.00E-02	unitless	1.70E-02	unitless
15046-84-1	Iodine-129	2.10E-01	unitless	1.26E-01	unitless
15067-28-4	Lead-214 (d)	6.00E-02	unitless	1.00E-02	unitless
15092-94-1	Lead-212 (d)	6.00E-02	unitless	1.10E-02	unitless
15100-28-4m	Protactinium-234m (d)	9.30E-01	unitless	6.30E-01	unitless
15100-28-4	Protactinium-234 (d)	5.00E-02	unitless	1.23E-02	unitless
15117-48-3	Plutonium-239	9.40E-01	unitless	7.90E-01	unitless
15117-96-1	Uranium-235	6.00E-02	unitless	1.15E-02	unitless
15229-37-5	Bismuth-211 (d)	1.50E-01	unitless	4.00E-02	unitless
15262-20-1	Radium-228	9.40E-01	unitless	7.90E-01	unitless
15389-34-1	Polonium-212 (d)	1.00E+00	unitless	1.00E+00	unitless
15422-74-9	Polonium-218 (d)	9.40E-01	unitless	7.90E-01	unitless
15510-73-3	Curium-242	9.40E-01	unitless	7.90E-01	unitless
15585-10-1	Europium-154	5.00E-02	unitless	1.23E-02	unitless
15594-54-4	Thorium-229	9.00E-02	unitless	1.70E-02	unitless
15605-10-8	Thorium-234 (d)	9.40E-01	unitless	7.90E-01	unitless
15623-45-7	Radium-223 (d)	6.00E-02	unitless	1.05E-02	unitless
15623-47-9	Thorium-227 (d)	6.00E-02	unitless	1.05E-02	unitless

Table 8-8 Canadian Goose and Spotted Sandpiper Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Canada Goose Absorption Factor	Canada Goose Absorption Factor	Spotted Sandpiper Absorption Factor	Spotted Sandpiper Absorption Factor
15690-73-0	Thallium-209 (d)	5.00E-02	unitless	1.23E-02	unitless
15706-52-2	Polonium-215 (d)	9.40E-01	unitless	7.90E-01	unitless
15715-94-3	Samarium-151	9.40E-01	unitless	7.90E-01	unitless
15735-68-8	Polonium-214 (d)	9.40E-01	unitless	7.90E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless
15756-32-8	Antimony-126 (d)	4.00E-02	unitless	1.00E-02	unitless
15756-32-8m	Antimony-126m (d)	5.00E-02	unitless	1.23E-02	unitless
15756-41-9	Francium-221 (d)	1.60E-01	unitless	5.00E-02	unitless
15756-57-7	Polonium-213 (d)	1.00E+00	unitless	1.00E+00	unitless
15756-58-8	Polonium-216 (d)	9.40E-01	unitless	7.90E-01	unitless
15756-98-6	Francium-223 (d)	9.00E-02	unitless	1.70E-02	unitless
15757-87-6	Curium-243	6.00E-02	unitless	1.05E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless
15776-20-2	Bismuth-213 (d)	6.00E-02	unitless	1.05E-02	unitless
15816-77-0	Lead-211 (d)	9.00E-02	unitless	1.70E-02	unitless
15832-50-5	Tin-126	9.00E-02	unitless	1.70E-02	unitless
17239-90-6	Astatine-217 (d)	9.40E-01	unitless	7.90E-01	unitless
22481-48-7	Radon-220 (d)	9.40E-01	unitless	7.90E-01	unitless
378253-40-8	Barium-137m				
378253-44-2	Cadmium-113m				
378782-82-2	Niobium-93m	9.40E-01	unitless	7.90E-01	unitless
378782-82-2	Niobium-93m (d)	9.40E-01	unitless	7.90E-01	unitless
7440-08-6R	Polonium-211 (d)	9.40E-01	unitless	7.90E-01	unitless
7440-29-1	Thorium-232	9.40E-01	unitless	7.90E-01	unitless
7440-54-2R	Gadolinium-152 (d)	1.00E+00	unitless	1.00E+00	unitless
7440-61-1R	Uranium-238	9.40E-01	unitless	7.90E-01	unitless

Notes:
"(d)" indicates radionuclide is a daughter product of a radionuclide of potential concern (see Table 8-1).

Reference (source) for Canadian Goose and Spotted Sandpiper Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Table 8-9 Bald Eagle, Great Blue Heron, and Mink Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Bald Eagle Absorption Factor	Bald Eagle Absorption Factor	Great Blue Heron Absorption Factor	Great Blue Heron Absorption Factor	Mink Absorption Factor	Mink Absorption Factor
10028-17-8	Tritium	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10045-97-3	Cesium-137	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10098-91-6	Yttrium-90	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
10098-97-2	Strontium-90	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
10198-40-0	Cobalt-60	4.00E-02	unitless	4.00E-02	unitless	3.00E-02	unitless
13233-32-4	Radium-224 (d)	3.50E-01	unitless	3.50E-01	unitless	2.90E-01	unitless
13966-29-5	Uranium-234	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13967-48-1	Ruthenium-106	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13967-70-9	Cesium-134	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
13968-55-3	Uranium-233	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13968-59-7	Neptunium-239 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
13981-14-1	Protactinium-233 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
13981-15-2	Curium-244	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-16-3	Plutonium-238	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-37-8	Nickel-63	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
13981-52-7	Polonium-210 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13981-53-8	Radium-225 (d)	9.30E-01	unitless	9.30E-01	unitless	9.30E-01	unitless
13982-10-0	Plutonium-242	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13982-63-3	Radium-226	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13982-70-2	Uranium-236	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
13994-20-2	Neptunium-237	1.50E-01	unitless	1.50E-01	unitless	1.10E-01	unitless
14119-30-3	Lead-209 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14119-32-5	Plutonium-241	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14119-33-6	Plutonium-240	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14133-67-6	Thallium-207 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14133-76-7	Technetium-99	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14158-29-3	Uranium-232	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14234-34-5	Rhodium-106 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
14234-35-6	Antimony-125	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
14255-04-0	Lead-210 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14265-85-1	Actinium-225 (d)	9.30E-01	unitless	9.30E-01	unitless	9.30E-01	unitless
14269-63-7	Thorium-230 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14274-82-9	Thorium-228 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless

Table 8-9 Bald Eagle, Great Blue Heron, and Mink Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Bald Eagle Absorption Factor	Bald Eagle Absorption Factor	Great Blue Heron Absorption Factor	Great Blue Heron Absorption Factor	Mink Absorption Factor	Mink Absorption Factor
14331-79-4	Bismuth-210 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14331-83-0	Actinium-228 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
14331-85-2	Protactinium-231	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
14336-70-0	Nickel-59	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14390-73-9	Tellurium-125m (d)	1.50E-01	unitless	1.50E-01	unitless	1.10E-01	unitless
14391-16-3	Europium-155	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
14596-10-2	Americium-241	1.60E-01	unitless	1.60E-01	unitless	1.20E-01	unitless
14683-23-9	Europium-152	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
14733-03-0	Bismuth-214 (d)	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
14762-75-5	Carbon-14	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
14835-02-0	Radon-219 (d)	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
14859-67-7	Radon-222 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14913-49-6	Bismuth-212 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
14913-50-9	Thalium-208 (d)	4.00E-02	unitless	4.00E-02	unitless	3.00E-02	unitless
14932-40-2	Thorium-231 (d)	2.10E-01	unitless	2.10E-01	unitless	1.60E-01	unitless
14952-40-0	Actinium-227	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
14993-75-0	Americium-243	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
15046-84-1	Iodine-129	2.10E-01	unitless	2.10E-01	unitless	1.60E-01	unitless
15067-28-4	Lead-214 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15092-94-1	Lead-212 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15100-28-4m	Protactinium-234m (d)	9.30E-01	unitless	9.30E-01	unitless	9.30E-01	unitless
15100-28-4	Protactinium-234 (d)	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
15117-48-3	Plutonium-239	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15117-96-1	Uranium-235	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15229-37-5	Bismuth-211 (d)	1.50E-01	unitless	1.50E-01	unitless	1.10E-01	unitless
15262-20-1	Radium-228	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15389-34-1	Polonium-212 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15422-74-9	Polonium-218 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15510-73-3	Curium-242	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15585-10-1	Europium-154	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
15594-54-4	Thorium-229	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
15605-10-8	Thorium-234 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15623-45-7	Radium-223 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15623-47-9	Thorium-227 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless

Table 8-9 Bald Eagle, Great Blue Heron, and Mink Gamma Radiation Absorption Fractions

CAS Registry Number	Constituent	Bald Eagle Absorption Factor	Bald Eagle Absorption Factor	Great Blue Heron Absorption Factor	Great Blue Heron Absorption Factor	Mink Absorption Factor	Mink Absorption Factor
15690-73-0	Thallium-209 (d)	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
15706-52-2	Polonium-215 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15715-94-3	Samarium-151	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15735-68-8	Polonium-214 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15751-77-6	Zirconium-93	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15756-32-8	Antimony-126 (d)	4.00E-02	unitless	4.00E-02	unitless	3.00E-02	unitless
15756-32-8m	Antimony-126m (d)	5.00E-02	unitless	5.00E-02	unitless	3.00E-02	unitless
15756-41-9	Francium-221 (d)	1.60E-01	unitless	1.60E-01	unitless	1.20E-01	unitless
15756-57-7	Polonium-213 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15756-58-8	Polonium-216 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
15756-98-6	Francium-223 (d)	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
15757-87-6	Curium-243	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15758-45-9	Selenium-79	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
15776-20-2	Bismuth-213 (d)	6.00E-02	unitless	6.00E-02	unitless	4.00E-02	unitless
15816-77-0	Lead-211 (d)	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
15832-50-5	Tin-126	9.00E-02	unitless	9.00E-02	unitless	6.00E-02	unitless
17239-90-6	Astatine-217 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
22481-48-7	Radon-220 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
378253-40-8	Barium-137m						
378253-44-2	Cadmium-113m						
378782-82-2	Niobium-93m	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
378782-82-2	Niobium-93m (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
7440-08-6R	Polonium-211 (d)	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
7440-29-1	Thorium-232	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless
7440-54-2R	Gadolinium-152 (d)	1.00E+00	unitless	1.00E+00	unitless	1.00E+00	unitless
7440-61-1R	Uranium-238	9.40E-01	unitless	9.40E-01	unitless	9.40E-01	unitless

Notes:

"(d)" indicates radionuclide is a daughter product of a radionuclide of potential concern (see Table 8-1).

Reference (source) for Bald Eagle, Great Blue Heron, and Mink Gamma Absorption Factor

Blaylock BG, Frank ML, and O'Neal BR. 1993. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment*, ES/ER/TM-78. Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.