

CAS 50-00-0

Substance name Formaldehyde

Toxicity

Formaldehyde is classified as a carcinogen by a number of authoritative sources.^{1,2,3,4} Inhalation of formaldehyde is associated with cancer in the respiratory tract in humans and laboratory animals. Oral exposures in animals are also carcinogenic. Formaldehyde is a skin, eye and respiratory tract irritant and sensitizer.

Exposure

Formaldehyde is used in the production of resins which are commonly used as adhesives and binders in wood products, pulp and paper, and in the production of plastics and coatings. It is also used in the finishing treatment of fabrics used in clothing and other products.⁵ Aqueous formaldehyde (formalin) is used as a preservative and antimicrobial agent in some soaps, shampoos, hair preparations, deodorants, lotions, cosmetics and nail products.⁶ Some of these may be marketed to children. Formaldehyde has been detected in a wide range of children's products including feeding pillows, nursing pillows, glitter glues, infant mittens, infant jackets, disposable diapers, bed linens, children's tents, and glue sticks.⁷

References

1. WHO International Agency for Research on Cancer (2006) IARC Monograph on the Evaluation of Carcinogenic Risks to Humans, Vol. 88: Formaldehyde, 2-Butoxyethanol and 1-*tert*-Butoxypropan-2-ol. <http://monographs.iarc.fr/ENG/Monographs/vol88/volume88.pdf>.
2. U.S. EPA Integrated Risk Information System (IRIS) for Formaldehyde (last revised 1991). <http://www.epa.gov/iris/subst/0419.htm>.
3. U.S. DHHS, PHS, National Toxicology Program. Report on Carcinogens, Eleventh Edition. 2005. <http://ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932>
4. California Office of Environmental Health Hazard Assessment. List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Feb 5, 2010. http://www.oehha.org/prop65/prop65_list/files/P65single020510.pdf.
5. U.S. DHHS, Agency for Toxic Substances & Disease Registry. Toxicological Profile for Formaldehyde. July 1999. <http://www.atsdr.cdc.gov/toxprofiles/tp111.html>.
6. US EPA, Office of Pesticide Programs. Reregistration Eligibility Decision for Formaldehyde and Paraformaldehyde. EPA 739-R-08-004. June 2008
7. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in consumer products. http://www.mst.dk/English/Chemicals/Consumer_Products/Surveys-on-chemicals-in-consumer-products.htm.