

CAS 85-44-9

Substance name Phthalic anhydride

Toxicity

In animal studies, phthalic anhydride had effects on rodent lung and kidneys and on fetal development at high doses.^{1,2} There is also limited evidence of adverse effects on sperm in laboratory mice.^{3,4} In workplace settings, inhalation and dermal exposures have been associated with irritation and allergic sensitization.^{4,5}

Exposure

Phthalic anhydride is primarily used in the manufacture of phthalate plasticizers and polyester resins. It is also used in small volume in the production of alkyl resins used in dyes, paints, and lacquers.^{4,6} It was detected by the Danish EPA in coatings on 4 out of 15 wooden toys tested.⁷ Phthalic anhydride was not listed as a direct ingredient in any product in the NLM database.⁸

References

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2. U.S.EPA, Integrated Risk Information System (IRIS). Phthalic Anhydride (last revised 1992). <http://www.epa.gov/iris/subst/0308.htm>.
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4. California EPA, Office of Environmental Health Hazard Assessment (OEHHA). Determination of non-cancer REL for Phthalic anhydride, December 2000. http://www.oehha.ca.gov/air/chronic_rels/pdf/85449.pdf.
5. American Conference of Governmental Industrial Hygienists. Documentation of the TLV's and BEI's with Other World Wide Occupational Exposure Values. CD-ROM Cincinnati, OH, 2005.
6. ICIS, Chemical Intelligence, Phthalic Anhydride Uses and Market Data, Updated February 2010. <http://www.icis.com/v2/chemicals/9076142/phthalic-anhydride/uses.html>.
7. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in Consumer Products. Report 60, 2005 http://www.mst.dk/English/Chemicals/Consumer_Products/Surveys-on-chemicals-in-consumer-products.htm.
8. National Institutes of Health, National Library of Medicine, Household Products Database. <http://householdproducts.nlm.nih.gov/> Accessed May 2010.