

CAS 117-84-0

Substance name Di-n-octyl phthalate

Toxicity

The National Toxicology Program found limited evidence that di-n-octyl phthalate caused adverse developmental effects in laboratory animals.¹ Multiple animal studies have demonstrated that di-n-octyl phthalate can be toxic to the liver, kidney, thyroid, and immune system.²

Exposure

Di-n-octyl phthalate is a common plasticiser in plastic production.² The Danish EPA found di-n-octyl phthalate in several children's products including foam toys, PVC soap containers, packaging for cosmetics, and a set of marker pens.³ A Dutch study found di-n-octyl phthalate in several plastics in children's products.⁴ Mono-(3-carboxypropyl) phthalate, a metabolite indicative of di-n-octyl phthalate exposure, was found in >60 percent of the U.S. population sampled in the NHANES survey.⁵

References

1. U.S. Department of Health and Human Services, National Toxicology Program, Center for the Evaluation of Risks to Human Reproduction (CERHR). NTP-CERHR Monograph on the Potential Human Reproductive and Developmental Effects of Di-n-Octyl (DnOP). 2003.
http://cerhr.niehs.nih.gov/evals/phthalates/dnop/DnOP_Monograph_Final.pdf
2. U.S. Consumer Products Safety Commission. March 8, 2010. Toxicity Review of Di-n-Octyl Phthalate (DnOP). <http://www.cpsc.gov/about/cpsia/toxicityDNOP.pdf>
3. Danish Ministry of the Environment, Environmental Protection Agency. Survey of Chemical Substances in Consumer Products, Reports 70, 88, 93, and 102.
http://www.mst.dk/English/Chemicals/Consumer_Products/Surveys-on-chemicals-in-consumer-products.htm
4. Dutch Inspectorate for Health Protection and Veterinary Public Health (VWA/KvW). Screening of Plastic Toys for Chemical Composition and Hazards, Report ND05o610/01, July 2005.
5. Colacino, JA, Harris, TR, and Schecter, A. (2010). Dietary intake is associated with phthalate body burden in a nationally representative sample. *Environ Health Perspect* 118: 998-1003.