

CAS 149-57-5

Substance name 2-Ethylhexanoic Acid (2-EHA)

Toxicity

2-Ethylhexanoic acid is listed as a developmental toxicant by the state of California and a reproductive and developmental toxicant by the European Union.^{1,2} The National Toxicology Program Center for the Evaluation of Risks to Human Reproduction also reviewed studies of 2-EHA as part of their evaluation of DEHP.³ It concluded that there was sufficient animal evidence to identify 2-EHA as a developmental toxicant.^{3,4}

Exposure

Metal derivatives of 2-ethylhexanoic acid are widely used as stabilizers for polyvinyl chloride (PVC). Testing by the Danish EPA found 2-EHA in foam washcloths for babies, baby foam mattresses, nursing pillows, marker pen sets, and a coating on a wooden toy.⁵ Testing by the Dutch government showed frequent detections of 2-EHA migrating out of PVC plastic.⁶

References

1. California EPA, Office of Environmental Health Hazard Assessment. List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. February 5, 2010. http://www.oehha.org/prop65/prop65_list/files/P65single020510.pdf.
2. European Commission, Joint Research Centre, Institute for Health and Consumer Protection. European Chemical Substances Information System (ESIS) file for 2-ethylhexanoic acid. <http://ecb.jrc.ec.europa.eu/esis/>.
3. U.S. Department of Health and Human Services, National Toxicology Program, Center for the Evaluation of Risks to Human Reproduction (CERHR). NTP- CERHR Expert Panel Report on Di (2-ethylhexyl) Phthalate. October 2000. <http://cerhr.niehs.nih.gov/evals/phthalates/dehp/DEHP-final.pdf>.
4. U.S. Department of Health and Human Services, National Toxicology Program, Center for the Evaluation of Risks to Human Reproduction (CERHR) Monograph on the potential human reproductive and developmental effects of Di (2-ethylhexyl) Phthalate (DEHP) November 2006. <http://cerhr.niehs.nih.gov/evals/phthalates/dehp/DEHP-Monograph.pdf>.
5. 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.
6. 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.