

2016 Children's Safe Products - Reporting Rule update Draft Chemical Evaluation

CAS 85-44-9

Substance Name Phthalic Anhydride

Historical summary

Phthalic Anhydride was included on Children's Safe Products-Reporting Rule list in 2012 because of its Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Category (Cat) 2 rating for reproductive toxicity or germ cell mutagenicity [1]. The GHS is an international approach to classification and labelling of chemicals by health, physical and environmental hazard [2]. A Cat 2 rating for reproductive toxicity or germ cell mutagenicity is based on the chemical presenting a possibility of this hazard. Cat 1A and 1B are the categories for chemicals presenting a known hazard. Phthalic anhydride was also identified as present in children's products [1].

In 2016, the American Chemistry Council – Phthalic Anhydride Producers Panel (ACC) asserted that phthalic anhydride is not classified for either reproductive toxicity or germ cell mutagenicity under the GHS criteria by the European Chemicals Agency (ECHA) [3,4].

Toxicity

Phthalic anhydride was classified as GHS Cat 2 for reproductive toxicity or germ cell mutagenicity when this chemical was evaluated under CSPA [1]. The REACH registration dossier from ECHA does not classify phthalic anhydride for reproductive toxicity or germ cell mutagenicity [3].

Exposure

Phthalic anhydride is primarily used in the manufacture of plastics from vinyl chloride. Phthalic anhydride is also used in the production of polyester resins. It is also used in small volumes in the production of alkyl resins used in dyes, paints, and lacquers [5]. It was detected by the Danish EPA in coatings on 4 of 15 wooden toys tested [6].

References

1. Ecology, 2011, Process used to generate the CSPA reporting list. Available at the bottom of: <http://www.ecy.wa.gov/programs/hwtr/rtt/cspa/chcc.html>
2. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). https://ec.europa.eu/growth/sectors/chemicals/classification-labelling_en
3. American Chemistry Council (ACC). Children's Safe Products Reporting Rule, Chapter 173-334 WAC - Review of the inclusion of phthalic anhydride on the existing list of Chemicals of High Concern to Children (WAC-173-334-130), September 15, 2016.
4. ECHA. REACH Registration Dossier – Phthalic Anhydride. Classification & Labelling & PBT Assessment. Available at <https://echa.europa.eu/registration-dossier/-/registered-dossier/15845/1>
5. California EPA, Office of Environmental Health Hazard Assessment (OEHHA). Determination of Non-cancer Chronic Reference Exposure Levels, December 2001, p 453. <http://oehha.ca.gov/media/downloads/crn/appendixd3final.pdf>
6. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in Consumer Products. Report 60, 2005 <http://eng.mst.dk/topics/chemicals/consumers--consumer-products/danish-surveys-on-consumer-products/>