

Chemical: Triphenyl Phosphate

CASRN: 115-86-6

Version: Draft, July 2012

Human Health Effects

PROPERTY/ENDPOINT	DATA	REFERENCE	DATA QUALITY
Repeated Dose Effects	MODERATE: Based on reduced body weight in rats administered triphenyl phosphate in the diet for 28-days. The LOAEL of 161.4 mg/kg-day falls within the Moderate hazard designation range (DfE criteria are for 90-day repeated dose studies; criteria values are tripled for chemicals evaluated in 28-day studies making the moderate hazard range between 30 and 300 mg/kg-day).		
	35-day repeated-dose oral (dietary) study, 5 male rats/group, test compound concentrations of 0, 0.5, and 5.0% (~0, 350, and 3,500 mg/kg-day, respectively), with a 0.1% (~70 mg/kg-day) dose replacing the high dose group after 3 days. Slight reduction in body weight gain and increase in liver weight in 350 mg/kg-day dose group. NOAEL = 70 mg/kg-day LOAEL = 350 mg/kg-day (Measured)	OECD SIDS, 2002	Reported in a secondary source. Limited study details provided.
	4-month repeated-dose dietary study, Sprague-Dawley rats, 10 rats/dose, 0.25, 0.5, 0.75 or 1% test concentration (161, 345, 517 or 711 mg/kg-bw/day, respectively), reduced body weight gain (11%) at 345 mg/kg-bw/day. NOAEL = 161 mg/kg-bw/day LOAEL = 345 mg/kg-bw/day (Measured)	ATSDR, 2009	Reported in a secondary source.

PROPERTY/ENDPOINT	DATA	REFERENCE	DATA QUALITY
	<p>21-day repeated-dose dermal study, 10 male and 10 female rabbits/group, test compound concentrations of 0, 100, and 1,000 mg/kg-bw/day, no mortality, clinical symptoms, or changes in body weight, hematology, clinical chemistry, necropsy, organ weights and histopathology reported; only decreased acetyl cholinesterase levels in plasma, erythrocytes and brain were reported and not considered to be of toxicological relevance as there was no clinical or histological correlation.</p> <p>NOAEL = 1,000 mg/kg-bw/day (Measured)</p>	OECD SIDS, 2002	Reported in a secondary source. Treatment period only 21 days.
	<p>28-day repeated dose oral exposure study in rats. 0, 250, 1000, 4000 ppm in diet. Effects on body weights were observed</p> <p>Male: NOAEL = 250 ppm (23.5 mg/kg-day) LOAEL = 1000 ppm (161.4 mg/kg-day)</p>	ECHA, 2012	Reported in secondary source. DfE criteria are for 90-day repeated dose studies. Criteria values are tripled for chemicals evaluated in 28-day studies.

ATSDR (Agency for Toxic Substances and Disease Registry). Draft toxicological profile for phosphate ester flame retardants. U. S. Department of Health and Human Services, Public Health Service, **2009**.

ECHA. European Chemicals Agency. Information on registered substances. **2012**. http://apps.echa.europa.eu/registered/data/dossiers/DISS-9c823fa6-50fe-0b74-e044-00144f67d249/AGGR-25e8a69c-b7a3-48f4-8aa3-df36b0a9735f_DISS-9c823fa6-50fe-0b74-e044-00144f67d249.html#section_1.1 (accessed April, 2012).

OECD SIDS (Organisation for Economic Cooperation and Development Screening Information Dataset). 2002. SIDS Initial Assessment Report for Triphenyl Phosphate. <http://www.chem.unep.ch/irptc/sids/OECD/SIDS/115866.pdf>