

GHS Classification

ID561

CAS 78-42-2

Physical Hazards

Tris(2-ethylhexyl) phosphate

Date Classified: Oct. 23, 2006 (Environmental Hazards: Mar. 31, 2006)

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
6 Flammable liquids	Not classified	—	—	—	The flash point is 170degC (ICSC (1999))
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not classified	—	—	—	Not pyrophoric when in contact with air at ordinary temperatures (flash point: 370degC (ICSC, 1999)).
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	—	—	—	Stable to water (water solubility: 0.6mg/L (24degC), SRC (2006)).
13 Oxidizing liquids	Classification not possible	—	—	—	Classification not possible due to lack of data, though being organic compounds containing oxygen bound to the elements other than carbon and hydrogen.
14 Oxidizing solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "O-O" structure
16 Corrosive to metals	Classification not possible	—	—	—	No data available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	—	—	—	Based on the rat LD50 (oral route) value of 37,000mg/kg, >10,000mg/kg and >36,800mg/kg (EHC 218 (2000)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rabbit LD50 (dermal route) value of 18,400mg/kg (CERI-NITE Hazard Assessment No.207 (2004)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is "liquid" according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	Insufficient data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	Based on the description in the report on rabbit skin irritation tests performed in accordance with OECD Guideline 404 (EHC 218 (2000)): "Moderate irritation was noted." The substance is considered corrosive given the evidence of crust formation, and thus classified into Category 2.
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Based on the description in the report on rabbit eye irritation tests (EHC 218 (2000)): "Doses up to 0.05mL produced slight conjunctivitis, while doses of 0.1 and 0.5mL produced moderate conjunctivitis which cleared up in 24 hours." Although classified into Category 2A-2B as the classification for skin irritation is Category 2, the substance should be placed in Category 2A from the viewpoint of safety if further subclassification is needed.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	Respiratory sensitization: No data available Skin sensitization: Insufficient data available
5 Germ cell mutagenicity	Not classified	—	—	—	Based on the absence of data on multi-generation mutagenicity tests and germ cell mutagenicity tests in vivo, and negative data on somatic cell mutagenicity tests in vivo (micronucleus tests, chromosome aberration tests), described in NTP DB (Access on June 2006), EHC 218 (2000) and CERI-NITE Hazard Assessment No.207 (2005).
6 Carcinogenicity	Classification not possible	—	—	—	Classification not possible based on expert judgment in the absence of existing classification, though some data are available on carcinogenicity studies with mice and rats.
7 Toxic to reproduction	Classification not possible	—	—	—	No data available
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	—	—	—	Insufficient data available
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	Classification not possible since there are no symptoms reported that can be used for assessment.
10 Aspiration hazard	Classification not possible	—	—	—	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Classification not possible	-	-	-	Classification not possible due to lack of data
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data