

GHS Classification

ID1008

Tris(o-cresyl) phosphate

CAS 78-30-8

Date Classified: Jul. 24, 2006 (Environmental Hazards: Mar. 31, 2006)

Physical Hazards

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

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Not classified	-	-	-	Flash point: >93degC
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Not classified	-	-	-	Flash point: 385degC (ICSC (J), 1994)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	UNRTDG Class: 6.1
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	UNRTDG Class: 6.1
13 Oxidizing liquids	Not classified	-	-	-	UNRTDG Class: 6.1
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16 Corrosive to metals	Not classified	-	-	-	UNRTDG Class: 6.1

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	-	-	-	SPECIES: Rat ENDPOINT: LD50 VALUE: 3000-10000 mg/kg REFERENCE SOURCE: ACGIH (7th, 2001), PATTY (4th, 1994)
1 Acute toxicity (dermal)	Not classified	-	-	-	It was set as the outside of Category based on rabbit LD50 value: >3700mg/kg (RTECS, 2006) and the description that a minimum lethal dose is within the range of 3160 - 5160mg/kg (HSDB, 2006).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Not classified	-	-	-	From description that it is not the skin irritation on PATTY (4th, 1994), it was carried out the outside of Category.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there is a positive result (RTECS, 2006) by the adduct bond test with somatic DNA of the rat (liver, kidney, lung, and heart) which is an in vivo genotoxicity study using a somatic, there is no positive result by in vitro mutagenicity test. So it cannot classify.
6 Carcinogenicity	Not classified	-	-	-	Since it was classified into A4 (ACGIH 7th, 2001) in ACGIH, it was considered as the outside of Category.
7 Toxic to reproduction	Classification not possible	-	-	-	Classification not possible due to lack of data
8 Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Cause damage to organs (nervous system)	The substance was classified as Category 1 (nervous system) based on the reports of effects on the nervous system in oral ingestion cases in humans (ACGIH (7th, 2001) and PATTY (4th, 1994)).

9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (nervous system)	Health hazard	Danger	Causes damage to organs (nervous system) through prolonged or repeated exposure	We classified it into Category 1 (nerve systems) based on the description that the effects on the nerve systems was observed in occupational exposure examples (ACGIH (7th, 2001) and PATTY (4th, 1994)). Moreover, in the oral study using a rat, the effects on the nervous system was observed with the given dose of the guidance value range of Category 2 (RTECS, 2006).
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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data