

GHS Classification

ID1283

Stannane, tetrachloro-

CAS 7646-78-8

Date Classified: Dec. 18, 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	-	-	-	Non-combustible (ICSC(J), 2004).
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	-	-	-	Non-combustible (ICSC(J), 2004)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (2004))
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Although it reacted with water (a high fevers is emitted), nonflammable hydrogen chloride gas was generated. So it carried out the outside of Category.
13 Oxidizing liquids	Classification not possible	-	-	-	No data available
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Inorganic compound
16 Corrosive to metals	Category 1	Corrosion	Warning	May be corrosive to metals	UNRTDG is classified into 8 and II which indicate causticity according to the UNRTDG No. (1827). Since ICSC (J) (2004) and HSDB (2003) also had the statement which indicates corrosion behavior, it was set as Category 1.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	No data. [Note] There are both liquid anhydrous and pentahydrate (CAS No.10026-06-9) forms of stannic chloride. In this GHS classification, the substance was investigated as anhydrous stannic chloride (CAS No.7646-78-8).
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Category 1	Skull and crossbones	Danger	Fatal if inhaled	Based on rat inhalation LC50 value of 2300mg/m ³ /10min (RETC, 2004), 0.47mg/L was obtained as a value for 4 hours, and it was classified as Category 1. In addition, saturated vapor concentration of this substance is 23762ppm from steam pressure of 2.4kPa, and the LC50 value of 2300mg/m ³ (= 216ppm) is presumed to be steam exposure.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 1A-1B	Corrosion	Danger	Causes severe skin burns and eye damage	It was taken as category 1A-1B from the description that this product is caustic to the eye and skin and airways, that shows caustic when oral ingestion is carried out (ICSC, 2004), that causes a burn injury on the skin, and that stimulates skin and eyes and respiratory tracts (HSDB, 2003). In addition, further categorizing is difficult.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	There is the description, with this product, the caustic is indicated to eye, skin, and respiratory tract, and caustic is indicated if oral ingestion is done (ICSC, 2004), and skin, eye, and respiratory tract are stimulated (HSDB, 2003). It was considered as Category 1 by skin corrosiveness, and it was set to Category 1.
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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	There is the negativity in the Ames test of in vitro mutagenicity test (CICAD 65, 2005; HSDB, 2003), and there is a positivity report by a chromosome aberration test (CICAD 65, 2005; RTECS, 2004). But there is no in vivo data, and it cannot be classified because of insufficient data.
6 Carcinogenicity	Classification not possible	-	-	-	No data available

7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	Since this product indicates respiratory tracts caustics (ICSC, 2004) and respiratory irritant (HSDB, 2003), and an inorganic tin compound indicates respiratory irritant (ACGIH-TLV (2006)), it was considered as Category 3 (respiratory irritant).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (lung)	Health hazard	Danger	causes damage to organs (lung) through prolonged or repeated	Since it has a risk of pneumoconiosis by as an inorganic tin compound (ACGIH-TLV (2006)), and the effect on the respiratory system is observed in the this product etc. in occupational exposure study (HSDB, 2003), it was classified into Category 1 (lung).
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)	Not classified	-	-	-	It carried out the outside of Category from 96-hour LC50>1000mg/L of fishes (Zebrafish) (IUCLID, 2000).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since not water-insoluble (soluble in water (HSDB, 2004)) and acute toxicity is low.