

GHS Classification

ID844

carbon tetrabromide

CAS 558-13-4

Date Classified: Jun. 20, 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	-	-	-	Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Solid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Solid (GHS definition)
6 Flammable liquids	Not applicable	-	-	-	Solid (GHS definition)
7 Flammable solids	Not classified	-	-	-	Non-combustible (ICSC (J), 1999; etc.)
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 applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (ICSC (J), 1999; etc.)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (ICSC(J) (1999); etc)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	The chemical structure of the substance does not contain metals or metalloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Containing no oxygen , chlorine and fluorine.
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Liquid at a test temperature, 55degC. Test methods applicable to solid substances are not available.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 4	Exclamation mark	Warning	Harmful if swallowed	SPECIES: Rat ENDPOINT: LD50 VALUE: 1800 mg/kg REFERENCE SOURCE: PATTY (4th, 1994), ACGIH (7th, 2001)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	All six cases had died within 48 hours by dermal administration of 2g/kg to rabbits(HSDB, 2005). And it was judged less than Category 4. But LD50 cannot be presumed, it cannot be classified due to insufficient data.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (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	Category 2	Exclamation mark	Warning	Causes skin irritation	Since it was indicated that the effect which suggested the stimulativeness of degrees from very mild to moderate was admitted as a result of the skin irritation study in a rabbit on PATTY (4th, 1994), it was judged with Category 2.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	Since it was indicated that there are irritation and lasting damage in the corneal (PATTY (4th, 1994)), it was set as Category 1.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available
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 1 (liver, kidneys, respiratory organs); Category 2 (nervous system); Category 3 (narcotic effects)	Health hazard; Exclamation mark	Danger; Warning	Cause damage to organs (liver, kidneys, respiratory organs); May cause damage to organs (nervous system); May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects)	As the influence on people, from description with the obstacle to hepatic and the kidney (ACGIH, 7th (2001), HSDB (2005), SITTIG (2002)), lung obstacles such as pulmonary edemas (ACGIH, 7th (2001), SITTIG (2002)), and respiratory irritant (ACGIH, 7th (2001), SITTIG (2002), HSFS (1998)), and it was set as Category 1 (hepatic, kidney, respiratory organs). Moreover, it was set as Category 2 (nervous systems) from statement which has the effects on the nervous systems (HSDB (2005), SITTIG (2002)). In addition, it was set as Category 3 (anesthetic actions) from description which causes unconsciousness by high concentration (HSDB (2005), SITTIG (2002)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (liver); Category 2 (respiratory organs)	Health hazard	Danger; Warning	Causes damage to organs (liver) through prolonged or repeated exposure; May cause damage to organs (respiratory organs) through prolonged or repeated exposure	Based on descriptions that a liver damage is occurred in chronic exposure to humans (ACGIH and (7th, 2001), HSFS (1998), SITTIG (4th, 2002), and HSDB (2005)), and that in six-month repeated inhalation exposure to rats, fatty degenerations was observed in liver by the exposure concentration of the guidance value range of Category 1 (PATTY (4th, 1994), ACGIH (7th, 2001)), target organ was judged to be liver, and it was classified into Category 1. Besides eyes and upper respiratory mucosal irritation having been observed by four-month repeated exposure of fume (0.07 to 7.4 ppm) to rats (ACGIH / (7th, 2001) and other), symptom in accordance with the stimulativeness to lungs and bronchitis was observed in repeated exposure to humans (HSFS, 1998), judging respiratory tracts also to be target organ, and were classified into Category 2.
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