

GHS Classification

ID622

iodomethane

CAS 74-88-4

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	-	-	-	There is no flash point (Lange (14th, 1992) p.1.232) or it is nonflammable. (ICSC(J) (2004) and Hommel (1991) Card No.942)
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, Hommel, 1991 Card No.942)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (ICSC (J), 2004; Hommel, 1991, Card No.942)
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	-	-	-	Organic compounds containing no oxygen, fluorine and chlorine.
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 No. 2644, Class: 6.1

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	SPECIES: Rat (male) ENDPOINT: LD50 VALUE: 51 mg/kg REFERENCE SOURCE: Agricultural Chemicals abstracts
1 Acute toxicity (dermal)	Not classified	-	-	-	since rabbit LD50 value: >2000mg/kg and there was no death at 2000mg/kg or less (Agricultural-Chemicals abstracts), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Category 3	Skull and crossbones	Danger	Toxic if inhaled	Rat LC50 (4 hours) value: 691ppm (equivalent of 4 mg/L) (Agricultural-Chemicals abstracts), and 691ppm indicates steam with almost no mist from vapor pressure, it was classified as Category 3 by the ppm concentration standard.
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 the moderate irritation was observed with 4 hour exposure in the skin irritation test on rabbits (Agricultural-Chemicals abstracts), it was classified as Category 2.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	Since very strong stimulativeness was indicated in the eye irritation test result using a rabbit and it did not recover completely during the observation period for 21 days (Agricultural-Chemicals abstracts), it was set as Category 1.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not possible	-	-	-	Respirator: No data Skin: Since the positive rate was less than 30% in Maximization test using the guinea pigs (Agricultural Chemicals abstracts), it was put outside of the Category.
5 Germ cell mutagenicity	Not classified	-	-	-	Since we found a negative result in the micronucleus test which used the mouse red corpuscles, which was the in vivo mutagenicity test using the somatic cells (Agrichemical Abstracts), we classified it as Out Of Category.
6 Carcinogenicity	Not classified	-	-	-	Since it was classified into the group 3 (IARC 71, 1999) according to IARC, it carried out the outside of Category.
7 Toxic to reproduction	Not classified	-	-	-	Since there is no obvious reproductive toxicity in the dose causing general toxicity to parent animals in inhalation exposure to pregnant rabbit and in the rat inhalation exposure reproduction study (Agricultural-Chemicals abstracts), it was considered as on the outside of Category.

8	Specific target organs/systemic toxicity following single exposure	Category 3 (narcotic effects, respiratory tract irritation)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects, respiratory tract irritation)	In the acute neurotoxicity test by inhalation exposures with rats, mild and transient effects on nerve systems and symptoms suggesting airway irritation such as shallow respiration, droopy eyelids, hyper salivation, gasping, hunchback position, gait disorder, slight incoordination of air recovery reflection, lack of response to fright reactions, decrease of Lotta load movements coordination, decrease of movements and locomotor activities etc. were observed (Agricultural chemical abstracts). So it was set as Category 3 (airway irritation, anesthetic action).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (thyroid gland, respiratory organs)	Health hazard	Warning	May cause damage to organs (thyroid gland, respiratory organs) through prolonged or repeated exposure	It was classified to Category 2 (thyroid gland, respiratory organs) since retention increases of thyroidal follicular colloid and involved thinning of the follicular epitheliocyte in the oral study using mice, colloid depletion in thyroid gland and hypertrophy follicle cell in the oral study using dogs, and follicular cell hyperplasia and cytoplasmic vacuolization of follicular cell in thyroidal follicular cell and olfactory-epithelium degeneration of nose in the inhalation exposure test using rats were acknowledged respectively with the given dose of the guidance value range of Category 2 (Agricultural Chemicals abstracts).
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	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.