

GHS Classification

ID187

2-bromopropane

CAS 75-26-3

Date Classified: Aug. 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	Category 2	Flame	Danger	Highly flammable liquid and vapour	Flash point: <23degC. Initial boiling point: >35degC
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	-	-	-	UNRTDG Class: 3
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	UNRTDG Class: 3
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	Classification not possible	-	-	-	No data available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	No data available
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: mist)	Not classified	-	-	-	Based on Mouse LC50 (4 hours) value: 31171ppm (equivalent of 156.48mg/L), it was classified as out of Category.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	Since change which is equivalent to basis of mild irritation in the test on rabbits indicated to ECETOC TR 66 (1992) was observed, it was classified as Category 3.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin 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	Not classified	-	-	-	The substance was regarded as outside the categories because there are negative results from the micronucleus tests using mouse erythrocytes, which are in vivo mutagenicity tests using somatic cells (CERI Hazard Data, 2002, Japan Society for Occupational Health Recommendations, 1999, MOE Risk Assessment Vol. 4, 2005).
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Category 1A	Health hazard	Danger	May damage fertility or the unborn child	There is the description that there are the obvious effect to generative organ such as the reduction of the number of spermatozoid and the cessation of menses in the human exposure example (CERI Hazard Data (2002), MOE Risk Assessment of the 4th volume (2005) and industrial hygiene academic recommendation (1999)). So it was considered as in the Category 1A.

8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	Although in the 4th volume of MOE Risk Assessment (2005) there was a description that the toxic effects is not observed at higher exposure level to mouse, there is no other data and it is in sufficient data for the outer Category. Therefore, it cannot be classified.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (testes, ovaries, blood)	Health hazard	Danger	causes damage to organs (testes, ovaries, blood) through prolonged or repeated	In exposure example to human in CERI Hazard Data (2002), MOE Risk Assessment the 4th volume (2005) , and industrial hygiene academic society advice (1999), due to the description that low sperm count, missed period, and anemia were observed, it was classified into Category 1 (testes, ovary, blood).
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)	Category 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 48-hour EC50=23mg/L of Crustacea (Daphnia magna) (MOE eco-toxicity tests of chemicals, 2000).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since rapidly degrading (BOD: 83% (existing chemical safety inspections data)), and less bio-accumulative (log Kow=2.14 (PHYSPROP Database, 2005)).