

GHS Classification

ID930

2-Propanol, 1-methoxy-

CAS 107-98-2

Date Classified: Sep. 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	-	-	-	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 3	Flame	Warning	Flammable liquid and vapour	Flash point: >=23degC and <=60degC, UNRTDG Class: 3, PGIII
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	-	-	-	It is classified into the UNRTDG class 3.
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid substances are not available
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 oxygen (but not chlorine and fluorine) chemically bonded only to carbon and hydrogen (but not to other elements).
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: 3

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	-	-	-	LD50 value of a rat, 6100, 5200 and 5000mg/kg (all the values are from SIDS (2001), ACGIH (2001), PATTY (1994)), 7350mg/kg (ACGIH (2001)), 5000mg/kg (DFGOT (1993)) and 7510mg/kg (DFGOT (1993), PATTY (1994)). Based on the value 5113mg/kg which was calculated from the values above, it was considered as out of category.
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on the lower value of 13000mg/kg among rabbit LD50 values: 13000 and 14100mg/kg (both are SIDS (2001) and PATTY (1994)), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Based on rat LC50 value (4 hours): >6mg/L (>1626ppm) and LC50 value (1 hour): >24mg/L (4 hour equivalent: >12mg/L (>3252ppm) (all are from SIDS (2001) and DFGOT (1993)), Category could not be specified. It was presupposed that it cannot be classified due to data insufficiency.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	Since extremely slight stimulativeness was admitted in the test applied to skin of rabbits (SIDS (2001) and PATTY (1994)), it was set as Category 3.
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Severe ocular irritant property was acknowledged at high concentrations in the test which exposed vapors of this product to the volunteers (SIDS (2001), ACGIH (2001), IRIS (2005), PATTY (1994)), but we found no delineation about quickness of examinee's recovery. Therefore we classified it as Category 2A-2B.
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)-	Although skin sensitization was not acknowledged by the test using the guinea pigs (modified Maguire test) (SIDS (2001)), we presupposed that we could not classify it since description which clearly negated sensitizing property was not obtained.
5 Germ cell mutagenicity	Not classified	-	-	-	Since it is negative in the micronucleus test which used the mouse bone marrows erythrocyte by in vivo (SIDS (2001)), it carried out the outside of Category.
6 Carcinogenicity	Classification not possible	-	-	-	Carcinogenic was not observed each in the carcinogenic examination using rats and mice (SIDS, 2001) there was no concrete information which otherwise endorses this, it was presupposed that it couldnot be classified.

7	Toxic to reproduction	Not classified	-	-	-	It was considered as out of Category. Based on the description that in the reproductive study (SIDS (2001), ACGIH (2001), PATTY (1994), NTP DB (2005)) using a rat, it is normal to fecundity, and teratogenicity was not observed also in the teratogenicity study (SIDS (2001), ACGIH (2001), PATTY (1994), DFGOT (1993)) using rats, mouse, and rabbit.
8	Specific target organs/systemic toxicity following single exposure	Category 3 (narcotic effects)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects)	Because of descriptions referring to that disappearance of transient rising reflection, reflection to external stimuli, etc. were confirmed through inhalation exposure tests using rats and mice, and transdermal administration examinations using rabbits (all the above sources are SIDS (2001)). So it was judged that there were anesthetic actions, and determined to be Category 3.
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	As for toxicity in the three-month continuation administration test in drinking water to rat (SIDS (2001), PATTY (1994)), a 14-week administration test in drinking water with the dog (SIDS (2001), PATTY (4th, 1994)), a dermal administration test to rat rabbit for three months (ACGIH (7th) 2001, SIDS (2001), DFGOT (vol.5, 1993), PATTY (4th, 1994)), the inhalation exposure test of three-month in rat (SIDS (2001), ACGIH(7th, 2001), PATTY (4th, 1994)), 3 or the six-month repetition inhalation exposure test in a mouse, a rabbit, a guinea pigs, and a monkey((SIDS (2001) ACGIH (7th, 2001), IRIS (2005), PATTY (4th, 1994), and DFGOT (vol.5, 1993)), neither was observed to be toxic with the dose of guidance value within the range of Category 2, and maximum no-observed effect levels is over the guidance value of Category 2 in which the dosage setup was carried out suitably. Only with the dose exceeding the guidance value range of Category 2,we categorized it to be Out Of Category based on the description that the mild central nervous system depression (stillness), and the effects liver and the kidney was observed.
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 48-hour EC50>500mg/L of Crustacea (Daphnia magna) (SIDS, 2003).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since not water-insoluble (water solubility=1.00*106mg/L(PHYSROP Database, 2005)) and acute toxicity is low.