

GHS Classification

ID757

2-Propanamine, N-(1-methylethyl)-

CAS 108-18-9

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	-	-	-	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: -6degC (ICSC, 1997), Initial Boiling point: 84degC (ICSC, 1997)
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Classified in UNRTDG No.1158, Class: 3, Subsidiary risks Class: 8, PG II.
9 Pyrophoric liquids	Not classified	-	-	-	Not ignite spontaneously on coming into contact with air at normal temperatures (flash point: 316degC (ICSC,1997)).
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 no oxygen, fluorine and chlorine.
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	There are no chemical groups associated with peroxide present in the molecule.
16 Corrosive to metals	Classification not possible	-	-	-	Although classified into the UN classification classes 3 (Flammable liquid); secondary following classification 8 PG II (UN No.1158), the UN classification has not distinguished between skin corrosiveness and corrosion behavior. Therefore, since data are insufficient, it cannot be classified.

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: 770 mg/kg REFERENCE SOURCE: ACGIH (2001)
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rabbit dermal LD50 >10g/kg bw (RTECS (2005)), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: skin and mucous membranes)	Category 3	Exclamation mark	Danger	Toxic if inhaled	It was classified as Category 3 based on rat LC50 = 3.4mg/L (RTECS (2005), HSDB (2005)).
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	Based on pH >11.5 (pH=11.8 (IUCLID (2000))), it was classified as Category 1A-1C.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	It was set as Category 1 based on pH >11.5 (IUCLID (2000)). Moreover, the report with the eye corrosiveness in a rabbit (IUCLID (2000)) also endorses this.
4 Respiratory/skin sensitization	respiratory sensitization: Classification not possible; Skin sensitization: Not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: There is no data. Skin sensitization : In three cases including Freund's complete adjuvant test using a guinea pigs to begin with, it is reported that sensitization was not identified(IUCLID (2000), HSDB (2005)). Therefore it was put outside of Category.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Insufficient 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 2 (respiratory)	Health hazard	Warning	May cause damage to organs (respiratory)	It is classified into Category 2 (respiratory systems) based on serious lung stimulativeness (PATTY (5th, 2001)) and pulmonary oedema (ICSCJ (1997)) being reported in humans.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Insufficient data available
10	Aspiration hazard	Classification not possible	-	-	-	Insufficient 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 96-hour LC50=37000microg/L of fishes (Rainbow trout) (AQUIRE, 2003).
11 Hazardous to the aquatic environment (chronic)	Category 3	-	-	Harmful to aquatic life with long lasting effects	Classified into Category 3, since acute toxicity was Category 3 and supposed not rapidly degrading (BIOWIN), though supposed less bio-accumulative (log Kow=1.4(PHYSPROP Database, 2005)).