

GHS Classification

ID707

2-Propanone, 1-chloro-

CAS 78-95-5

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	Category 2	Flame	Danger	Highly flammable liquid and vapour	Adopting 7 degC of flash point and 120 degC of boiling point, it was classified as Category 2 (GHS standards: flash point being less than 23 degC, and initial boiling point being more than 35 degC). Moreover, according to UNRTDG class 6.1 subsidiary risks 3 and 8 PG: I, it will be classified as Category 1. But it is not clear whether PG I corresponds with subsidiary risk 3.
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	-	-	-	Based on UNRTDG class 6.1 subsidiary risks 3 and 8 PG: I, it was classified as the outside of Category.
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 and chlorine (but not fluorine) and these elements are chemically bonded only to carbon (but not to other elements).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Organic compounds 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)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Category 3 based on SPECIES: Rat; ENDPOINT: LD50;VALUE: 100 mg/kg; REFERENCE SOURCE: ACGIH (2001)
1 Acute toxicity (dermal)	Category 2	Skull and crossbones	Danger	Fatal in contact with skin	It was set as Category 2 based on rabbit LD50 = 141mg/kg (ACGIH (2001)).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	The saturated vapor pressure concentration of this product is 14851ppm, and it is thought that the inhalation test was done with vapor. It was classified as Category 2 based on rat LC50 = 121ppm (ACGIH (2001)).
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 statements that moderate to severe erythemas and edemas were observed on the rabbit (BUA 226 (2000)) and that this product indicates skin corrosiveness (ICSC (J) (1996)), it was classified as Category 1A-1C.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	Based on description that even if a little of this product brought permanent damages to the eye (ACGIH (2001)) and indicated caustic to an eye (ICSC (J), (1996)), it was set to Category 1.
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	Classification not possible	-	-	-	There were no data of the over generation mutagenicity test, the germ cell in vivo mutagenicity test, the somatic cell in vivo mutagenicity test, germ cell in vivo genotoxicity study and the somatic cell in vivo genotoxicity study, in addition, there was no positive finding in multiple criteria in vitro mutagenicity test. Therefore we presupposed that we could not categorize it according to the technical guideline.
6 Carcinogenicity	Classification not possible	-	-	-	Classification not possible due to lack of data

7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory)	Health hazard	Danger	Cause damage to organs (respiratory)	There is the statement as which the egema/hydrothorax of plumonary were regarded by inhalation exposure in the dosage of the Category 1 guidance value using rat (BUA 226 (2000)), moreover, there is the description that this substance indicated causticity to the respiratory tracts, and it may cause pulmonary edemas when vapor was inhaled (ICSC (J), (1996)), it is classified into Category 1 (respiratory systems).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Insufficient data available
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