

GHS Classification

ID575

chloroacetaldehyde

CAS 107-20-0

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 4	-	Warning	Combustible liquid	Category 4 because of its flash point: 88degC
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	-	-	-	Since flash measurements is performed under temperatures higher than normal temperatures (88 degC) (ICSC (1997)), it is judged as not igniting spontaneously.
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not classified because of UNRTDG Class: 6.1
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 2	Skull and crossbones	Danger	Fatal if swallowed	SPECIES: Rat ENDPOINT: LD50 VALUE: 23.0 mg/kg REFERENCE SOURCE: ACGIH (2001), PATTY (5th, 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= 67.0mg/kg (ACGIH (2001), PATTY (5th, 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 131, 680ppm, and it is presumed that inhalation toxicity study was done in the state of steam. It was classified as Category 2 based on the lower of two rat LC50 values (103, 122ppm), LC50 = 103ppm (DFGOT vol.12 (1998)). It is Category 2 though almost Category 1.
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	It was classified as Category 1A-1C based on the statement that severe damage (ACGIH (2001)) and severe corrosivity (DFGOT vol.12 (1998)) were seen on rabbit skin .
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	This product has skin corrosivity. Based on the statement of the serious damage with rabbit eye (ACGIH (2001)) and ocular tissue damage with human (ACGIH (2001)), and caustic being indicated to an eyeby vapor on this substance (ICSC (J), (1997)). Based on the above statement, it was set to Category 1.
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)-	Respiratory sensitization: No data. ; Skin sensitization: It cannot be classified because of lack of information.

5	Germ cell mutagenicity	Classification not possible	-	-	-	There are no human multi-generation epidemiological data, multi-generation mutagenicity tests, in vivo mutagenicity tests in germ cells, in vivo mutagenicity tests in somatic cells, nor data from in vivo genotoxicity tests in germ cells. Although there are no positive results from in vivo genotoxicity tests in somatic cells, there are positive results from the in vitro mutagenicity test (for more than 2 parameters, the strength unknown) (DFGOT vol.12 (1998)). After receiving experts' opinions it was decided that the substance could not be classified.
6	Carcinogenicity	Category 2	Health hazard	Warning	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	It was set as Category 2 based on the category 3 of existing EU.
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)	Due to the description that in humans, vapors of this product may show respiratory tracts caustics and cause lung edemas (ICSC (J) (1997)), it was classified into Category 2 (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