

GHS Classification

ID776

1,1-dichloro-1-nitroethane

CAS 594-72-9

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 classified	-	-	-	Not an explosive substance, though containing chemical groups associated with explosive properties present.
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	Category 3 because of its flash point: 57.8degC(c.c.)
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Not classified in 4.1, but UNRTDG Class: 6.1 (though containing chemical groups associated with explosive properties present)
9 Pyrophoric liquids	Not classified	-	-	-	The flash points is 76 degC (o. c.), and does not ignite in room temperatures.
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 classified	-	-	-	UNRTDG Class: 6.1
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 on corrosion to metals

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: 410 mg/kg REFERENCE SOURCE: RTECS (2004)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Since there is no data, it cannot be classified. (In EU, it is classified as "when contacted with skin, it is toxic.")
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	There is a report of rat LCLo: 300mg/m3 (52ppm) (4 hour equivalent: 113ppm). But there is no report of LC50 value, it cannot be classified.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was classified as Category 2 as it showed irritation in rabbit skin test (ACGIH (2001)).
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Although there is the information of irritation (HSFS (2004)), it cannot be classified, since there is no test data.
4 Respiratory/skin sensitization	Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there was a data (RTECS (2004)) of the mutagen of the salmonella, there were no in vivo data, therefore we could not classify it.
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 1 (blood system, lung)	Health hazard	Danger	Cause damage to organs (blood system, lung)	Change of the hemoglobin and red blood cell count was regarded at 100ppm in rabbit and guinea, and lung diseases was regarded at 170ppm (ACGIH (2001)), so it is classified into Category 1 (blood, lung).
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No data available

10	Aspiration hazard	Classification not possible	-	-	-	No data available
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Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.