

GHS Classification

ID748

diazomethane

CAS 334-88-3

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	-	-	-	Gas (GHS definition)
2 Flammable gases	Category 1	-	Danger	Extremely flammable gas	Ignitable if there is an ignition source, because of "its auto-ignition temperature: 100degC" (ICSC(J), 1995)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not classified	-	-	-	Not oxidizing gas because of flammable gas
5 Gases under pressure	Not applicable	-	-	-	Impossible to store or transport as pure articles
6 Flammable liquids	Not applicable	-	-	-	Gas (GHS definition)
7 Flammable solids	Not applicable	-	-	-	Gas (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
9 Pyrophoric liquids	Not applicable	-	-	-	Gas (GHS definition)
10 Pyrophoric solids	Not applicable	-	-	-	Gas (GHS definition)
11 Self-heating substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	Gas (GHS definition)
13 Oxidizing liquids	Not applicable	-	-	-	Gas (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Gas (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Gas (GHS definition)
16 Corrosive to metals	Classification not possible	-	-	-	Test methods are not available.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	No data available
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Classification not possible	-	-	-	It cannot be classified. Since concentration is unknown in rat inhalation exposure, test time of others is slight, and there is no valid data used for classification. (In these exposure examinations, having died for a short times, and death in 10 minutes in cat inhalation study at 175ppm (4 hour equivalent: 35ppm). It seems that treating as Category 1 is desirable since this is less than 100ppm of Category 1.)
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was classified as Category 2 as it was reported that there is stimulativeness and denudation on human skin (ACGIH (2001)).
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	Since there was a case of severe inflammation (critical inflammation) to humans, it was set as Category 1. (DFGOT vol.13(1999)
4 Respiratory/skin sensitization	Respiratory sensitization: Category 1; Skin sensitization: Category 1	(Respiratory sensitization)Health hazard; (Skin sensitization)Exclamation mark	(Respiratory sensitization)Danger; (Skin sensitization)Warning	(Respiratory sensitization)May cause allergy or asthma symptoms or breathing difficulties if inhaled; (Skin sensitization)May cause allergic skin reaction	Based on the case which caused the attack of asthma in humans(ACGIH (2001)) respiratory sensitization was referred to as Category 1. Skin sensitization was set to Category 1 since sensitization was identified in guinea pigs (PATTY (5th, 2001)). Diazomethane is defined as a sensitizing chemical substance in the interim report of the Japanese occupational and environmental allergology meeting's specially committee .
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although it showed mutagenicity for the in vitro information (DFGOT vol.13 (1999)), there was no in vivo data. Therefore we could not classify it.
6 Carcinogenicity	Not classified	-	-	-	It carried out the outside of Category by classification called three of IARC.

7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory); Category 2 (spleen, liver)	Health hazard	Danger; Warning	Cause damage to organs (respiratory); May cause damage to organs (spleen, liver)	There is cases, such as pneumonia, pulmonary oedema, difficulty breathing, cyanosis, chest pain, asthma, and generation of heat, are regarded in humans (ACGIH (2001), PATTY (5th, 2001), IARC 7 (1974)), so it is classified into Category 1. Moreover, in the examination of a rat, atelectasis, purulence and hyperemia of bronchus, emphysema, dysplasia of bronchus mucosa, etc., moreover, congestion and expansion of spleens, nephrotic changes in half of liver cortex inner side, and ongestion of glomerulus (IARC 7 (1974), DFGOT vol.13 (1999)). Thereby, it is classified into Category 2 (a
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	It cannot be classified, according to that in the human case, there are the examples that pulmonaru edema, asthma, respiratory distress, cyanosis, and a tremor has come out and, died and the other hand recover ten days afterward (DFGOT vol.13 (1999)). These occupational exposure is considered to be the results out of which the symptom of acute toxicity (single exposure) came.
10	Aspiration hazard	Not applicable	-	-	-	Gas (GHS definition)

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.