

GHS Classification

ID903

Ethanamine, 2,2'-oxybis[N,N-dimethyl-

CAS 3033-62-3

Date Classified: Oct. 1, 2005 (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	60 degC < flash point <= 93 degC (Although flash point data is obtained with Open cup, even if it was examined by closed cup, it is judged that it will not be below the lower limit (60 degC) of Category 4.)
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	Classification not possible	-	-	-	No data available
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	-	-	-	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 4	Exclamation mark	Warning	Harmful if swallowed	Category 4 based on SPECIES: Rat; ENDPOINT: LD50; VALUE: :910mg/kg and 1190mg/kg; REFERENCE SOURCE: ACGIH 7th (2001)
1 Acute toxicity (dermal)	Category 3	Skull and crossbones	Danger	Toxic in contact with skin	It was set as Category 3 based on rabbit LD50 value: 238mg/kg and 530mg/kg (ACGIH 7th, 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	Lower value was adopted from LC50 (6 hours) value: 117ppm and 166ppm (4-hour equivalent: 0.938mg/L and 1.33mg/L) (ACGIH 7th, 2001). 0.938mg/L was considered to vapor with almost no mist from vapor pressure, and it was classified by the ppm concentration standard. It was classified as Category 2 based on the converted value (conversion coefficient 1ppm=6.55mg/m3) was 142ppm.
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	From description that necrosis was accepted by the test applied to the rabbit skin (ACGIH (7th, 2001)), it was judged that there was caustic, and it was set as Category 1A-1C.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	We found a description that corneal injury, iritis and severe irritational property on the conjunctiva were acknowledged in the ocular irritation tests which used the rabbits (ACGIH (7th, 2001)). Since it had skin corrosiveness, we classified it as Category 1.
4 Respiratory/skin sensitization	Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Not classified	-	-	-	Since there was a negative result (ACGIH 7th, 2001) by the micronucleus test which used the mouse red corpuscles, which are the in vivo mutagenicity tests using a somatic, it carried out the outside of Category.

6	Carcinogenicity	Classification not possible	-	-	-	No data available
7	Toxic to reproduction	Classification not possible	-	-	-	It is unclassifiable due to insufficient data. It may be out of the Category due to the description in the ACGIH (7th, 2001) that mischief on reproductive functions, fertility or generations of children was not observed in the percutaneous administration examination using the pregnant rabbits at the dose in which general toxicity is seen in the dam animals. However, degree in the influence on mother animal and significance of the influence on fetus are not clear and there is no trial data using other animals. Therefore, for judging classification, data is insufficient.
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	Insufficient data available.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Since data was insufficient, we could not classify it. Although there is possibility that it is Out Of Category based on the description that target organs toxicities are not observed in the 14-week inhalation exposure test using the rat (ACGIH (7th, 2001)), the exposure concentrations used for the test was low, and since there is no other data, the data is insufficient for judging target organ.
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	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.