

## GHS Classification

**ID665**

**Ethanamine**

**CAS 75-04-7**

Date Classified: May 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	Category 1 because of UNRTDG Class: 2.1 and "the flammable range with air is 3.5-14 vol%" (ICSC(J), 2002, etc.) (It is ignitable when in a mixture of 13% or less by volume in air, according to GHS criteria)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not classified	-	-	-	UNRTDG Class: 2.1
5 Gases under pressure	Low pressure liquefied gas	Gas cylinder	Warning	Contains gas under pressure; may explode if heated	Low pressure liquefied gas because of "the critical temp: 182.9degC or 183degC" (HSDB, 2002) .
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 applicable to gas substances are not 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:400 mg/kg; REFERENCE SOURCE: ACGIH (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 = 390mg/kg (ACGIH (2001)).
1 Acute toxicity (inhalation: gas)	Category 5	-	Warning	May be harmful if inhaled	It was considered as Category 5 based on rat LC50 = 6842ppm (IUCLID (2000)).
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
2 Skin corrosion / irritation	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	Based on the descriptions the necrosis of skin and burn (ACGIH (2001) and PATTY (5th, 2001)), and corrosion (IUCLID (2000)) in animal experiments, it was classified as Category 1A-1C.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	This product is a skin corrosive substance, and based on the statements of eye irritations and corneal edema in humans (ACGIH (2001)) and severe damage (PATTY (5th, 2001)), a serious stimulative (ACGIH (2001)) by the animal experiments, and based on EU-Annex I: Xi; R36/37, it was set as 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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Since there was no result of in vivo mutagenicity test and there was no positive in vitro finding of multiple indices, we presupposed that we could not categorize it by the technical guideline.
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 3 (respiratory tract irritation)	Exclamation mark	Warning	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	There is the statement that there is the significant irritation to respiratory as human information (ICSC(J) (2002)) and there is the category of EU-Annex I: Xi; R36/37. So it is classified into Category 3 (respiratory irritation).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (respiratory organs); Category 2 (kidneys)	Health hazard	Danger; Warning	Causes damage to organs (respiratory organs) through prolonged or repeated exposure; May cause damage to organs (kidneys) through prolonged or repeated	It was classified to as Category 1 (respiratory systems) based on the statement that peribronchial inflammation and interstitial pneumonias were observed in inhalation exposure of the guidance value range of Category 1 of the rabbit (ACGIH (2001)). Moreover, it was classified to as Category 2 (kidney) based on the statement that the kidney parenchymatous degeneration was observed in inhalation exposure of the guidance value range of Category 2 of the rabbit (ACGIH (2001)).
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)	Category 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 24-hour EC50=94mg/L of Crustacea (Daphnia magna), and others (AQUIRE, 2003).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since rapidly degrading (BOD: 90% (existing chemical safety inspections data)), and less bio-accumulative (log Kow=-0.13 (PHYSPROP Database, 2005)).