

ETHYLAMINE (50-70% aqueous solution)**1482**
May 2003

CAS No: 75-04-7
RTECS No: KH2100000
UN No: 2270
EC No: 612-002-004

Ethanamine
Aminoethane
 $C_2H_5NH_2 / C_2H_7N$
Molecular mass: 45.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Extremely flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Water spray, dry powder, alcohol-resistant foam.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS! STRICT HYGIENE!	
Inhalation	Cough. Laboured breathing. Sore throat.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness. Pain.	Protective clothing. Protective gloves.	Rinse skin with plenty of water or shower. Refer for medical attention. Remove contaminated clothes.
Eyes	Redness. Pain. Blurred vision.	Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Burning sensation. Diarrhoea.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Ventilation. Remove all ignition sources. Cautiously neutralize spilled liquid. Absorb remaining liquid in sand or inert absorbent and remove to safe place. (Extra personal protection: filter respirator for organic gases and vapours.)	F+ Symbol Xi Symbol R: 12-36/37 S: (2-)16-26-29 UN Hazard Class: 3 UN Subsidiary Risks: 8 UN Pack Group: II

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-30GFC-II NFPA Code: H 3; F 4; R 0	Fireproof. Cool. Well closed. Separated from acids, oxidants.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS SOLUTION IN WATER, WITH PUNGENT ODOUR.

Physical dangers

The vapour is heavier than air and may travel along the ground; distant ignition possible.

Chemical dangers

The substance is a strong base, it reacts violently with acid and is corrosive. Reacts violently with strong oxidants and organic compounds causing fire and explosion hazard. Attacks many non-ferrous metals and plastic.

Occupational exposure limits

TLV: 5 ppm as TWA; 15 ppm as STEL; (skin) (ACGIH 2002).
MAK: 5 ppm, 9.4 mg/m³; Peak limitation category: I(2);
Pregnancy risk group: IIc; (DFG 2002).
EU OEL: 5 ppm, 9.4 mg/m³; (EU 2002).

Routes of exposure

The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

Inhalation risk

A harmful contamination of the air will on evaporation of this substance at 20°C be reached very quickly.

Effects of short-term exposure

The substance is severely irritating to the eyes, the skin and the respiratory tract.

PHYSICAL PROPERTIES

Boiling point: 17°C
Melting point: -81°C
Relative density (water = 1): 0.81
Vapour pressure, kPa at 2°C: 53.3
Relative vapour density (air = 1): 1.6

Relative density of the vapour/air-mixture at 20°C (air = 1): 1.3
Flash point: -18°C c.c.
Auto-ignition temperature: 385°C
Explosive limits, vol% in air: 3.5-14

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

See ICSC 0153 Ethylamine, gas in a cylinder.
All physical properties are for 70% solution.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information