

CAS No: 75-04-7

RTECS No: KH2100000

UN No: 1036

EC No: 612-002-00-4

Ethanamine

Aminoethane

(cylinder)

 $C_2H_5NH_2 / C_2H_7N$

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.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with dry powder, carbon dioxide.
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting.	In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position.

EXPOSURE		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	ON CONTACT WITH LIQUID: FROSTBITE.	Cold-insulating gloves. Protective clothing.	ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Refer for medical attention.
Eyes	Redness. Pain. Blurred vision.	Safety goggles, 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		Do not eat, drink, or smoke during work.	

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Ventilation. Remove all ignition sources. NEVER direct water jet on liquid. (Extra personal protection: complete protective clothing including self-contained breathing apparatus.)	EU classification F+ Symbol Xi Symbol R: 12-36/37 S: (2-)16-26-29 UN classification UN Hazard Class: 2.1

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-20G2F NFPA Code: H 3; F 4; R 0	Fireproof. Cool.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS COMPRESSED LIQUEFIED GAS, WITH PUNGENT ODOUR.

Physical dangers

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

Chemical dangers

The substance decomposes on burning producing toxic gases including nitrogen oxides. The solution in water 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).
EU OEL: 5 ppm; 9.4 mg/m³; as TWA (EU 2000).

Routes of exposure

The substance can be absorbed into the body by inhalation.

Inhalation risk

On loss of containment, a harmful concentration of this gas in the air will be reached very quickly.

Effects of short-term exposure

The substance is severely irritating to the eyes and the respiratory tract. Rapid evaporation of the liquid may cause frostbite.

PHYSICAL PROPERTIES

Boiling point: 16.6/C

Melting point: -81/C

Relative density (water = 1): 0.7 (liquid)

Solubility in water: miscible

Vapour pressure, kPa at 20/C: 121

Relative vapour density (air = 1): 1.55

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.66

Flash point: -17/C c.c.

Auto-ignition temperature: 385/C

Explosive limits, vol% in air: 3.5-14

Octanol/water partition coefficient as log Pow: -0.27/-0.08 (calculated)

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

Ethylamine is available commercially also in the form of 50-70% aqueous solution (UN number: 2270).

Turn leaking cylinder with the leak up to prevent escape of gas in liquid state.

Card has been partially updated in January 2008: see Occupational Exposure Limits.

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