

DIETHANOLAMINE**0618**

October 2002

CAS No: 111-42-2
RTECS No: KL2975000
EC No: 603-071-00-12,2'-Iminodiethanol
DEA
2,2'-Dihydroxydiethylamine
 $C_4H_{11}NO_2 / (CH_2CH_2OH)_2NH$
Molecular mass: 105.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION			

EXPOSURE		PREVENT DISPERSION OF DUST! PREVENT GENERATION OF MISTS!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain. Severe deep burns.	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	Abdominal pain. Burning sensation.	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Refer for medical attention. Rest.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Then remove to safe place. (Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust.)	Xn Symbol R: 22-38-41-48/22 S: (2-)26-36/37/39-46

EMERGENCY RESPONSE	STORAGE
NFPA Code: H1; F1; R0	Separated from strong oxidants, and acids. Dry.

IMPORTANT DATA

Physical State; Appearance

WHITE CRYSTALS OR COLOURLESS VISCOUS HYGROSCOPIC LIQUID, WITH CHARACTERISTIC ODOUR.

Physical dangers

The vapour is heavier than air.

Chemical dangers

The substance decomposes on burning producing toxic fumes. The solution in water is a medium strong base. Reacts violently with strong oxidants, strong acids. Attacks copper, zinc, aluminium, and their alloys.

Occupational exposure limits

TLV: 2 mg/m³; (skin); (ACGIH 2002).
MAK: class Carcinogen category: 3A; Sh, H (2002).

Routes of exposure

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

Inhalation risk

A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20°C.

Effects of short-term exposure

The substance is corrosive to the eyes.

Effects of long-term or repeated exposure

Repeated or prolonged contact may cause skin sensitization. The substance may have effects on the liver and kidneys.

PHYSICAL PROPERTIES

Boiling point: 269°C

Melting point: 28°C

Relative density (water = 1): 1.09 (liquid)

Solubility in water: very good

Vapour pressure, Pa at 20°C: <1

Relative vapour density (air = 1): 3.65

Flash point: 134°C o.c.

Auto-ignition temperature: 662°C

Explosive limits, vol% in air: 1.7-9.8

Octanol/water partition coefficient as log Pow: -1.43

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

Do NOT take working clothes home.

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