

DIISOPROPANOLAMINE**0493**

April 1997

CAS No: 110-97-4
 RTECS No: UB6600000
 UN No:
 EC No: 603-083-00-7

1,1'-Iminodi-2-propanol
 Bis(2-propanol) amine
 DIPA
 $C_6H_{15}NO_2 / (CH_3CHOHCH_2)_2NH$
 Molecular mass: 133.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, alcohol-resistant foam, water spray, carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
Inhalation	Sore throat. Cough. Burning sensation. Shortness of breath. Laboured breathing. Symptoms may be delayed (see Notes).	Local exhaust or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration if indicated. Refer for medical attention.
Skin	Pain. Redness. Blisters. Skin burns.	Protective gloves.	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
Eyes	Pain. Redness. Severe deep burns.	Safety goggles, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Burning sensation. Abdominal cramps. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water (extra personal protection: A/P2 filter respirator for organic vapour and harmful dust).	Xi Symbol R: 36 S: (2-)26

EMERGENCY RESPONSE	STORAGE
NFPA Code: H2; F1; R0;	Separated from strong oxidants, strong acids. Dry. Keep in the dark. Well closed.

IMPORTANT DATA

Physical State; Appearance

WHITE HYGROSCOPIC CRYSTALLINE POWDER, WITH CHARACTERISTIC ODOUR. TURNS YELLOW ON EXPOSURE TO LIGHT AND AIR.

Physical Dangers

Dust explosion possible if in powder or granular form, mixed with air.

Chemical Dangers

The substance decomposes on heating and on burning producing toxic gases (nitrogen oxides). The solution in water is a medium strong base and reacts with strong acids. Reacts violently with strong oxidants causing fire and explosion hazard.

Occupational Exposure Limits

TLV not established.

Routes of Exposure

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

Inhalation Risk

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20°C.

Effects of Short-term Exposure

The substance is corrosive to the eyes, the skin and the respiratory tract. Inhalation of the aerosol may cause lung oedema (see Notes). The effects may be delayed. Medical observation is indicated.

PHYSICAL PROPERTIES

Boiling point: 248°C

Melting point: 42°C

Relative density (water = 1): 0.99

Solubility in water, g/100 ml at 20°C: 87

Vapour pressure, Pa at 42°C: 2,67

Relative vapour density (air = 1): 4.6

Flash point: 127°C o.c.

Auto-ignition temperature: 374°C

Explosive limits, vol% in air: 1.1-5.4

ENVIRONMENTAL DATA

NOTES

The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Immediate administration of an appropriate spray, by a doctor or a person authorized by him/her, should be considered.

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