

TRIETHYLAMINE

0203

October 2002

CAS No: 121-44-8
 RTECS No: YE0175000
 UN No: 1296
 EC No: 612-004-00-5

N,N-Diethylethanamine
 $C_6H_{15}N / (C_2H_5)_3N$
 Molecular mass: 101.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Alcohol-resistant foam, powder, carbon dioxide
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		AVOID ALL CONTACT!	
Inhalation	Cough. Sore throat. Shortness of breath. Laboured breathing. Headache. Dizziness. Weakness. Nausea. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
Skin	Redness. Skin burns. Pain.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	Pain. Redness. Blurred vision. Blue haze and halo. Temporary loss of vision. Severe deep burns.	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. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Give one or two glasses of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Personal protection: complete protective clothing including self-contained breathing apparatus. Ventilation. Remove all ignition sources. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment.	<p>EU classification</p> F Symbol C Symbol R: 11-20/21/22-35 S: (1/2-)-3-16-26-29-36/37/39-45
	<p>UN classification</p> UN Hazard Class: 3 UN Subsidiary Risks: 8 UN Pack Group: II

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30S1296 NFPA Code: H3; F3; R0	Fireproof. Separated from incompatible materials, and food and feedstuffs. See Chemical Dangers.



IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Physical dangers

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

Chemical dangers

The substance decomposes on burning producing irritating and toxic gases including nitrogen oxides. The substance is a strong base, it reacts violently with acid and is corrosive to aluminium, zinc, copper and their alloys in the presence of moisture. Reacts violently with strong oxidants causing fire and explosion hazard. Attacks some forms of plastic, rubber and coating.

Occupational exposure limits

TLV: (as TWA) 1 ppm;(as STEL) 3 ppm; (skin), A4; (ACGIH 2002).
EU OEL: 2 ppm, 8.4 mg/m³ (as TWA); 3 ppm, 12.6 mg/m³ (as STEL); (skin); (EU 2000).

Routes of exposure

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

Inhalation risk

A harmful contamination of the air can be reached very quickly 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. Corrosive on ingestion. Inhalation of the substance may cause lung oedema (see Notes). The effects may be delayed. Medical observation is indicated. The substance may cause effects on the central nervous system.

PHYSICAL PROPERTIES

Boiling point: 89/C

Melting point: -115/C

Relative density (water = 1): 0.7

Solubility in water, g/100 ml at 20/C: 17 (good)

Vapour pressure, kPa at 20/C: 7.2

Relative vapour density (air = 1): 3.5

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.2

Flash point: -17/C c.c.

Auto-ignition temperature: 230/C

Explosive limits, vol% in air: 1.2-8

Octanol/water partition coefficient as log Pow: 1.45

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

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 inhalation therapy by a doctor or a person authorized by him/her, should be considered.

The odour warning when the exposure limit value is exceeded is insufficient.

Card has been partially updated in July 2007: see Occupational Exposure Limits, Ingestion First Aid, Fire fighting.

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