

DIETHYLENE GLYCOL

0619

November 2007

CAS No: 111-46-6

RTECS No: ID5950000

EC No: 603-140-00-6

Ethylene diglycol
2,2'-Dihydroxyethyl ether
3-Oxypentane-1,5-diol
2,2'-Oxydiethanol
2,2'-Oxybisethanol
 $C_4H_{10}O_3 / (CH_2CH_2OH)_2O$
Molecular mass: 106.1

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			
EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation		Ventilation.	Fresh air, rest.
Skin		Protective gloves.	Rinse skin with plenty of water or shower.
Eyes		Safety spectacles.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion	Abdominal pain. Nausea. Vomiting. Diarrhoea. Dizziness. Drowsiness. Confusion. Unconsciousness.	Do not eat, drink, or smoke during work.	Give one or two glasses of water to drink. Refer immediately for medical attention. See Notes.

SPILLAGE DISPOSAL

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking liquid in sealable containers. Wash away spilled liquid with plenty of water.

PACKAGING & LABELLING

EU classification

Xn Symbol

R: 22

S: (2-)46

GHS classification

Signal: Danger

Excl mark-Health haz

Harmful if swallowed

Causes damage to kidneys if swallowed

May cause drowsiness or dizziness

EMERGENCY RESPONSE

NFPA Code: H1; F1; R0

SAFE STORAGE

Dry. Well closed. Separated from strong oxidants.

IPCS

International
Programme on
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©
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SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance

ODOURLESS, COLOURLESS VISCOUS HYGROSCOPIC LIQUID.

Chemical dangers

Reacts violently with strong oxidants causing fire and explosion hazard.
Attacks some forms of plastic.

Occupational exposure limits

TLV not established.
MAK: 10 ppm; 44 mg/m³; Peak limitation category: II(4) Pregnancy risk group: C (DFG 2007).

Routes of exposure

The substance can be absorbed into the body 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 ; on spraying or dispersing, however, much faster.

Effects of short-term exposure

The substance may cause effects on the kidneys, resulting in kidney impairment The substance may cause effects on the central nervous system and liver by ingestion. Exposure by ingestion may result in death.

PHYSICAL PROPERTIES

Boiling point: 245/C
Melting point: -6.5/C
Relative density (water = 1): 1.12
Solubility in water: miscible
Vapour pressure, Pa at 20/C: 2.7

Relative vapour density (air = 1): 3.7
Flash point: 124/C c.c.
Auto-ignition temperature: 229/C
Explosive limits, vol% in air: 1.6-10.8
Octanol/water partition coefficient as log Pow: -1.47

ENVIRONMENTAL DATA

NOTES

Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

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