ETHYLENE GLYCOL

0270
March 1999

CAS No: 107-21-1
RTECS No: KW2975000
EC No: 603-027-00-1

1,2-Ethanediol
1,2-Dihydroxyethane
$HOCH_2CH_2OH$
Molecular mass: 62.1

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	Cough. Dizziness. Headache.	Ventilation.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
Skin	Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Dullness. Nausea. Unconsciousness. Vomiting.	Do not eat, drink, or smoke during work.	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention. If no medical personnel are available and the patient is conscious, ingestion of alcoholic beverage may prevent kidney failure.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water. (Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust).	Xn Symbol R: 22 S: 2

EMERGENCY RESPONSE	STORAGE
NFPA Code: H1; F1; R0	Separated from strong oxidants, strong bases. Dry. Ventilation along the floor.

IPCS
International Programme on Chemical Safety

Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission

SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance
ODOURLESS, COLOURLESS, VISCOUS, HYDROSCOPIC LIQUID

Chemical dangers
On combustion, forms toxic gases. Reacts with strong oxidants and strong bases.

Occupational exposure limits
TLV (as STEL): 100 mg/m^3 (ceiling values) (ACGIH 1998).

Routes of exposure
The substance can be absorbed into the body by inhalation and through the skin.

Inhalation risk
A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

Effects of short-term exposure
The substance irritates the eyes and the respiratory tract. The substance may cause effects on the the kidneys and central nervous system, resulting in renal failure and brain injury. Exposure could cause lowering of consciousness.

Effects of long-term or repeated exposure
The substance may have effects on the central nervous system, resulting in abnormal eye movements (nystagmus).

PHYSICAL PROPERTIES

Boiling point: 198°C
Melting point: -13°C
Relative density (water = 1): 1.1
Solubility in water: miscible
Vapour pressure, Pa at 20°C: 7
Relative vapour density (air = 1): 2.1
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.00
Flash point: 111°C (c.c.)
Auto-ignition temperature: 398°C
Explosive limits, vol% in air: 3.2-15.3
Octanol/water partition coefficient as log Pow: -1.93

ENVIRONMENTAL DATA

NOTES

The occupational exposure limit value should not be exceeded during any part of the working exposure.

ADDITIONAL INFORMATION