HYDROXYACETIC ACID

1537
October 2004

CAS No: 79-14-1
RTECS No: MC5250000
UN No: 3261

Glycolic acid
Alpha-hydroxyacetic acid
Hydroxyethanoic acid
$C_2H_4O_3$ / $HOCH_2COOH$
Molecular mass: 76.1

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			
Inhalation	Cough. Shortness of breath. Sore throat.	Avoid inhalation of fine dust and mist.	Half-upright position. Fresh air, rest. Refer for medical attention.
Skin	Redness. Pain. Serious skin burns.	Protective gloves.	First rinse with plenty of water, then remove contaminated clothes and rinse again.
Eyes	Redness. Pain. Blurred vision. 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. Shock or collapse.	Do not eat, drink, or smoke during work.	Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Chemical protection suit including self-contained breathing apparatus. Sweep spilled substance into covered containers.	UN Hazard Class: 8 UN Pack Group: II	Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-80GC4-II+III	Separated from strong oxidants, metals, sulfides, cyanides strong bases food and feedstuffs. Dry.

IPCS
International Programme on Chemical Safety

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

IMPORTANT DATA

Physical State; Appearance
COLOURLESS HYGROSCOPIC CRYSTALS

Chemical dangers
Reacts with strong oxidants, cyanides and sulfides. Reacts violently with aluminium, zinc and tin causing fire and explosion hazard. The solution in water is a medium strong acid.

Occupational exposure limits
TLV not established.
MAK not established.

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

Inhalation risk
A harmful concentration of airborne particles can be reached quickly on spraying or when dispersed, especially if powdered.

Effects of short-term exposure
The substance is corrosive to the skin and the eyes, and is irritating to the respiratory tract. Corrosive on ingestion. The substance may cause effects on the kidneys, resulting in kidney failure.

Effects of long-term or repeated exposure
Repeated or prolonged contact with skin may cause dermatitis.

PHYSICAL PROPERTIES

Boiling point (decomposes): 100/C
Melting point: 80/C
Relative density (water = 1): 1.49
Solubility in water: very good
Relative vapour density (air = 1): 2.6
Octanol/water partition coefficient as log Pow: -1.11

ENVIRONMENTAL DATA

NOTES

This substance is often available commercially as a 70% solution with UN number 3265, hazard class 8, packaging group II.

ADDITIONAL INFORMATION