ICSC: 1427 **GLYCOLONITRILE**

Date of Peer Review: October 2002

Formaldehyde cyanohydrin Hydroxyacetonitrile Cyanomethanol

Glyconitrile
Glycolic acid nitrile solution

CAS#

107-16-4

C₂H₃NO / HOCH₂CN

RTECS#

AM0350000

Molecular mass: 57.1

UN#

3276

EC#

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		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Dizziness. Dullness. Headache. Shortness of breath. Weakness. Blue lips or finger nails.	Closed system and ventilation.	Fresh air, rest. No mouth-to-mouth artificial respiration. Refer for medical attention. See Notes.
Skin	MAY BE ABSORBED! (Further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	MAY BE ABSORBED! Redness. Pain. Blurred vision. (Further see Inhalation).	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	(See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for

		medical attention. See Notes.
SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Wash away remainder with plenty of water. Do NOT let this chemical enter the environment. (Extra personal protection: complete protective clothing including self-contained breathing apparatus.)	Do not transport with food and feedstuffs. EU Classification UN Classification UN Hazard Class: 6.1 UN Pack Group: II	
EMERGENCY RESPONSE	STORAGE	

Transport Emergency Card: TEC (R)-61GT1-I

Separated from food and feedstuffs, acids, bases. Cool. Store only if stabilized.

IPCS International Programme on Chemical Safety









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SEE IMPORTANT INFORMATION ON BACK

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GLYCOLONITRILE

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:

COLOURLESS OILY LIQUID

CHEMICAL DANGERS:

The substance may polymerize violently under the influence of traces of acid(s) or base(s) with fire or explosion hazard. The substance decomposes on heating producing toxic fumes including hydrogen cyanide and nitrogen oxides.

OCCUPATIONAL EXPOSURE LIMITS:

TLV not established.

ROUTES OF EXPOSURE:

The substance can be absorbed into the body by inhalation, 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 irritating to the eyes. The substance may cause effects on the cellular respiration, resulting in convulsions and respiratory failure. Exposure may result in death. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:

The substance may have effects on the nervous system and thyroid.

PHYSICAL PROPERTIES

Boiling point: 183℃ Melting point: -72℃

Relative density (water = 1): 1.1

Relative density of the vapour/air-mixture at 20℃

(air = 1): 1.00

Octanol/water partition coefficient as log Pow: -

Solubility in water: good Vapour pressure, Pa at 63℃: 100 Relative vapour density (air = 1): 2.0 1.6

ENVIRONMENTAL DATA

This substance may be hazardous in the environment; special attention should be given to aquatic organisms.

NOTES

An added stabilizer or inhibitor can influence the toxicological properties of this substance, consult an expert. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. Commercial products are supplied as stabilized 70 % solutions in water.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the CEC nor the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information

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