Printing date 24.06.2009

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1 Identification of the substance/preparation and of the company/undertaking · Product details · Trade name: Mono Ethylene Glycol Manufacturer/Supplier: Asiatic Chemicals Pakistan Address Mobile 30-Mussa Market 2nd Floor, 0092-320-4320301 Tel No 0092-21-32422537 **Opp Sindh Madarsah** Email asiatic-petro@cyber.net.pk Fax No Shahrah-e-Liaquat 0092-21-3241554 asiatic@asiatic.com.pk **2** Composition/information on ingredients

• Chemical characterization:

- · CAS No. Description
- 107-21-1 ethanediol
- · Identification number(s)
- EINECS Number: 203-473-3 • Index number: 603-027-00-1

3 Hazards identification

· Hazard description:



Xn Harmful

• Information concerning particular hazards for human and environment: R 22 Harmful if swallowed.

4 First aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Call for a doctor immediately.

5 Fire-fighting measures

• Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

· Protective equipment: No special measures required.

6 Accidental release measures

· Person-related safety precautions: Not required.

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- Measures for environmental protection: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.
 Measures for cleaning/collecting:
- Dilute with plenty of water. Dispose contaminated material as waste according to item 13.

7 Handling and storage

- · Handling:
- · Information for safe handling: No specific requirement
- · Information about fire and explosion protection: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol	
TLV (USA)	Short-term value: C 100 mg/m ³
	Н
IOELV (EU)	Short-term value: 104 mg/m³, 40 ppm
	Long-term value: 52 mg/m³, 20 ppm
	Skin
WEL (Great Britain)	Short-term value: 104** mg/m³, 40** ppm
	Long-term value: 10* 52** mg/m³, 20** ppm
	Sk *particulate **vapour

• Additional information: The lists valid during the making were used as basis.

· Personal protective equipment:

- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Trade name: Mono Ethylene Glycol

• *Eye protection: Goggles recommended during refilling*

· General Information		
Form:	Fluid	
Colour:	Colourless	
Odour:	Sweetish	
Change in condition		
Melting point/Melting range:	-12.4°C	
Boiling point/Boiling range:	197°C	
Flash point:	111°C	
Ignition temperature:	410°C	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	3.2 Vol %	
Upper:	53 Vol %	
Vapour pressure at 20°C:	0.08 hPa	
Density at 20°C:	1.11 g/cm ³	
Solubility in / Miscibility with water at 20°C:	1 g/l	
Viscosity: Dynamic at 20°C:	21 mPas	

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral LD50 5840 mg/kg (rat) Dermal LD50 9530 mg/kg (rabbit)

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

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HAF

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12 Ecological information

· General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· Product:

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- *Recommended cleansing agents:* Water, if necessary together with cleansing agents.

14 Transport information

· Land transport ADR/RID (cross-border)

- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: -

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xn Harmful

• *Risk phrases:* 22 Harmful if swallowed.

· Safety phrases:

2 Keep out of the reach of children.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department

· Contact: Mr. Menon