

Safety Data Sheet

According to 91/155 EEC

Printing date 11.02.2010

Revision: 23.06.2009

1 Identification of the substance/preparation and of the company/undertaking

· **Product details**

· **Trade name:** Ethyl Glycol

Manufacturer/Supplier:

Asiatic Chemicals Pakistan



Address

30-Mussa Market 2nd Floor,
Opp Sindh Madrasah
Shahrah-e-Liaquat

Mobile

0092-320-4320301

Email

asiatic-petro@cyber.net.pk
asiatic@asiatic.com.pk

Tel No

0092-21-32422537

Fax No

0092-21-3241554

2 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Description**

110-80-5 2-ethoxyethanol

· **Identification number(s)**

· **EINECS Number:** 203-804-1

· **Index number:** 603-012-00-X

3 Hazards identification

· **Hazard description:**



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T Toxic

· **Information concerning particular hazards for human and environment:**

R 60 May impair fertility.

R 61 May cause harm to the unborn child.

R 10 Flammable.

R 20/21/22 Also harmful by inhalation, in contact with skin and 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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **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.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **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:** Keep container tightly sealed.

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:**

110-80-5 2-ethoxyethanol

PEL (USA)	740 mg/m ³ , 200 ppm Skin
REL (USA)	1.8 mg/m ³ , 0.5 ppm Skin
TLV (USA)	18 mg/m ³ , 5 ppm Skin; BEI
WEL (Great Britain)	37 mg/m ³ , 10 ppm Sk

- **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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

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· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

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.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Oily
Colour: Colourless
Odour: Ether-like

· **Change in condition**

Melting point/Melting range: -100°C
Boiling point/Boiling range: 135°C

· **Flash point:** 40°C

· **Ignition temperature:** 235°C

· **Danger of explosion:** *Product is not explosive. However, formation of explosive air/vapour mixtures are possible.*

· **Explosion limits:**

Lower: 1.8 Vol %
Upper: 15.7 Vol %

· **Vapour pressure at 20°C:** ca.5 hPa

· **Density at 20°C:** 0.93 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

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- **Viscosity:**
Dynamic at 20°C: 2.07 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	3000 mg/kg (rat)
Dermal	LD50	3300 mg/kg (rabbit)
Inhalative	LC50/4 h	2000 mg/l (rat)

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

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:** 3 Flammable liquids.
- **Danger code (Kemler):** 30

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- **UN-Number:** 1171
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1171 ETHYLENE GLYCOL MONOETHYL ETHER

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1171
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ETHYLENE GLYCOL MONOETHYL ETHER

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1171
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** ETHYLENE GLYCOL MONOETHYL ETHER

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:**



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· **Risk phrases:**

- 60 May impair fertility.
- 61 May cause harm to the unborn child.
- 10 Flammable.
- 20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.

· **Safety phrases:**

- 53 Avoid exposure - obtain special instructions before use.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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