



SAFETY DATA SHEET

ETHYLENE GLYCOL

1.IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: ETHYLENE GLYCOL

Recommended use: Chemical for industrial

Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

- 1.) Causes skin irritation.
- 2.) May be fatal if swallowed and enters airways.
- 3.) May cause drowsiness or dizziness.
- 4.) Toxic to aquatic life with long lasting effects.
- 5.) May damage the unborn child. Suspected of damaging fertility.

Precautionary statement(s)

- 1.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.



2.) Avoid release to the environment.

3.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.

4.) IF IN EYES: Rinse cautiously with water for 15 minutes.

5.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 1,2-Ethandiol, EG, MEG

Ingredients	% (w/w)	CAS NO.
ETHYLENE GLYCOL	100	107-21-1

4. FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact: Wash off with soap and plenty of water. Consult a physician.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

No data available

Specific hazards arising from Chemicals:

Carbon oxides

Special protective equipment for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.



6. ACCIDENTAL RELEASE MEAS

Precautions: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions: Do not let product enter drains.

Methods and Material for Containment and Clean Up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist.

Conditions for Safe Storage & Unsuitable Materials:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 165 ppm (1200 mg/m³)

Appropriate Engineering Controls:No data available

Individual Protection Measures

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:



- Eye protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin and body protections:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless , Characteristic	Evaporation rate : < 1 (n-Bu Acetate = 100)
Melting Point : -13 °C	Specific gravity : 1.1151-1.1156 g/cm ³ at 20 °C
pH : N/A	Solubility in water : Soluble
Boiling point : 193-204 °C	Viscosity : 21 mPa.sec
Vapour pressure : 0.06 mHg at 20 °C	Vapor density (air=1) : 2.1 g/l
Lower explosive limits : 3.2%Vol	Upper explosive limits : 15.3%Vol
Auto-ignition temperature : 413°C	Flash point: 117 °C
Odour threshold: N/A	Flammability (solid, gas): N/A
Decomposition temperature: N/A	Solubility in other solvents: N/A
n-octanol/water partition coefficient (log P_{ow}): N/A	



10. STABILITY AND REACTIVITY

Chemical Stability:	No data available
Reactions:	No data available
Possibility of Hazardous Reactions:	No data available
Conditions to avoid:	Heating in air.
Materials to avoid:	Strong oxidizing agents, Strong acids, Zinc
Hazardous decomposition products:	Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 (oral, rat): 4700 mg/kg
Sensitization:	Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes Causes eye irritation.
Chronic toxicity:	No data available
Further toxicological information:	No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish:	No data available
Toxicity to daphnia and other aquatic invertebrates:	No data available
Toxicity to algae	No data available
Toxicity to bacteria	No data available
Biodegradability Remarks:	No data available
Bioaccumulative Potential:	No data available
Mobility:	No data available
Affected in any other way:	No data available

13. DISPOSAL CONSIDERATIONS

Material Disposal:	Offer surplus and non-recyclable solutions to a licensed disposal company.
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Container Disposal: Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/ADNR

Not dangerous goods

IMGD

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

GHS-Labeling

Hazard statement(s):

no data available

Precautionary statement(s):

no data available

R - phrase(s):

no data available

S - phrase(s):

no data available

16. Other Information

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