



## 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:  | <b>MODERN CHEMICAL CO.,LTD.</b><br>82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,<br>Klong Tan Nuea, Watthana, Bangkok 10110 |
| Telephone No:           | 0-2715-0897-9, 0-2392-3410-3   |
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#### 2. HAZARDS IDENTIFICATION

##### Label elements

Pictogram



Signal word

Warning

##### Hazard statement(s):

1.) Harmful if swallowed.

##### Precautionary statement(s):

- 1.) Wash skin thoroughly after handling.
- 2.) Do not eat, drink or smoke when using this product.
- 3.) IF SWALLOWED: call a doctor/physician if you feel unwell.
- 4.) Rinse Mouth.
- 5.) Dispose container in accordance with regulations.



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** 1,2-Ethanediol, EG, MEG

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

### 4. FIRST AID MEASURES

- 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:**

No data available.

**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 vapours, 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 dispose.



## 7. HANDLING AND STORAGE

### Precautions for Safe Handling & Product Transfer:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precaution see section 2.

### Conditions for Safe Storage & Unsuitable Materials:

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** TWA 100 mg/m<sup>3</sup>

**Appropriate Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice.  
Wash hands before breaks and at the end of workday.

### Individual Protection Measures

**Respiratory protection:** Where air-filtering respirators are suitable.

**Hand protection:** Wear impervious chemical resistant gloves.

**Eye protection:** Avoid eye contact. Chemical type goggles should be worn. Do not wear contact lenses

**Skin and body protections:** Workers should be wash exposed skin several times daily with soap and water.  
Soiled work clothing should be laundered or dry - cleaned.

**Hygiene measures:** Immediately change contaminated clothing. Apply skin-protective barrier cream.  
Wash hands and face after working with substance.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |  |
|--|--|
| <b>Form, Color and Odor :</b> liquid, colorless , sweetish             | <b>Evaporation rate :</b> N/A                                      |
| <b>Melting Point :</b> -12 °C  | <b>Specific gravity :</b> 1.1151-1.1156 g/cm <sup>3</sup> at 20 °C |
| <b>pH :</b> N/A  | <b>Solubility in water :</b> Soluble at 20 °C                      |
| <b>Boiling point :</b> 198 °C  | <b>Viscosity :</b> N/A   |
| <b>Vapour pressure :</b> 0.06 mmHg at 20 °C                            | <b>Vapor density (air=1) :</b> N/A                                 |
| <b>Lower explosive limits :</b> 1.8 %Vol                               | <b>Upper explosive limits :</b> 12.8 %Vol                          |
| <b>Auto-ignition temperature :</b> 410 °C                              | <b>Flash point:</b> 111 °C   |
| <b>Odour threshold:</b> N/A  | <b>Flammability (solid, gas):</b> N/A                              |
| <b>Decomposition temperature:</b> N/A                                  | <b>Solubility in other solvents:</b> N/A                           |
| <b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> N/A |  |



## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Chemical Stability:</b>                 | No data available.  |
| <b>Reactions:</b>                          | No data available.  |
| <b>Possibility of Hazardous Reactions:</b> | From explosive gas mixture with air. Reacts with strong oxidizing agents.   |
| <b>Conditions to avoid:</b>                | Heating   |
| <b>Materials to avoid:</b>                 | aluminium, chromyl chloride, alkali hydroxides, perchloric acid, strong oxidizing agents strong acids, strong bases, aldehydes. |
| <b>Hazardous decomposition products:</b>   | carbon monoxide and carbon dioxide.   |

## 11. TOXICOLOGICAL INFORMATION

|   |                              |
|---|------------------------------|
| <b>Acute toxicity:</b>                    | LD50 (oral, rat): 4700 mg/kg |
| <b>Sensitization:</b>                     | Harmful if swallowed.        |
| <b>Chronic toxicity:</b>                  | No data available.           |
| <b>Further toxicological information:</b> | 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

|                           |   |
|---------------------------|---|
| <b>Material Disposal:</b> | Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal. |
|---------------------------|---|



**Container Disposal:** Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

#### 14. TRANSPORT INFORMATION

##### ADR/ADNR

Not dangerous goods

##### IMGD

Not dangerous goods

##### IATA

Not dangerous goods

#### 15. REGULATORY INFORMATION

Regulatory information:

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

#### 16. Other Information

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