

MATERIAL SAFETY DATA SHEET

TRIETHYLENE GLYCOL



1 PRODUCT & COMPANY IDENTIFICATION

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|----------------------|-----------------------------|------------------|---|
| Product Name: | Triethylene Glycol | Supplier: | ASES CHEMICAL WORKS. |
| Synonyms: | TEG, Triglycol, Trigen | Address: | Brahm Bagh, Jalori Gate Jodhpur - 342001 Rajasthan-India |
| CAS Number: | 112-27-6 | Phone: | +91-9636889954 |
| Product Form: | Liquid | Web: | www.ases.in |
| Product Use: | Personal Care Formulations. | Email : | ecom@ases.in |

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture : Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Label elements : Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Other hazards: No data available

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No. | EC-No. | Formula | Mol Weight | Composition (%) |
|--------------------|----------|-----------|---|--------------|-----------------|
| Triethylene Glycol | 112-27-6 | 203-953-2 | C ₆ H ₁₄ O ₄ | 150.17 g/mol | 99% |

4 FIRST AID MEASURES

Eye: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin: Wash off with soap and plenty of water. Consult a physician.
Inhalation: Remove from exposure, move to fresh air and seek medical advice immediately.
Instigation: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5 FIRE-FIGHTING MEASURES

Extinguishing media: Water Foam, Carbon dioxide (CO₂), Dry powder. Avoid water jet.
Fire hazard: Carbon oxides.
Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.
Further information: No data available

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Environmental precautions: Do not let product enter drains.
Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7 HANDLING & STORAGE

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Handle in accordance with good industrial hygiene and safety practice.
Eye protection: Safety glasses with side-shields.
Personal protection: Protective equipment must be selected according to the substance at the specific workplace.
Skin protection: Handle with gloves. Dispose of contaminated gloves after use
Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator.
Environmental control: Do not let product enter drains.

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9 PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------|-------------------------------|----------------------------|---------------------|
| Physical State : | Clear, Viscous Liquid. | Vapour pressure | < 1 mmHg at 20 °C |
| Colour : | Colourless | Vapour density | 5.18 - (Air = 1.0) |
| Odor : | No data available | Relative density | 1.124 g/mL at 20 °C |
| pH (aqueous solution): | No data available | Auto-ignition temperature | 347 °C |
| Melting Freezing Point : | -7 °C - lit. | Decomposition Temperature: | No available |
| Boiling Point : | 25 - 127 °C at 0.1 hPa - lit. | Water solubility: | completely miscible |
| Flash Point : | 166 °C - closed cup | Viscosity, Kinematic : | No available |
| Upper explosion limit: | 9.2 %(V) | Viscosity, Dynamic : | No available |
| Lower explosion limit: | 0.9 %(V) | | |

10 STABILITY AND REACTIVITY

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| Reactivity: | No data available |
| Chemical Stability: | Stable under recommended storage conditions. |
| Hazardous Polymerization: | None known. |
| Conditions to Avoid: | No data available. |
| Incompatible Materials: | Strong oxidizing agents, Acids and bases |
| Hazardous Decomposition Products: | Carbon oxides |

11 TOXICOLOGICAL INFORMATION

| | | |
|--|---|---------------------------------|
| Information on Toxicological Effects: | LD50 Oral - Rat - 17,000 mg/kg | (2,2'-(Ethylenedioxy)diethanol) |
| | Inhalation- Respiratory disorder | (2,2'-(Ethylenedioxy)diethanol) |
| | LD50 Dermal- Rabbit - > 22,500 mg/kg | (2,2'-(Ethylenedioxy)diethanol) |
| Skin corrosion/irritation: | Skin – Human Result: Mild skin irritation | (2,2'-(Ethylenedioxy)diethanol) |
| | Skin - Rabbit Result: Mild skin irritation | (2,2'-(Ethylenedioxy)diethanol) |
| Serious eye irritation: | Eyes – Rabbit Result: Mild eye irritation | (2,2'-(Ethylenedioxy)diethanol) |
| Sensitization to the Product: | This product is not expected to cause skin sensitization. | |
| Respiratory or skin sensitisation: | No data available | |
| Germ cell mutagenicity: | No data available | |
| Carcinogenicity: | No data available | |
| Reproductive toxicity: | No data available | |
| STOT-Single Exposure: | No data available | |
| STOT-Repeated Exposure: | No data available | |
| Aspiration hazard: | No data available | |

12 ECOLOGICAL INFORMATION

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|---|---|
| Toxicity: | |
| To fish | LC50 - Leuciscus idus (Golden orfe) - > 100 mg/l - 96 h |
| To daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 46,500 mg/l - 48 h |
| Toxicity to algae | Remarks: No data available |
| Persistence and degradability: | Biodegradability Result: > 70 % - Readily biodegradable |
| Bioaccumulative potential: | No bioaccumulation is to be expected (log Pow <= 4). |
| Mobility in soil: | No data available. |
| Results of PBT & vPvB assessment : | No data available. |
| Other adverse effects: | No data available. |

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13 DISPOSAL CONSIDERATIONS

| | |
|---------------------------------|--|
| Disposal Product – | Offer surplus and non-recyclable solutions to a licensed disposal company. |
| Contaminated packaging – | Dispose of as unused product. |

14 TRANSPORT INFORMATION

IATA / IMO-IMDG / RID/ADR: Not dangerous goods.

15 REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture : -

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment :- For this product a chemical safety assessment was not carried out

16 OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and ASES CHEMICAL WORKS assume no liability resulting from its use.