



SAFETY DATA SHEET

PROPYLENE GLYCOL

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

Product name:	PROPYLENE GLYCOL
Recommended use:	Chemical for industrial
Manufacturer/Supplier:	MODERN CHEMICAL CO.,LTD. 82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63, Klong Tan Nuea, Watthana, Bangkok 10110
Telephone No:	0-2715-0897-9, 0-2392-3410-3
Fax No:	0-2715-0908-9, 0-2391-1571-2
Emergency Telephone No:	0-2715-0897-9, 0-2392-3410-3

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-Propanediol, MPG, PG

Ingredients	% (w/w)	CAS NO.
PROPYLENE GLYCOL	100	57-55-6

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:** Flush eyes with water as a precaution.
- 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. Evacuate personnel to safe areas.



Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Discharge into the environment must be avoided.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 525 ppm

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 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:

Chemical resistant gloves are recommended. Nitrile, CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.



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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless , Characteristic	Evaporation rate : N/A
Melting Point : -60°C	Specific gravity : 1.035-1.037 g/cm ³ at 25 °C
pH : N/A	Solubility in water : Soluble
Boiling point : 185-189 °C	Viscosity : N/A
Vapour pressure : 0.08 mHg at 20 °C	Vapour density (air=1) : 2.62 g/l
Lower explosive limits : 2.6 %Vol	Upper explosive limits : 12.5 %Vol
Auto-ignition temperature : 415°C	Flash point: 103 °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: No data available

Materials to avoid: Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents

Hazardous decomposition products: No data available



11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 Oral - rat – >2,000 mg/kg
Sensitization:	No data available
Chronic toxicity:	No data available
Further toxicological information:	No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish:	mortality NOEC - Pimephales promelas (fathead minnow)-52.930 mg/l - 96 h
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.
Container Disposal:	Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/ADNR

No data available

IMGD

No data available

IATA

No data available



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

Modern Chemical Co.,Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

MODERN CHEMICAL CO., LTD. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MODERN CHEMICAL CO.,LTD.