



SAFETY DATA SHEET

POLYETHYLENE GLYCOL 400

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

Product name: POLYETHYLENE GLYCOL 400
Recommended use: Chemical for industrial
Manufacturer/Supplier: **MODERN CHEMICAL Co.Ltd.**
82/80 Soi Eakamai 22 (Nuan-noi) Sukhumvit Road 63,
North Klong Ton, Wattana, 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

Not a hazardous substance or mixture.

Hazard statement(s):

Not a hazardous substance or mixture.

Precautionary statement(s):

Not a hazardous substance or mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: PEG 400; Poly (oxy-1,2-ethanediyl).alpha.-hydro-.omega.-hydroxy, Polyoxyethylene 400

Ingredients	% (w/w)	CAS NO.
POLYETHYLENE GLYCOL 400	100	25322-68-3



4. FIRST AID MEASURES

- General advice:** Do not leave the victim unattended.
- Inhalation:** Remove person to fresh air. If signs/symptoms continue, get medical attention. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a medical doctor.
- Skin contact:** Wash off with plenty of water.
- Eye contact:** Immediately flush eye (s) with plenty of water. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. Protect unharmed eye. If eye irritation persists, consult a specialist.
- Ingestion:** Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers, foam, Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable Extinguishing Media

Do not use direct water stream. May spread fire.

Specific hazards arising from Chemicals

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritation. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Special protective equipment for fire-fighters.

Wear positive-pressure self-contained breathing apparatus (SBCA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.



6. ACCIDENTAL RELEASE MEAS

Precautions: Use personal protective equipment.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological information. Wipe up with absorbent material (e.g. cloth, fleece).

Methods and Material for Containment and Clean Up:

Contain spilled material if possible. Small spills can be diluted with large quantities of water. Large spills can be collected in suitable and properly labeled containers.

Dispose of according to applicable regulations. See Section 13 Disposal Considerations.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Normal measures for preventive fire protection. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Practice care and caution to avoid skin and eye contact.

Conditions for Safe Storage & Unsuitable Materials:

Electrical installations/working materials must comply with the technological safety standards. Store containers tightly closed in a well ventilated area. Use product promptly after opening. Store in the following(s): Stainless steel.

Polypropylene. Polyethylene lined contained. Teflon. Glass-lined container. Plasite 3066 lined container. Plasite 3070 lined container. 316 stainless steel. Materials to avoid: No materials to be especially mentioned.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: Contains no substances with occupational exposure limit values.

Appropriate Engineering Controls: No data available.

Individual Protection Measures

Respiratory protection: Atmospheric levels should be maintained below the exposure guideline. When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.

Hand protection: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to



glove materials, as well as the instructions/specifications provided by the glove supplier.

Eye protection: Use safety glasses. Safety glasses should be consistent with EN 166 or equivalent.

Skin and body protections: Protective suit. Wear clean, body-covering clothing. Use gloves with insulation for thermal protection, when needed.

Hygiene measures: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless, Odourless	Evaporation rate : < 0.01
Melting Point : 4 - 8 °C	Specific gravity : N/A
pH : N/A	Solubility in water : Soluble
Boiling point : >200 °C	Viscosity : N/A
Vapour pressure : < 0.001 hPa at 20 °C	Vapor density (air=1) : 10
Lower explosive limits : N/A	Upper explosive limits : N/A
Auto-ignition temperature : N/A	Flash point: 227 °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: Stable under normal conditions.

Reactions: Hazardous polymerization does not occur.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.

Conditions to avoid: Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed system. Heat, sparks, flame and build-up of static electricity. Exposure to elevated temperatures can cause product to decompose.

Materials to avoid: Strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.



Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials.

Decomposition products can include and are not limited to: Carbon dioxide, alcohols, ethers, hydrocarbons, ketones and polymer fragments.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	No data available.
Sensitization:	No data available.
Chronic toxicity:	No data available.
Further toxicological information:	No data available.

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish:	LC50 - Poecilia reticulata (guppy): >100 mg/l - 96 h.
Toxicity to daphnia and other aquatic invertebrates:	LC50 - Daphnia magna (Water flea): 1,000 mg/l - 48 h.
Toxicity to algae:	EC50 - Pseudokirchneriella subcapitata (green algae): 398.9135 mg/l
Toxicity to bacteria:	IGC50 - Tetrahymena pyriformis : 1,651.521 mg/l - 46 h.
Biodegradability Remarks:	Not persistent and readily biodegradable in water. Persistent and not readily biodegradable in sediment.
Bioaccumulative Potential:	Does not bioaccumulate.
Mobility:	Medium Soil. Weakly absorbed in soil.
Affected in any other way:	No data available.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Incinerate in a furnace where permitted under national and local regulations. At very low concentrations in water, this product is biodegradable in a biological wastewater treatment plant. Dispose in accordance with all national and local environmental regulations. Disposal methods identified are for the product as sold. For proper disposal of used materials, an assessment must be completed to determine the proper and permissible waste management options permissible under applicable rules regulations and/or laws governing your location.



Container Disposal: Empty containers should be recycled or disposed of through an approved waste management facility

14. TRANSPORT INFORMATION

ADR/ADNR

Not dangerous goods

IMGD

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

The components of this product are reported in the following inventories:

CH INV	:	On the inventory, or in compliance with the inventory
TSCA	:	On TSCA Inventory.
DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or In compliance with the inventory.
NZIoC	:	On the inventory, or In compliance with the inventory.
ENCS	:	On the inventory, or In compliance with the inventory.
ISHL	:	On the inventory, or In compliance with the inventory.
KECI	:	On the inventory, or In compliance with the inventory.
PICCS	:	On the inventory, or In compliance with the inventory.
IECSC	:	On the inventory, or In compliance with the inventory.



บริษัท โมเดิร์นเคมีเคิล จำกัด (สำนักงานใหญ่) (MODERN CHEMICAL CO.,LTD. (Head Office))

82/80 ซอยเอกมัย 22(นวลน้อย) ถ.สุขุมวิท 63 แขวงคลองตันเหนือ เขตวัฒนา กรุงเทพมหานคร 10110 โทร0-2715-0897-9 แฟกซ์.0-2392-3410-3

82/80 Soi Eakmai 22(nuan-noi) 63 Sukhumvit Rd, Klong Ton Nuea, Wattana, Bangkok 10110 E-mail : service@modernchemical.co.th

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.