



PO Box 530 ♦ Gig Harbor, Washington 98335

Dear Customer:

Senergy Chemical is pleased to enclose the following Material Safety Data Sheet (MSDS) for your use:

PROPYLENE GLYCOL

MSDS Date: 10/27/2006

This MSDS takes precedence over any previous MSDS you may have for this product.

Under the OSHA Hazard Communication Standard (29CFR 1910.1200 *et seq.*), all manufacturers are required to supply MSDS's to customers with the first shipment, whenever the MSDS is updated and whenever a copy is requested.

Please note that in Section 15 of this MSDS, Supplier Notification information is provided pursuant to Section 313, Title III of the Superfund Amendment and Reauthorization Act of 1986 (SARA). Please further note that if you repackage or otherwise redistribute this material you are required to send the recipient notice containing this SARA 313 information.

This MSDS contains information relative to safety and health for use in establishing safe handling procedures for your employees. Please see that this MSDS reached those in your organization responsible for health and safety practices and for OSHA compliance.

Employers subject to the provisions of the OSHA Hazard Communications Standard are required to make MSDS's available to their employees and to incorporate the information in their training programs.

Please contact our Safety and Health office if you have questions about this MSDS or if additional copies are needed.

Very truly yours,



MATERIAL SAFETY DATA SHEET

T 0101

enclosures:

T0101

SECTION 1- PRODUCT AND MANUFACTURER INFORMATION

MSDS DATE: 12/27/2001

PRODUCT Propylene Glycol
SYNONYMS 1,2-Propanediol
CHEMICAL FAMILY Glycols

DISTRIBUTED BY

Triangle Chemical Co.
PO Box 707.
Downingtown, PA 19335
610-518-2519

EMERGENCY

CHEMTREC.....800-424-9300
COMPANY EMERGENCY PHONE....610-608-1167
(24-hour)

SECTION 2 - HAZARDOUS INGREDIENTS

Table with 5 columns: CHEMICAL/COMMON NAME, CAS-NO, %, PEL-OSHA, TLV-ACGIH. Row 1: Propylene Glycol, 00057-55-6, >99, Not Listed, Not Listed.

SECTION 3 - HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH=0 FLAMMABILITY=1 REACTIVITY=0 PROTECTION=B

SECTION 4 - HEALTH HAZARD DATA

HEALTH EFFECTS (Acute And Chronic)

EYES May cause minor eye irritation.

SKIN No adverse health effects are expected as a result of skin exposure. Not a skin absorption hazard.

INHALATION No adverse health effects are expected as a result of inhalation exposure

INGESTION No adverse health effects are expected as a result of accidental ingestion.

PRIMARY ROUTES OF ENTRY

EYES/SKIN: Possible

INHALATION: Possible(mist/vapor)

INGESTION: Not likely

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE May aggravate pre-existing eye disease



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SECTION 5 - FIRST AID INSTRUCTIONS

EMERGENCY FIRST AID PROCEDURES

EYES Immediately flood with water for at least 15 minutes. If irritation occurs and persists, get medical attention.
SKIN Wash with soap and water. No adverse effects are expected.
INHALATION Not expected to present a significant inhalation hazard under anticipated conditions of normal use
INGESTION Ingestion unlikely. However, if ingested, obtain medical attention. If large quantity is swallowed, administer 12 oz of lukewarm water.

SECTION 6 - CHEMICAL DATA

<u>BOILING POINT</u>	370°F	<u>SPECIFIC GRAVITY (WATER=1)</u>	1.0492
<u>VAPOR PRESSURE (mmHg)</u>	0.0	<u>VOLATILITY CHARACTERISTICS</u>	slight
<u>VAPOR DENSITY (AIR=1)</u>	2.62	<u>SOLUBILITY IN WATER</u>	complete

APPEARANCE AND ODOR INFORMATION clear colorless liquid; practically odorless

INCOMPATIBILITY (Materials To Avoid) strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS incomplete combustion will release carbon monoxide and other toxic gases.

WILL HAZARDOUS POLYMERIZATION OCCUR No

CONDITIONS TO AVOID FOR POLYMERIZATION None

IS THE PRODUCT STABLE Yes

CONDITIONS TO AVOID FOR STABILITY strong oxidizers

SECTION 7 – FIRE FIGHTING INFORMATION

FLASH POINT (Method Used) 228°F (COC) FLAMMABLE LIMITS Upper=2.4 Lower=17.4

EXTINGUISHING MEDIA foam, dry chemical, CO₂.

SPECIAL FIRE FIGHTING PROCEDURES Keep fire-exposed containers cool with water spray. Wear chemical protective clothing and NIOSH/MSHA-approved SCBA .

UNUSUAL FIRE AND EXPLOSION HAZARDS None



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SECTION 8 - SPILL OR LEAK/DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Dike and contain spill. Material may make the area slippery. Spread inert absorbent material on area and sweep up. Place in plastic container for disposal. Keep material out of sewers and waterways. Comply with spill notification requirements. All response activities must comply with HAZWOPER (29CFR 1910.120).

WASTE DISPOSAL METHODS Dispose of waste in compliance with local, state and federal regulations. Recycle material where possible.

SECTION 9 – TOXICOLOGY INFORMATION

Skin: LD₅₀ (skin absorption – rabbit) >10,000 mg/kg
Ingestion: LD₅₀ (oral – rat) = 20,000 to 34,000 mg/kg

SECTION 10 – ECOLOGICAL INFORMATION

Toxicity to fish/amphibians: LC₅₀/96 hours (Oncorhynchus mykiss) >100 mg/l
Toxicity to aquatic invertebrates: EC₅₀/48 hours (daphnia) >100 mg/l
Toxicity to aquatic plants: EC₅₀/72 hours (green algae) >100 mg/l

SECTION 11 - EXPOSURE CONTROL AND PROTECTION

VENTILATION Forced air ventilation is recommended if product is handled in confined areas.

RESPIRATORY PROTECTION None required under normal use of product.

PROTECTIVE GLOVES Neoprene

OTHER PROTECTIVE EQUIPMENT Always wear eye protection when handling chemicals. Protect against excessive splashing. Wear full cover shirt and pants to protect against exposure. Provide local emergency showers and eyewash stations.

OTHER ENGINEERING CONTROLS None

WORK PRACTICES All users should consult MSDS before handling this material.

HYGIENIC PRACTICES Wash hands and face after using this product. Remove contaminated clothing immediately. Launder contaminated clothing before re-use.

SECTION 12 – HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Store in cool, dry place. Material is hygroscopic. Protect against high water pickup. Keep containers closed when not in use.



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SECTION 13 - SPECIAL PRECAUTIONS

MAINTENANCE PRECAUTIONS NA

SECTION 14 – OTHER INFORMATION

NA

SECTION 15 – REGULATORY INFORMATION

NEW JERSEY RIGHT TO KNOW INFORMATION

00057-55-6 Propylene Glycol

SARA INFORMATION

Product is not regulated under SARA III Section 313 Supplier Notification Requirements.

TSCA INFORMATION

Propylene Glycol is listed in the TSCA Inventory.

TRANSPORTATION INFORMATION

Not regulated