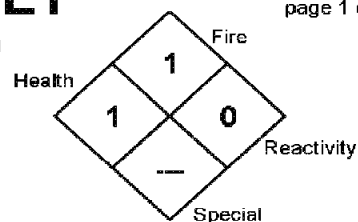


MATERIAL SAFETY DATA SHEET**BRENNTAG**

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NFPA 704 DESIGNATION
HAZARD RATING4=Extreme
3=High
2=Moderate
1=Slight
0=Insignificant

Brenntag MSDS #:	BPI-07031
MSDS Revision/Issue Date:	09/16/09
Supersedes Revision Date:	04/20/07

1. CHEMICAL PRODUCT IDENTIFICATION & COMPANY IDENTIFICATION

PRODUCT IDENTIFIER:	Propylene Glycol Inhibited F.G.
GENERAL USE:	An inhibited, food grade Propylene Glycol used in industrial applications where a food grade product is required.
PRODUCT DESCRIPTION:	A clear, colorless, viscous liquid having a very slight mild odor.

INFORMATION PROVIDED BY: Brenntag Pacific, Inc.
10747 Patterson Place
Santa Fe Springs, CA 90670

EMERGENCY PHONE NUMBERSFor MSDS call: **PHONE: 562-903-9626****CHEMTREC: 800-424-9300****2. COMPOSITION & INFORMATION ON INGREDIENTS**

COMPONENT	CAS #	OSHA HAZARD	WT %	ACGIH		OSHA	
				TLV _(TWA)	STEL	PEL _(TWA)	STEL
Propylene Glycol	57-55-6	Eye and Skin Irritant	95 ± 3	None	None	None	None
				AIHA WEEL: 10 mg/m ³ (for the Aerosol)			
Dipotassium Phosphate	7758-11-4	Eye, Skin & Respiratory Irritant	3 ± 1	None	None	None	None

NDA = No Data Available

N/A = Not Applicable

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A clear, colorless, viscous, moderately alkaline liquid having a very slight mild odor. The vapors, mists and liquid are mildly to moderately irritating to eyes, skin and respiratory tract. Ingestion may cause gastrointestinal discomfort or irritation.

POTENTIAL HEALTH EFFECTS

- INHALATION:** While no significant adverse acute effects have been reported from inhalation of this product, it may cause mild to moderate irritation to the nose, throat, mucous membranes and lungs. Symptoms of exposure may include sneezing, coughing, shortness of breath and chest discomfort or pain. Inhalation of high mist concentrations may produce more serious symptoms.
- EYE CONTACT:** Exposure to the liquid or mists can cause eye irritation. Symptoms of exposure may include tearing, redness, possible swelling and discomfort or pain. Exposure is not expected to cause corneal damage or visual impairment, when treated promptly.
- SKIN CONTACT:** Exposure to the liquid or mists may cause mild skin irritation. Symptoms of exposure may include redness and an itching sensation. No published reports indicate this product is absorbed through the skin.
- INGESTION:** Ingestion may cause mild to moderate irritation to the entire gastrointestinal tract. Symptoms of exposure may include nausea, vomiting, lethargy and/or diarrhea. Ingestion of a large amount may cause human systemic effects that include general anesthesia, convulsions and changes in surface EEG.
- CHRONIC:** Some chronic, health effects have been reported, for repeated ingestion of Propylene Glycol by children (as a solvent in medications), to suggest a causal relationship with grand mal seizures, and possible animal chronic effects by inhalation.

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PRODUCT IDENTIFIER: **Propylene Glycol Inhibited F.G.**

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4. FIRST AID MEASURES

- INHALATION:** If inhaled, immediately move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.
- EYE CONTACT:** In case of contact, immediately flush eyes with plenty of clean running water for at least 15 minutes, lifting the upper and lower lids occasionally. Remove contact lenses, if worn. Get medical attention if irritation persists.
- SKIN CONTACT:** In case of contact, flush skin with plenty of clean running water. Remove contaminated clothing and shoes and wash before reuse. If irritation occurs and persists, get medical attention.
- INGESTION:** If swallowed, give plenty of water to drink. Call a physician. **DO NOT** induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- NOTE TO PHYSICIANS:** Treat exposures symptomatically.

5. FIRE FIGHTING MEASURES

- Flashpoint and Method:** Greater than 93.3° C. (200° F.) Tagliabue Closed Tester (ASTM D 56-79)
- Flammable Limits (in air, % by volume)** Lower: No data available Upper: No data available
- Autoignition Temperature:** No data available

GENERAL HAZARD: This product is not a combustible liquid per OSHA or WHMIS criteria, but may ignite at elevated temperatures and can burn. The Uniform Fire Code physical hazard classification for this product is: **Combustible Liquid, Class III-B**; the health hazard is: **Irritant**. This product may produce hazardous decomposition products.

- FIRE FIGHTING INSTRUCTIONS:** **EXTINGUISHING MEDIA:** Water fog, CO₂, foam or dry chemical.
Use a water spray or fog to cool the containers exposed to the heat of a fire.
- FIRE FIGHTING EQUIPMENT:** Fire fighters should wear full protective equipment, including self-contained breathing apparatus.
- HAZARDOUS COMBUSTION PRODUCTS:** When heated to decomposition, it emits toxic carbon monoxide, carbon dioxide, phosphorus oxides and potassium oxide plus irritating smoke.

6. ACCIDENTAL RELEASE MEASURES

- LAND SPILL:** Wearing recommended protective equipment and clothing, dike the spill and pick up the bulk of liquid using pumps or a vacuum truck, or absorb the liquid in sand or a commercial absorbent. Place in approved containers for recovery, disposal, or satellite accumulation. Neutralize the alkalinity, of the remaining liquid, using a dilute acid solution appropriate for neutralizing alkaline liquids. Liberally cover the spill area with sodium bicarbonate. Flush the spill area with water; collect the rinsates for disposal or sewer, as appropriate.
- WATER SPILL:** Wear recommended protective equipment and clothing if contact with hazardous material can occur. Stop or divert water flow. Dike contaminated water and remove for disposal and/or treatment. As appropriate, notify all downstream users of possible contamination.

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7. HANDLING AND STORAGE**STORAGE TEMPERATURE:** Ambient**STORAGE PRESSURE:** Ambient

GENERAL: Store in a cool, dry, well-ventilated area away from all sources of ignition and incompatible materials or products. Protect eyes, skin and clothing from contact with this product. Wear recommended personnel protective equipment. Avoid breathing vapors, mists or aerosols. Use with adequate ventilation. Do not drink this product. Keep the container tightly closed when not in use. Wash thoroughly after handling this product.

The empty container may be hazardous. It may contain organic residues that can be ignited and will burn. Do not cut, puncture, or weld, on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL MEASURES: Use a local or general, mechanical exhaust ventilation system if emissions, in the work area, are above the AIHA WEEL or levels that may cause irritation.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: Respiratory protection is not normally required when this product is used as directed. If emissions in the work area are above the AIHA WEEL or may cause irritation, wear a NIOSH-approved respirator equipped with a good mist / particulate cartridge and an organic vapor cartridge, or supplied air.

EYES: Wear chemical goggles (recommended by ANSI Z87.1-1979), unless a full facepiece respirator is worn.

GLOVES: Wear Neoprene or Butyl Rubber gloves

CLOTHING & EQUIPMENT: Wear a Neoprene or Butyl Rubber apron when handling this product. An eye wash station and safety shower should be available in the work area.

FOOTWEAR: Wear Neoprene or Butyl Rubber boots, if contact is likely.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless	Bulk Density (pounds/ft³):	Not applicable
Physical State:	Liquid	Vapor Pressure:	No data available
Odor:	Very slight, mild organic	Vapor Density (air=1):	2.62 (100% Propylene Glycol)
Odor Threshold:	No data available	Evaporation Rate (n-Butyl Acetate=1):	Less than 1
Molecular Formula:	Mixture	VOC Content:	Approximately 1,011 grams/Liter
Molecular Weight:	Not applicable	% Volatile:	Approximately 97
Boiling Point:	Greater than 100° C. (212° F.)	Solubility in H₂O:	Complete
Freezing/Melting Point:	Less than -18° C. (0° F.)	Octanol/Water Partition Coefficient:	No data available
Specific Gravity:	Approximately 1.056 @ 25° C.	pH (as is):	Not applicable
Density (pounds/gallon):	Approximately 8.81	pH (33% solution):	9.0 to 10.0

10. STABILITY AND REACTIVITY

GENERAL: This product is stable and hazardous polymerization will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIAL: Strong oxidizing agents, reducing agents and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, it emits toxic oxides of carbon, phosphorus and potassium plus irritating smoke.

SENSITIVITY TO MECHANICAL IMPACT: This product is not sensitive to mechanical impact.

SENSITIVITY TO STATIC DISCHARGE: This product is not sensitive to static discharge.

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PRODUCT IDENTIFIER: **Propylene Glycol Inhibited F.G.**

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11. TOXICOLOGICAL INFORMATION

Components:	Propylene Glycol	Dipotassium Phosphate
Eye Contact:	Rabbit: 500 mg/24 hours: MILD	Rabbit: Mild
Skin Contact:	Human: 500 mg/7 days; MILD	Rabbit: 300 mg; Mild
Oral Rat LD₅₀:	20 gm/kg	Greater than 500 mg/kg
Dermal Rabbit LD₅₀:	20,800 mg/kg	Greater than 300 mg/kg
Inhalation Rat LC₅₀:	No data available (Chronic, Multiple Dose, Rat TD ₀₁ : 2,180 mg/m ³ /6 hours/90 Days-I; Behavioral – Food intake; Endocrine – Changes in spleen weight; Biochemical – Dehydrogeases)	No data available
Human Data:	Oral Child TD ₀₁ : 79 gm/kg/56 weeks-I; Changes in surface EEG, Convulsions	No data available
Other Toxicological Data:	Oral Mouse LD ₅₀ : 22 gm/kg	No data available
Carcinogenicity:	No data available	No data available
Teratogenicity:	Intraperitoneal Mouse TD ₀₁ : 100 mg/kg (female 15 Days pregnant); Effects on Embryo or Fetus - Fetotoxicity	No data available
Mutagenicity:	Subcutaneous Mouse DNA Inhibition: 8,000 mg/kg	No data available
Synergistic Products:	None reported	None reported
Target Organs:	Eyes & Skin	Eyes, Skin, Mucous membranes & Lungs
Medical Conditions Aggravated By Exposure:	Skin disorders	Skin, or Respiratory disorders

12. ECOLOGICAL INFORMATION**ENVIRONMENTAL FATE:**

The environmental fate of this product is expected to be: **Land:** biodegradation with some leaching into the groundwater. **Water:** biodegradation. **Air:** not expected to readily volatilize due to low vapor pressure. This product is not expected to bioaccumulate.

ENVIRONMENTAL CONSIDERATIONS:

Aquatic toxicity for Propylene Glycol: Goldfish LC₅₀ (24 hours) = Greater than 5,000 mg/liter; Guppies LC₅₀ (48 hours) = Greater than 10,000 mg/liter; Fingerling Rainbow Trout LC₅₀ (24 hours) = Greater than 50,000 mg/liter.

13. DISPOSAL CONSIDERATIONS**RCRA 40 CFR 261 CLASSIFICATION:** Non-Hazardous Waste**U.S. EPA WASTE NUMBER/DESCRIPTION:** Not applicable

If this product is disposed of as shipped, it does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D due to toxicity. As a non-hazardous liquid waste, it should be disposed of in accordance with all local, state, and federal regulations. Consult state or local officials for proper disposal method.

14. TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	Not Restricted		
	Hazard Class:	Not applicable	UN Number: Not applicable
	Primary Label:	None Required	Subsidiary Label(s): None Required
	Primary/Subsidiary Placards:	None Required	
DOT Reportable Quantity (RQ):	Not listed	RQ for Product:	Not applicable
Marine Pollutant:	No		
2008 North American Emergency Response Guidebook No.:	Not applicable		
TDG PROPER SHIPPING NAME:	NOT RESTRICTED		
	Hazard Class:	Not applicable	UN Number: Not applicable
	Primary Label:	None Required	Subsidiary Label(s): None Required
	Primary/Subsidiary Placards:	None Required	
TDG Reportable Quantity (RQ):[#]	Not applicable		
TDG Schedule XII:	Not applicable		
Regulated Limit (RL):^{###}	Not listed	RL for Product:	Not applicable
Other Shipping Information:	None		

[#] Canadian Transportation of Dangerous Goods Regulations (TDGR), Part IX, Table I. Quantities or levels for Immediate Reporting: releases of reportable quantities, RQ, that meet the definition of a "dangerous occurrence" (a threat to life, health, property, or the environment) must be reported to the appropriate authorities as outlined in TDGR 9.13(1) and 9.14(1).

^{###} Reporting to Environment Canada is required for any releases exceeding the regulated limits, RL, of 9.2 materials (primary or secondary). The regulated limits are found in Schedule XIII of the TDGR.

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15. REGULATORY INFORMATION

COMPONENTS:	<u>Propylene Glycol</u>	<u>Dipotassium Phosphate</u>
OSHA Target Organs:	Eyes & Skin	Eyes, Skin, Mucous membranes & Lungs
<u>Carcinogenic Potential:</u>		
Regulated by OSHA:	No	No
Listed on NTP Report:	No	No
Listed by IARC:	No	No
IARC Group:	Not applicable	Not listed
ACGIH Appendix A:	Not listed	Not listed
A1 Confirmed Human:	Not applicable	Not applicable
A2 Suspected Human:	Not applicable	Not applicable
<u>U.S. EPA Requirements</u>		
Release Reporting		
CERCLA (40 CFR 302)		
Listed Substance:	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable
Category:	Not applicable	Not applicable
RCRA Waste No.:	Not applicable	Not applicable
Unlisted Substance:	Not applicable	Not applicable
Reportable Quantity:	Not applicable	Not applicable
Characteristic:	Not applicable	Not applicable
RCRA Waste No.:	Not applicable	Not applicable
<u>SARA TITLE III</u>		
Section 302 & 303 (40 CFR 355):		
Listed Substance:	Not listed	Not listed
Reportable Quantity:	Not applicable	Not applicable
Planning Threshold:	Not applicable	Not applicable
Section 311 & 312 (40 CFR 370):		
Hazard Categories (product):	Fire: <u>N</u>	Sudden Release of Pressure: <u>N</u>
Planning threshold:	10,000 pounds	10,000 pounds
Section 313 (40 CFR 372):		
Listed Toxic Chemical:	Not listed	Not listed
Reporting Threshold:	Not applicable	Not applicable
<u>U.S. TSCA Status</u>		
Listed (40 CFR 710):	Yes	Yes
<u>State Regulations</u>		
State of California: Safe Drinking Water and Toxins Enforcement Act, 1986 (Proposition 65):		
Carcinogen:	No	No
Reproductive Toxin:	No	No
<u>Other Regulations</u>		
State Right To Know Laws:	PA	
<u>Canadian Regulations</u>		
Product Information:		
Controlled Product:	Yes	
WHMIS Hazard Symbols:	Material Causing Other Toxic Effects	
WHMIS Class & Division:	D.2B	
Ingredient Information:		
IDL Substance:	Yes	No
DSL or NDSL Lists:	DSL	DSL

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16. OTHER INFORMATION

EPA Registration number: Not applicable

Approved Product Uses: Not applicable

Special Notes:

This product is not formulated to contain any material, which the State of California has found to cause cancer and/or birth defects or other reproductive harm.

Special Instructions:

Store Propylene Glycol Inhibited F.G. in a clean, dry, well ventilated area away from incompatible materials and products.

The empty containers may be hazardous. They may contain organic residues that can be ignited and will burn. Do not cut, puncture, or weld on or near these empty containers.

MSDS Revision Information: Information Revised This Issue Date: **Updated per new format with additional information.**

Form Revision made 2/19/09

MSDS Distributed by: Brenntag Pacific, Inc.

Prepared By: Edward Doheny

Date Prepared: September 16, 2009

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