### (Mono) Propylene Glycol Normal Propyl Ether

# Glycol Ether PNP

CAS No. 1569-01-3



#### **Description**

Glycol Ether PNP is a colorless, flammable liquid with an ether-like odor. It is completely water-soluble and has good coupling. It demonstrates good solvency for coating resins. The properties of Glycol Ether PNP support its use in coatings, cleaning, ink, agricultural, textile and adhesive products. Glycol Ether PNP and blends are substitutes for many ethylene glycol (E-series) ethers.

## Product Identification

Chemical Name Propoxy Propanol
Chemical Family Propylene Glycol Ether
Other Names Normal Propoxy Propanol

Propylene Glycol Normal Propyl Ether

Chemical Formula C<sub>6</sub>H<sub>14</sub>O<sub>2</sub>

# Product Specifications

Property	Specifications	Test Method
Specific Gravity		
@ 25/25°C	0.878-0.890 <sup>1</sup>	ASTM D-891
Distillation		
@760mm Hg		
IBP, min.	140°C	ASTM E-202
DP, max.	160°C	USP XXI
Acidity, wt. % as		ASTM E-202;
Acetic acid, max.	0.01	USP XXI
Water, Wt. %,	0.15	ASTM E-202;
max.	0.15	E-203
Color, APHA,	10	ASTM E-202;
max.	10	D-1209
GC Purity, Wt. %,	99.0	
min.	00.0	

For the most current product specification, please call 1-888-777-0232 or your local sales contact.

# Typical Properties

•	Density (pounds per gallon at 25°C)	7.4
•	Evaporation Rate (BuAc = 100)	21
•	Flash Point (Tag Closed Cup) °C(°F)	48 (119)
•	Formula Molecular Weight	118.2
•	Refractive Index @ 25°C(77°F)	1.410
	Calubility by waight in water at 2000	0
•	Solubility by weight in water at 20°C	Complete
•	Solubility by weight in water at 20°C Solubility Parameter (Total Hansen)	10.3
•		•
•	Solubility Parameter (Total Hansen)	10.3
•	Solubility Parameter (Total Hansen) Surface Tension (Dynes/cm) @ 25°C(77°F)	10.3 27

### **Applications**

**Coatings:** Glycol Ether PNP is colorless and water-soluble. It's characterized by low odor, good solvent properties, good chemical stability, and low volatility. It is used as a cosolvent for waterborne coatings. Glycol Ether PNP has excellent coalescing properties and promotes stability in waterborne coatings.

Glycol Ether PNP is a good substitute for E-series solvents, EP (ethylene glycol propyl ether) and EB (ethylene glycol butyl ether.

**Cleaners**: Glycol Ether PNP can be used in floor wax strippers and in many types of hard-surface cleaners, such as glass, metal, tile, ceramic, and general-purpose cleaners. Glycol Ether PNP facili- tates the removal of water-soluble or water-dispersible soils. It is a good coupling solvent for many oils.

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**Other Applications:** The properties listed in the previous section also support the use of *Glycol Ether* PNP in agriculture, cosmetics, electronics, ink, textile and adhesive products. Specific end uses may require approval by appropriate regulatory agencies.

#### **Storage**

General industry practice is to store *Glycol Ether* PNP ethers in carbon steel vessels. Avoid contact with air when storing for long periods of time. Glycol ethers should never be stored or handled in copper or copper alloys. This product may absorb water if exposed to air

Store only in tightly closed, properly vented containers away from heat, sparks, open flame or strong oxidizing agents. Use only non-sparking tolls. Ground containers before transfer. Electrical equipment should conform to national electric code.

# Safety and Handling

Unnecessary exposure or spillage should be strictly avoided as a matter of good practice.

Hazard ratings are summarized as follows:

	<u>NPCAHMIS</u>	<u>NFPA</u>
Health	1	1
Flammability	2	2
Reactivity	0	0
Personal Protection	X	
Refer to material Safety Data Sheet for more information.		

### Material Compatibility Guidelines

Stainless steel is recommended for valves, pumps and filters. *Teflon* is suitable for gaskets. Information from material suppliers and specific conditions of contact should be considered in the selection of suitable materials.

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Users should review the applicable Safety Data Sheet before handling the product.

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