

# Glycol Ether PNB

CAS No. 5131-66-8

## Description

*Glycol Ether* PNB is a colorless combustible liquid with an ether-like odor. It has low water solubility and good coupling and demonstrates good solvency for coating resins. The properties of PNB support its use in agricultural, coating, cleaning, ink, textile and adhesive products. It is a good substitute for ethylene glycol ethers including EB.

## Product Identification

Chemical Name	Normal Butoxy Propanol Propylene Glycol Normal Butyl Ether
Chemical Family	Propylene Glycol Ether
Chemical Formula	C <sub>7</sub> H <sub>16</sub> O <sub>2</sub>

## Product Specifications

Property	Specifications	Test Method
Specific Gravity @25°C	0.874-0.881	ASTM D-891
Distillation @ 760mm Hg IBP, min. DP, max	160°C 180°C	ASTM D 1078; E-202
Acidity, wt. % as Acetic acid, max.	0.02	ASTM E-202 USP XXI
Water, Wt. % max.	0.15	ASTM E-202; E-203
Color, APHA, max	15	ASTM E-202; D-1209
GC Purity wt.%, min.	99.0	ACC-6550

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)	7.3
• Evaporation Rate (BuAc = 100)	7
• Flash Point (Abel Closed Cup) °C (°F)	62C (143.6F)
• Solubility by weight in water at 20°C	6%
• Solubility Parameter (Total Hansen)	9.8
• Surface Tension (Dynes/cm) @ 25°C (77°F)	26
• Refractive Index @ 25°C (77°F)	1.42
• Viscosity (centistokes) @ 25°C (77°F)	3.5
• Vapor Pressure @ 25°C (77°F) (mmHg)	0.92

## Applications

**Coatings:** *Glycol Ether* PNB can be used as a coalescent with various resins including Acrylics, Styrene-Acrylics, and Polyvinylacetates. It has superior film forming characteristics.

**Cleaners:** *Glycol Ether* PNB has a moderate odor, good coupling ability, and good surface tension lowering in water-based cleaners. It is compatible with a wide range of cleaning components. *Glycol Ether* PNB is also partially water soluble and the water solubility can be increased by adding low molecular weight alcohols or other propylene glycol ethers.

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

(Mono) Propylene Glycol Normal Butyl Ether

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## Storage

General industry practice is to store *Glycol Ether* 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 tools. 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. Refer to the Safety Data Sheet for *Glycol Ether* PNB for more specific 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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