

PROPYLENE GLYCOL

TECHNICAL GRADE

Last revision 2008

Chemical Name: Molecular formula: C₃H₈O₂
 No. CAS: 57-55-6
 Abbreviation: PG

General Description:

Propylene Glycol is an organic compound, a clear, viscous, oily, colorless liquid with characteristic odor. The product is very easily soluble in water, acetone and chloroform.

Propylene Glycol is manufactured by the hydration of propylene oxide.

Technical Quality Conditions:

Characteristics	M.U.	Values	Test methods
Appearance	-	viscous, clear liquid	visual
Propylene glycol, min	%	99.5	ILL-033/3-01-17
Distillation range (95% vol.)	°C	185-189	ASTM D 1078
Water (Karl-Fischer), max.	%	0.25	ASTM E 203
Acidity (CH ₃ COOH), max.	%	0.005	ASTM D 1613
Hazen color, max.	Hazen units	15	SR ISO 2211
Ashes, max.	%	0.001	ILL-033/3-01-18

Specific Properties:

Density at 20°C, g/cm ³	1.037
Boiling point	188.2°C at 760 mm Hg
Ignition temperature	99 °C
Flammability	Not flammable

The specific properties present approximate values and contain general information, without being part of the technical quality conditions.

Main Applications:

- unsaturated polyester resins;
- urethanes;
- paints & varnishes;
- heat transfer fluids;
- antifreezes, polyether polyols, antifoaming agents;
- as glycerin substitute in fine organic synthesis;
- as solvent in printing inks;
- as solvent and enzyme stabilizer in laundry detergents;
- stabilizer in hydraulic fluid;
- plasticizer to improve process ability of plastics .



Shipping Information:

- 20 or 40 tons stainless steel, carbon steel or aluminum tanks, with adequate inner protection.

Storage:

Propylene Glycol requires special designed storage facilities, shed type, with concreted platform, in order to prevent moisture intrusion because of its hygroscopic nature.

In case of storage in reservoirs, a light overpressure with inert gas should be created to avoid moisture.

Product should not be stored in direct sunlight or at high temperatures.

Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

Avoid contact with oxidizing materials.

Propylene Glycol is not a toxic product and does not cause systemic lesions.

Propylene Glycol has a low vapor pressure and is not expected to volatilize. Propylene Glycol is stable unless exposed to high temperatures, when it can decompose.

Attention:

Information contained in this document is provided to the best of our knowledge and experience.

Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of non-compliance with the information provided herein.