

PROPYLENE OXIDE

TECHNICAL GRADE

Last revision 2011

Chemical Name: Molecular formula: C₃H₆O
CAS No.: 75-56-9
Abbreviation: PO

General Description:

Propylene oxide is obtained through propylene hydro chlorination. It is soluble in water and miscible with acetone, benzene, carbon tetrachloride, diethyl ether, and ethanol. Propylene oxide is a volatile, clear, colorless, extremely flammable liquid with an ether-like odor.

Technical Quality Conditions:

Characteristics	MU	Values	Test methods
Propylene oxide, min.	%	99.9	ILL-003/3-01-20
Aldehydes and ketones (propionaldehyde), max.	%	0.01	STAS 11600
Water (Karl-Fischer), max.	%	0.01	ASTM E 203
Acidity (CH ₃ COOH), max.	%	0.005	ASTM D 1613
Hazen color, max.	Hazen units	10	SR ISO 2211

Specific Properties:

Density at 20°C, g/cm ³	0.828
Boiling point at 760 mmHg	34°C
Ignition temperature	-37 °C
Flammability	Extremely flammable

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

Main Applications:

- polyether polyols for polyurethanes ;
- propylene glycol;
- glycol ethers;
- specialty chemicals;
- glycerine
- brake fluid;
- fire fighting agents;
- synthetic lubricants;
- chemicals for oil drilling, etc.



Packing and storage:

The product is delivered in stainless steel or carbon steel car or rail tanks, specifically designed for the product, property of supplier or client.

Propylene oxide is stored in tightly closed steel containers (under nitrogen blanket), provided with grounding (to avoid generation of electrostatic discharges), in cool, well-ventilated areas, far from heat sources and incompatible materials. Outdoor storage is preferred for a period not exceeding three months without affecting the product quality. At the beneficiary's request, protected containers can be used. The storage tanks will be equipped with self-closing safety valves, vacuum gauges and a flame trap.

Safety Considerations:

Before handling and using of product, the personnel must be aware of the dangers implied. This information is available in MSDS and on the product label.

Attention:

Please contact OLTCHIM to see if the document has been revised and for any other additional information related to the product.

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.