



ARC Specialty Products, Balchem Corporation

52 Sunrise Park Road New Hampton, NY 10973 845-326-5641 www.balchem.com

Properties of Propylene Oxide

Appearance: Colorless Liquid or Gas

Odor: Sweet, ether-like at 200 ppm min.

Boiling Point: 94°F (34.4°C)

Vapor Density: 2.0 (Air=1)

OSHA Pel 8 hour weighted average 2 parts per million or less

Humans can smell Propylene Oxide 200 parts per million

Immediately Dangerous to Life & Health (IDLH) 400 parts per million

Lower Explosion Limit 17,000 parts per million (1.7%)





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Properties of Propylene Oxide

	Liquid	Gas
Boiling Point (760mm)	93.2° F (34.4° C)	-
Coefficient of Expansion 20° C (69° F)	0.0015 per ° C	-
Color	Colorless	Colorless
Corrosiveness	Non-Corrosive	Non-Corrosive
Critical Density	2.6 lbs per gallon	-
Critical Pressure (lbs./sq abs)	-	714 psi
Critical Temperature	-	209.1° C (408.3° F)
Density at 20/20° lbs/gal.	6.9	
Explosive Limits	Non-Explosive	Explosive
Percent by volume in air:		
Upper	-	37%
Lower	-	1.7%
Flash Point (Open cup)	<0° F	-35°F
Heat of Combustion Kg. Cal./gm. mol.	-	312.15
Heat of Vaporization 1atm, BTU/lb.	205 BTU/lb	-
Hygroscopicity	Light	-
Auto-ignition temperature in air (1 atm)	-	449° C (840° F)
Freezing Point	-112.6° C (170.7° F)	-
Molecular Weight	58.08 g/mol	-
Odor	Characteristic ether-like odor, but irritating in high concentration	Characteristic ether-like odor, but irritating in high concentration