Propylene Glycol Industrial Grade

CAS NO. 57-55-6

Product Description	Key Features	Application
• Propylene Glycol (PG) is the preferred glycol for manufacturing high performance unsaturated polyester resins, themselves used in a variety of applications. PGI is an important co-solvent for architectural water-based paints, and is also used as an intermediate in the production of alkyd resins for paints and varnishes.	• Colorless • Completely miscible with water and many organic solvents • High boiling point • Hygroscopic liquid • Low freezing point • Low toxicity • Low vapor pressure • Slight acid taste • Slight odor • Stable liquid • Transparent liquid • Viscous liquid	• Antifreeze • Coating • Heating media • Industrial solvent • Paints • Refrigerant • Reinforced plastic laminates • Sheet molding compounds • Varnishes

Properties	Typical Value	Unit	Test Based On
Acidity as Acetic acid	0.0020 Max	%	DOWM 100687
Assay	99.5 Min	%wt	DOWN 101370
Autoignition Temperature	> 400	°C	EC Method A15
Boiling Point @ 760 mmHg	184	°C	-
Color Pt-Co	10 Max	-	ASTM D 5386
Critical Pressure	5791.74	kPa	-
Critical Temperature	614.38	K	-
Critical Volume	0.24	m^3/kg.mol	-
Empirical Formula	$C_3H_8O_2$	-	-
Evaporation Rate			-
(n-butyl acetate = 1)	0.01	-	-
Expansion Coefficient	0.00062	Per K	-
Explosion Limits in Air			
Lower	2.6	vol%	-
Upper	12.5	vol%	-
Flash Point			
Closed Cup @1000.1 hPa	104	°C	EC Method A9
Freezing Point	< -20	°C	EC Method A1
Hansen Solubility Parameters			
Hydrogen bonding	23.3	-	-
Nonpolar	16.8	-	-
Polar	9.4	-	-
Total	30.2	-	-
Heat of Combustion	-1822.90 ± 4.10	kJ/mol	-
Heat of Vaporization	67	kJ/mol	-
Liquid Heat Capacity @ 30 °C	177.00	J/mol K	-
Liquid Viscosity @ 25 °C	43.4	cP (mPa.s)	-
Maximum Incremental Reactivity (MIR)	2.75	-	-
Molecular Weight	76.10	-	-
Refractive Index @ 20°C	1.4320	-	
Solubility In water, @ 20 °C	1000	g/L	EC No.440/2008, Annex,A-6
Specific Gravity @ 20°C/20°C	1.03	-	EU Method A.3
Surface Tension @ 20 °C	45.6	Dynes/cm	-
Vapor Density (air = 1)	2.62	-	-
Vapor Pressure @ 25 °C	20	Pa	EC Method A4
Wt/Vol @ 20 °C	1.03	kg/L	-

Notes

Typical properties: these are not to be construed as specifications.

For additional technical, sales and order assistance please contact our sales representative

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