



Ethyl PROXITOL

Product Code	U5129
Region	Global
Product Category	Propylene Glycol Ethers
CAS Registry Number	1569-02-4; US: 52125-53-8
Synonym(s)	1-ethoxy-2-propanol, EtPROX, EP,
Description	Ethyl PROXITOL is a colourless, hygroscopic solvent with a volatility, viscosity and solvent power similar to those of ethylene oxide-based glycol ethers.

Typical Properties

Property	Unit	Method	Value
Purity, min.	%m/m	GC	99.0
Water	%m/m	ASTM D1364	0.05
Acidity (as Acetic Acid)	%m/m	ASTM D1613	0.001
Density at 20°C	kg/l	ASTM D4052	0.896
Specific Gravity at 20°C/20°C	-	ASTM D4052	0.898
Specific Gravity at 25°C/25°C	-	ASTM D4052	0.894
Coefficient of Cubic Expansion at 20°C	10 ⁻⁴ /°C	Calculated	10
Refractive Index at 20°C	-	ASTM D1218	1.408
Colour	Pt-Co	ASTM D1209	< 5
Boiling Point	°C	-	132
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	0.49
Relative Evaporation Rate (Ether=1)	-	DIN 53170	33
Antoine Constant A #	kPa. °C	-	7.51525
Antoine Constant B #	kPa. °C	-	2310.49
Antoine Constant C #	kPa. °C	-	287.280
Temperature Limits for Antoine Equation #	°C	-	+5 to 130
Vapour Pressure at 20°C	kPa	Calculated	1.0

Vapour Pressure at 50°C	kPa	Calculated	4.6
Saturated Vapor Concentration at 20°C	g/m ³	Calculated	42
Volatile Organic Compound (VOC)	g/l	EU / EPA	896
Flash Point (Abel)	°C	IP 170	42
Auto Ignition Temperature	°C	ASTM E659	255
Lower Explosion Limit	%v/v	-	1.3
Upper Explosion Limit	%v/v	-	12.0
Electrical Conductivity at 20°C	pS/m	ASTM D4308	2*10 ⁷
Dielectric Constant at 20°C	-	-	10.4
Freezing Point	°C	-	-90
Surface Tension at 20°C	mN/m	-	26
Viscosity at 20°C	mPa.s	-	2.1
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	9.0
Hydrogen Bonding Index	-	-	0.0
Fractional Polarity	-	-	0.080
Heat of Vaporisation at T _{boil}	kJ/kg	-	412
Heat of Combustion (Net) at 25°C	kJ/kg	-	28500
Specific Heat at 20°C	kJ/kg/°C	-	2.3
Miscibility at 20°C: Solvent in water	%m/m	-	complete
Miscibility at 20°C: Water in solvent	%m/m	-	complete
Molecular Weight	g/mol	-	104

(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation: $\log P = A - B/(T+C)$

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM) : www.astm.org
Energy Institute (IP) : www.energyinst.org.uk
Deutsches Institut für Normung (DIN) : www.din.de

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Quality

Ethyl PROXITOL does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Hazard Information

For detailed Hazard Information please refer to the Safety Data Sheet on www.shell.com/chemicals.

Storage Handling

Provided proper storage and handling precautions are taken we would expect Ethyl PROXITOL to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on www.shell.com/chemicals.

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