



Data Sheet

Issued:

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Product Name

Ethyl PROXITOL

Product Code**U5129****Product Category****Propylene Glycol Ethers****CAS Registry Number**

1569-02-4; US: 52125-53-8

EINECS Number

216-374-5

Alternate Name

1-ethoxy-2-propanol, propylene glycol monoethyl ether, PGEE, PE, EP

Description

Ethyl PROXITOL is a colorless, hygroscopic solvent with a volatility, viscosity and solvent power similar to those of the ethylene oxide-based glycol ethers.

Typical Properties

Property	Unit	Method	Value
Purity	% m/m	GC	min. 99.0
Water	% m/m	ASTM D1364	0.05
Density @20°C	kg/L	ASTM D4052	0.896
Cubic Expansion Coefficient @20°C	(10 ⁻⁴)/°C	Calculated	10
Refractive Index @20°C	-	ASTM D1218	1.408
Color	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
Antoine Constants: Temperature range	°C	-	+5 to 130
Vapor Pressure @20°C	kPa	Calculated	1.0
Vapor Pressure @50°C	kPa	Calculated	4.6
Saturated Vapor Concentration @20°C	g/m ³	Calculated	42
Flash Point	°C	IP 170	42
Auto Ignition Temperature	°C	ASTM E659	255
Explosion Limit: Lower	%v/v	-	1.3
Explosion Limit: Upper	%v/v	-	12
Electrical Conductivity @20°C	µS/m	ASTM D4308	20
Dielectric Constant @20°C	-	-	10.4
Freezing Point	°C	-	-90

Surface Tension @20°C	mN/m	-	26
Viscosity @20°C	mPa.s	ASTM D445	2.1
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	9.0
Hydrogen Bonding Index	-	-	0.0
Fractional Polarity	-	-	0.080
Heat of Vaporization @Tboil	kJ/kg	-	412
Heat of Combustion (Net) @25°C	kJ/kg	-	28500
Specific Heat @20°C	kJ/kg/°C	-	2.3
Miscibility @20°C: Solvent in Water	% m/m	-	Complete
Miscibility @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

For routine quality control analyses, local test methods may be applied that are different from those mentioned in this datasheet. Such methods have been validated and can be obtained through your local Shell Chemicals company.

Quality

Ethyl PROXITOL can be supplied to meet the requirements of DIN 55998. Ethyl PROXITOL does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Storage and 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 Material Safety Data Sheet on www.shell.com/chemicals.

Hazard Information

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

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