

## Technical Data Sheet Eastman™ EP Solvent

### **Applications**

- Aerosol coatings
- Architectural coatings
- Auto oem
- Auto refinish
- Automotive
- Flexographic printing inks
- General industrial coatings
- Graphic arts
- Herbicides intermediate for other
- Lcd displays
- Marine
- Paints & coatings
- Protective coatings
- Wood coatings

#### **Key Attributes**

- Good coupling efficiency
- Good solvent activity
- High dilution ratio
- Inert Nonfood use
- Low surface tension
- Low volatility/Low vapor pressure
- Miscible with water and most organic liquids
- Predicted to be readily biodegradable\*
- REACH compliant
- Slow evaporation rate

# Product Description

Eastman<sup>™</sup> EP Solvent (Ethylene Glycol Monopropyl Ether) is a colorless, water-miscible solvent providing a slow evaporation rate, good viscosity control in waterborne resins, and high flash point. Eastman<sup>™</sup> EP Solvent has a milder, less detectable odor than most other glycol ethers, enhancing its use in coatings when mild odor is desirable. Eastman<sup>™</sup> EP Solvent is completely water miscible over a wide range of temperatures. It can also be used to develop customized aqueous cleaners.

\*Modeled using The Estimation Programs Interface (EPI) Suite<sup>™</sup> (EPA), BIOWIN v4.10 module

The chemical substances for this product are listed as Inert Ingredients Permitted for Use in Nonfood Use Pesticide Products under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). For details on specific permissions, <u>click here</u>.

## **Typical Properties**

Property	Test Method	Typical Value, Units
General		
Acidity		
as Acetic Acid		0.01 wt % max.
Assay		99.5 wt % min.
Autoignition Temperature	D 2155	235 °C (455 °F)
Azeotropes		
BP		98.5 °C (209.3 °F)
Wt % Water		73 wt %
Blush Resistance		
@ 80°F (26.7°C)		90 % RH
Boiling Point @ 760 mm Hg		
Dry Point		153 °C (308 °F)
Initial		149.5 °C (301 °F)
Color		
Pt-Co		10 max.
Critical Pressure		36.2 ATM

Critical Temperature	308.8 °C
Critical Volume	347 ml/g∙mol
Dilution Ratio	
Toluene	4
VMP Naphtha	2
Electrical Resistance	0.1 Megohms
Empirical Formula	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>
Evaporation Rate	
(ether = 1)	60.5
(n-buty  acetate = 1)	0.2
Expansion Coefficient, per °C	
@ 20°C	0.0009
Explosive Limits in Air	
Lower @ 69°C	1.26 Vol %
Upper @ 127°C	15.8 Vol %
Fire Point	56 °C (133 °F)
Flash Point	
Tag Closed Cup	49 °C (120 °F)
Tag Open Cup	56 °C (133 °F)
Freezing Point	<-90 °C (<-130 °F)
Hansen Solubility Parameters	
Hydrogen Bonding	6.6
Nonpolar	7.9
Polar	4.2
Total	11.1
Heat of Combustion	-704.8 kcal/g·mol
Heat of Vaporization	10030 cal/g·mol
Liquid Heat Capacity	
@ 27°C	44.51 cal/(g*mol)(°C)
Liquid Viscosity	
@ 25°C	2.4 cP (mPa⋅s)
Molecular Weight	104.15
Nitrocellulose Solubility	Active
Refractive Index	
@ 20°C	1.4136
Solubility	
in Water, @ 20°C	Complete
Water in, @ 20°C	Complete
Specific Gravity	F
@ 20°C/20°C	0.913
Surface Tension	
@ 25°C	27.9 dynes/cm
Vapor Density	3.6
(air = 1)	5.0
Vapor Pressure	1.3 mm Hg
@ 20°C	2.2 kPa
@ 55°C	2.2 11 4
Wt/Vol	0.91 kg/L (7.59 lb/gal)
@ 20°C	0.91 Kg/L (7.39 lb/gal)

## Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any

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