EASTMAN

Technical Data Sheet
Eastman™ DE Solvent

Applications

- Architectural coatings
- Auto oem
- Auto refinish
- Brake fluids
- Fabric care
- Graphic arts
- Hard surface care
- Industrial cleaners
- Institutional cleaners
- Process solvents
- Protective coatings
- Textile
- Wood coatings

Key Attributes

- Good coupling efficiency
- Good solvent activity
- Inert - Food use with limitations
- Inert - Nonfood use
- LVP-VOC
- Low odor
- Low volatility/Low vapor pressure
- Miscible with water and most organic liquids
- REACH compliant
- Readily biodegradable
- Slow evaporation rate

Product Description

Eastman DE Solvent (Diethylene Glycol Monoethyl Ether) is a very polar, slow evaporating, water miscible solvent with a low odor. It is an active solvent for cellulose acetate butyrate, nitrocellulose, epoxy resins, and other coating materials. Eastman™ DE solvent is used as a coalescent in latex paints and floor polishes, and as penetrating solvent in wood stains.

The established LVP-VOC exemption criteria, applicable in some states, can be reviewed in California's Consumer Product Regulation. Visit the California Air Resource Board website for regulatory information .

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

Typical Properties

Property	Test Method	Typical Value, Units
General		
Acidity as Acetic Acid		0.01 wt % max.
Assay		99.0 wt % min.
Autoignition Temperature	D 2155	204 °C (400 °F)
Blush Resistance @ 80°F (26.7°C)		76 % RH
Boiling Point @ 760 mm Hg Dry Point Initial		 204 °C (399 °F) 198 °C (388 °F)
Color Pt-Co		10 max.
Critical Pressure		31 ATM
Critical Temperature		358.8 °C
Critical Volume		420 ml/g·mol
Dilution Ratio		1.9

Toluene VMP Naphtha	Immiscible
Electrical Resistance	<0.2 Megohms
Empirical Formula	$C_6H_{14}O_3$
Evaporation Rate (ether = 1) (n-butyl acetate = 1)	 605.1 0.02
Expansion Coefficient, per °C @ 20°C	 0.0009
Explosive Limits in Air Lower @ 135°C Upper @ 182°C	 1.2 Vol % 23.5 Vol %
Fire Point	96 °C (205 °F)
Flash Point Tag Closed Cup Tag Open Cup	 91 °C (195 °F) 96 °C (205 °F)
Freezing Point	-90 °C (-130 °F)
Hansen Solubility Parameters Hydrogen Bonding Nonpolar Polar Total	 6.2 7.9 3.8 10.7
Heat of Combustion	-817.4 kcal/g·mol
Heat of Vaporization	11170 cal/g·mol
Liquid Heat Capacity @ 25°C	 73 cal/(g*mol)(°C)
Liquid Viscosity @ 20°C	 4.5 cP (mPa·s)
Maximum Incremental Reactivity (MIR)	3.19
Molecular Weight	134.17
Nitrocellulose Solubility	Active
Refractive Index @ 20°C	 1.426
Solubility in Water, @ 20°C Water in, @ 20°C	 Complete Complete
Specific Gravity @ 20°C/20°C	 0.99
Surface Tension @ 20°C	 32.2 dynes/cm
Vapor Density (air = 1)	 4.6
Vapor Pressure @ 20°C @ 55°C	 0.095 mm Hg 0.49 kPa
Wt/Vol @ 20°C	 0.99 kg/L (8.25 lb/gal)

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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