

Technical Data Sheet

Eastman™ DB Solvent

Applications

- Adhesives/sealants-b&c
- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Automotive parts & accessories
- Brake fluids
- Concrete
- Fabric care
- Flexographic printing inks
- Formulators
- Furniture
- Graphic arts
- Hard surface care
- Industrial cleaners
- Institutional cleaners
- Janitorial & household cleaners
- Lubricants
- Marine
- Paints & coatings
- Process solvents
- Protective coatings
- Rubber modification
- Soap/detergents
- Textile
- Wood coatings

Key Attributes

- Efficient coalescent
- Good coupling efficiency
- Good solvent activity
- High blush resistance
- High dilution ratio
- Inert - Food use with limitations
- Inert - Nonfood use
- LVP-VOC
- Low surface tension
- Low volatility/Low vapor pressure
- Miscible with water and most organic liquids
- REACH compliant
- Readily biodegradable
- Slow evaporation rate

Product Description

Eastman DB Solvent (Diethylene Glycol Monobutyl Ether) improves the flow-out and gloss of baking enamels, is an effective coalescent in both architectural and industrial maintenance formulations, can be used in printing inks to increase dry times, and provides excellent coupling ability for the effective removal of contaminants in Industrial & Institutional and/or household cleaners. It is also used in coatings for solvent-sensitive plastic substrates. In textile dyeing formulations, Eastman™ DB Solvent promotes rapid, uniform penetration of the dyes.

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.
		204 °C (400 °F)

Blush Resistance @ 80°F (26.7°C)	85 % RH
Boiling Point @ 760 mm Hg	
Dry Point	235 °C (455 °F)
Initial	230 °C (441 °F)
Color	
Pt-Co	10 max.
Critical Pressure	25.3 ATM
Critical Temperature	380.8 °C
Critical Volume	526 ml/g·mol
Dilution Ratio	
Toluene	3.9
VMP Naphtha	1.9
Electrical Resistance	<0.3 Megohms
Empirical Formula	C ₈ H ₁₈ O ₃
Evaporation Rate	
(ether = 1)	4034
(n-butyl acetate = 1)	0.003
Expansion Coefficient, per °C @ 20°C	0.00085
Explosive Limits in Air	
Lower @ 135°C	0.85 Vol %
Upper @ 199°C	24.6 Vol %
Fire Point	117 °C (242 °F)
Flash Point	
Cleveland Open Cup	111 °C (232 °F)
Freezing Point	-76 °C (-105 °F)
Hansen Solubility Parameters	
Hydrogen Bonding	5.2
Nonpolar	7.8
Polar	3.4
Total	10
Heat of Combustion	-1109 kcal/g·mol
Heat of Vaporization	12920 cal/g·mol
Liquid Heat Capacity @ 54°C	80.62 cal/(g·mol)(°C)
Liquid Viscosity @ 25°C	4.7 cP (mPa·s)
Maximum Incremental Reactivity (MIR)	2.7
Molecular Weight	162.23
Nitrocellulose Solubility	Active
Refractive Index @ 20°C	1.4316
Solubility	
in Water, @ 20°C	Complete
Water in, @ 20°C	Complete
Specific Gravity @ 20°C/20°C	0.955
Surface Tension @ 20°C	30 dynes/cm
Vapor Density (air = 1)	5.6
Vapor Pressure	

@ 20°C

0.02 mm Hg

@ 55°C

0.04 kPa

Wt/Vol

@ 20°C

0.96 kg/L (7.94 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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