EASTMAN

Technical Data Sheet

Eastman™ IBIB

Applications

- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Commerical printing inks
- Electronic chemicals
- General industrial coatings
- Graphic arts
- Industrial maintenance
- Intermediates
- Packaging inks non food contact
- Paints & coatings
- Process solvents
- Protective coatings
- Wood coatings

Key Attributes

- 42% biodegradation (28 days)
- Good solvent activity
- High blush resistance
- High electrical resistance
- Inert - Nonfood use
- Low MIR value
- Low density
- Low surface tension
- Low water solubility
- Low-cost retarder solvent
- Non-HAP
- Non-SARA
- REACH compliant
- Slow evaporation rate
- Urethane grade

Product Description

Eastman™ IBIB (Isobutyl Isobutyrate) is an economical retarder solvent that is used in nitrocellulose lacquers, coatings for plastic substrates, and high-solids coatings. It is a slow-evaporating solvent with good flow and leveling characteristics, and good blush resistance. It is an economical, urethane grade, active solvent for nitrocellulose. The low surface tension of IBIB is valuable in applications where improved wetting of the substrate is needed. With low water miscibility, IBIB is an excellent retarder solvent for moisture-sensitive coatings such as 2-K polyurethanes. IBIB has high electrical resistance, which is helpful in adjusting the resistivity of coatings applied using electrostatic spray equipment.

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, click here .

Typical Properties

Property	Typical Value, Units
General	
Acidity as Acetic Acid	 0.01 wt % max.
Assay	98.0 wt % min.
Autoignition Temperature	432 °C (810 °F)
Azeotropes BP Wt % Water	 95.5 °C (203.9 °F) 39.4 wt %
Blush Resistance @ 80°F (26.7°C)	 92 % RH
Boiling Point @ 760 mm Hg	 144-151 °C (291-304 °F)
Color Pt-Co	 15 max.

Critical Pressure	25.7 ATM
Critical Temperature	328.8 °C
Critical Volume	494 ml/g·mol
Dilution Ratio	
Toluene	1.5
VMP Naphtha	0.8
Electrical Resistance	>20 Megohms
Empirical Formula	$C_8H_{16}O_2$
Evaporation Rate	
(ether = 1)	30.2
(n-butyl acetate = 1)	0.43
Expansion Coefficient, per °C	
@ 20°C	0.0011
Fire Point	46 °C (115 °F)
Flammability Limits in Air, % by Volume	
Lower @ 93°C	1 Vol %
Upper @ 93°C	7.6 Vol %
Flash Point	
Tag Closed Cup	40 °C (104 °F)
Freezing Point	-80 °C (-112 °F)
Hansen Solubility Parameters	
Hydrogen Bonding	2.9
Nonpolar	7.4
Polar	1.4
Total	8.1
Heat of Combustion	-1073 kcal/g·mol
Heat of Vaporization	9021 cal/g·mol
Liquid Heat Capacity	
@ 25°C	62.55 cal/(g*mol)(°C)
Liquid Viscosity	
@ 25°C	0.9 cP (mPa·s)
Maximum Incremental Reactivity (MIR)	0.64
Molecular Weight	144.22
NFPA Classification 30	IC
Nitrocellulose Solubility	Active
Refractive Index	
@ 20°C	1.4
Solubility	
in Water, @ 20°C	<0.1 wt %
Water in, @ 20°C	<0.2 wt %
Specific Gravity	
@ 20°C/20°C	0.855
Surface Tension	
@ 20°C	23.2 dynes/cm
Vapor Density	
(air = 1)	5
Vapor Pressure	
@ 20°C	3.2 mm Hg
@ 55°C	3.3 kPa
Wt/Vol	
@ 20°C	0.86 kg/L (7.13 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.

4/3/2018 11:06:53 AM