

Technical Data Sheet

Eastman EastaPure™ n-Butyl Acetate

Applications

- Fragrance ingredients
- Lcd displays
- Process solvents

Key Attributes

- Excellent resin solubility
- High Purity/Low Trace Metals
- High assay
- Inert - Nonfood use

Product Description

Eastman EastaPure™ n-Butyl Acetate solvent is offered for negative and positive photoresist formulations for semiconductor chip manufacturing.

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.
Alcohol Content	0.25 wt % max.
Assay	99.5 % min
Autoignition Temperature	407.0 °C (765 °F)
Azeotropes BP Wt % Water	90.2 °C (194.4 °F) 1.2
Blush Resistance @ 80°F (26.7°C)	83 % RH
Boiling Point @ 760 mm Hg	124.0 °C (255 °F)
Color Pt-Co	5 max.
Critical Pressure	30.7 ATM
Critical Temperature	306 °C
Critical Volume	389 ml/g·mol
Dilution Ratio Toluene VMP Naphtha	2.7 1.2
Electrical Resistance	>20 Megohms
Empirical Formula	C ₆ H ₁₂ O ₂
Evaporation Rate (ether = 1) (n-butyl acetate = 1)	12.1 1.0
Expansion Coefficient, per °C @ 20°C	0.00121

Flammability Limits in Air, % by Volume	
Lower @ 38°C	1.4 Vol %
Upper @ 38°C	7.6 Vol %
Flash Point	
Tag Closed Cup	27 °C (81 °F)
Freezing Point	
	-74.0 °C (-101 °F)
Hansen Solubility Parameters	
Hydrogen Bonding	3.1
Nonpolar	7.7
Polar	1.8
Total	8.5
Heat of Combustion	
	-783.9 kcal/g·mol
Heat of Vaporization	
	8723 cal/g·mol
Liquid Heat Capacity	
@ 25°C	53.14 cal/(g·mol)(°C)
Liquid Viscosity	
@ 20°C	0.7 cP (mPa·s)
Maximum Incremental Reactivity (MIR)	
	0.89
Molecular Weight	
	116.2
Nitrocellulose Solubility	
	Active
Refractive Index	
@ 20°C	1.392-1.396
Solubility	
in Water, @ 20°C	0.7 wt %
Water in, @ 20°C	1.6 wt %
Specific Gravity	
@ 20°C/20°C	0.882-0.884
Surface Tension	
@ 20°C	25.1 dynes/cm
TLV PPM 1998	
	150
Upper Limits for Trace Metals	
Aluminium (Al)	20 ppb
Barium (Ba)	20 ppb
Cadmium (Cd)	20 ppb
Calcium (Ca)	20 ppb
Chromium (Cr)	20 ppb
Cobalt (Co)	20 ppb
Copper (Cu)	20 ppb
Gallium (Ga)	20 ppb
Germanium (Ge)	20 ppb
Iron (Fe)	20 ppb
Lead (Pb)	20 ppb
Lithium (Li)	20 ppb
Magnesium (Mg)	20 ppb
Manganese (Mn)	20 ppb
Nickel (Ni)	20 ppb
Potassium (K)	20 ppb
Silver (Ag)	20 ppb
Sodium (Na)	20 ppb
Strontium (Sr)	20 ppb
Titanium (Ti)	20 ppb
Zinc (Zn)	20 ppb
Vapor Density	
(air = 1)	4.0
Vapor Pressure	

@ 20°C	1.39 mm Hg
@ 55°C	7.4 kPa
Viscosity, Neat	
@ 20°C	0.73 cP
Water Content	0.05 wt % max.
Wt/Vol	
@ 20°C	0.88 kg/L (7.35 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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