



Technical Data SheetEastman EastaPure™ EB Solvent

Applications

- Electronic chemicals
- Lcd displays
- Process solvents

Key Attributes

- Excellent resin solubility
- High Purity/Low Trace Metals
- High assay
- · Inert Food use with limitations
- Inert Nonfood use
- Viscosity control

Product Description

Eastman EastaPure™ EB solvent is a high flash point, water miscible, colorless solvent providing slow evaporation rate and good viscosity control for a broad range of polymers, resins and coatings. It is primarily used in the production of electronic components in the etching and photoresist processes.

Miscible with most organic solvents and water, EastaPure™ EB solvent enables formulators to develop customized blends that meet the most demanding requirements for electronic chemicals in wet processing and photoresist applications.

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, <u>click here</u>.

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	238 °C (460 °F)
Azeotropes		
ВР		98.8 °C (209.8 °F)
Wt % Water		79.2 wt %
Blush Resistance		
@ 80°F (26.7°C)		96 % RH
Boiling Point @ 760 mm Hg		
Dry Point		172 °C (343 °F)
Initial		169 °C (336 °F)
Color		
Pt-Co		10 max.
Critical Pressure		32 ATM
Critical Temperature		326.8 °C
Critical Volume		400 ml/g·mol
Dilution Ratio		
Toluene		3.4
VMP Naphtha		2.1
Electrical Resistance		<0.2 Megohms

Empirical Formula	$C_6H_{14}O_2$
Evaporation Rate	
(ether = 1)	136
(n-butyl acetate = 1)	0.09
Expansion Coefficient, per °C	
@ 20°C	0.00092
Explosive Limits in Air	
Lower @ 93°C	1.1 Vol %
Upper @ 135°C	12.7 Vol %
Fire Point	70 °C (158 °F)
Flash Point	
Tag Closed Cup	62 °C (143 °F)
Tag Open Cup	70 °C (158 °F)
Freezing Point	-75 °C (-103 °F)
	75 6 (105 1)
Hansen Solubility Parameters	6
Hydrogen Bonding	7.8
Nonpolar	2.5
Polar	10.2
Total	
Heat of Combustion	-848.5 kcal/g·mol
Heat of Vaporization	11060 cal/g·mol
Liquid Heat Capacity	65 40 1/4 th 1)/00)
@ 25°C	65.49 cal/(g*mol)(°C)
Liquid Viscosity	
@ 20°C	3.3 cP (mPa·s)
Maximum Incremental Reactivity	2.9
(MIR)	
Molecular Weight	118.17
Nitrocellulose Solubility	Active
Refractive Index	
@ 20°C	1.4193
@ 20°C Solubility	
	Complete
Solubility	
Solubility in Water, @ 20°C	Complete Complete
Solubility in Water, @ 20°C Water in, @ 20°C	Complete
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity	Complete Complete
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C	Complete Complete
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension	Complete Complete 0.902
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C	Complete Complete 0.902 26.6 dynes/cm
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014	Complete Complete 0.902 26.6 dynes/cm
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb 100 ppb 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb 100 ppb 100 ppb 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb 100 ppb 100 ppb 100 ppb 100 ppb 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (AI) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe) Lead (Pb)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (AI) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe) Lead (Pb) Lithium (Li)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe) Lead (Pb) Lithium (Li) Magnesium (Mg)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe) Lead (Pb) Lithium (Li) Magnesium (Mg) Manganese (Mn)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb
Solubility in Water, @ 20°C Water in, @ 20°C Specific Gravity @ 20°C/20°C Surface Tension @ 20°C TLV PPM 2014 Upper Limits for Trace Metals Aluminium (Al) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Gallium (Ga) Germanium (Ge) Iron (Fe) Lead (Pb) Lithium (Li) Magnesium (Mg)	Complete Complete 0.902 26.6 dynes/cm 20 dynes/cm 100 ppb

Potassium (K)		
Silver (Ag)	100 ppb	
Sodium (Na)	100 ppb	
Titanium (Ti)	100 ppb	
Zinc (Zn)	100 ppb	
Vapor Density		
(air = 1)	4.1	
Vapor Pressure		
@ 20°C	0.6 mm Hg	
@ 55°C	0.97 kPa	
Wt/Vol		
@ 20°C	0.9 kg/L (7.51 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.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

4/3/2018 10:48:58 AM

© 2019 Eastman Chemical Company or its subsidiaries. All rights reserved. As used herein, ® denotes registered trademark status in the U.S. only.