EASTMAN

Technical Data Sheet
Eastman™ Methyl Acetate

Applications

- Aerosol coatings
- Architectural coatings
- Auto oem
- Auto refinish
- Building materials
- Commerical printing inks
- Construction chemicals
- Fabric care
- Flexographic printing inks
- Furniture
- General industrial coatings
- Graphic arts
- Hard surface care
- Industrial cleaners
- Industrial maintenance
- Institutional cleaners
- Marine
- Other-transportation
- Paints & coatings
- Process additives
- Process solvents
- Roofing ingredients
- Upholstery
- Wood coatings

Key Attributes

- Excellent solvent activity
- Fast evaporation rate
- Low MIR value
- Low odor
- Non-HAP*
- Non-SARA
- Readily biodegradable
- VOC Exempt*

Product Description

Eastman Methyl Acetate is a fast evaporating, mild odor, active solvent that can be used with a broad range of coating and ink resins. Because of its fast evaporation rate, methyl acetate is useful as the fast-evaporating component in high-low solvent systems and in other applications where fast solvent release and quick dry-to-touch time are needed. Methyl acetate is an active solvent for the following resins: cellulose acetate butyrate, nitrocellulose, vinyl copolymers, acrylics, epoxies, polyamides, phenolics, alkyds, and polyesters. Compared with other fast evaporating solvents, methyl acetate gives solution viscosity somewhat higher than acetone or MEK but lower than ethyl acetate. Where a mild odor, fast evaporating solvent is required, methyl acetate is a very good choice for formulators of coating and ink products Methyl acetate is a VOC-exempt, non-HAP, non-ODS, readily biodegradable solvent that can be used in blends to develop environmentally friendly cleaners.

* Eastman™ Methyl Acetate is exempt from regulation as a VOC and HAP under Federal Law, but can contain <= 2.5% methanol, which is a VOC and a HAP.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Acidity as Acetic Acid		0.15 wt % max.
Assay		96 wt % min.
Autoignition Temperature	D 2155	501 °C (936 °F)
Blush Resistance @ 80°F (26.7°C)		20 % RH

Boiling Point	
@ 760 mm Hg	55.8-58.2 °C (132-137 °F)
Color	
Pt-Co	5 max.
Critical Pressure	46.9 ATM
Critical Temperature	233.3 °C
Critical Volume	228 ml/g·mol
Dilution Ratio	
Toluene	2.9
VMP Naphtha	0.9
Electrical Resistance	0.4 Megohms
Empirical Formula	$C_3H_6O_2$
Evaporation Rate	
(ether = 1)	2.3
(n-butyl acetate = 1)	6.0
Expansion Coefficient, per °C	
@ 20°C	0.00142
Flash Point	
Setaflash Closed Cup	-15 °C (5 °F)
Tag Closed Cup	-13 °C (9 °F)
Freezing Point	-98 °C (-144 °F)
Hansen Solubility Parameters	
Hydrogen Bonding	3.7
Nonpolar	7.6
Polar	3.5
Total	9.2
Heat of Combustion	-349.2 kcal/g·mol
Heat of Vaporization	7279 cal/g·mol
Liquid Heat Capacity	
@ 25°C	33.95 cal/(g*mol)(°C)
Liquid Viscosity	
@ 20°C	0.4 cP (mPa·s)
Maximum Incremental Reactivity (MIR)	0.07
Methyl Alcohol Content	5 wt % max.
Molecular Weight	74.09
NFPA Classification 30	II
Nitrocellulose Solubility	Active
Refractive Index	
@ 20°C	1.36
Solubility	
in Water, @ 20°C	22 wt %
Water in, @ 20°C	7.3 wt %
Specific Gravity	
@ 20°C/20°C	0.93
Surface Tension	
@ 20°C	25.8 dynes/cm
TLV PPM 1998	200
Vapor Density	
(air = 1)	2.6
Vapor Pressure	
@ 20°C	178.3 mm Hg
@ 55°C	94.4 kPa
Water	1.5 wt % max.
Wt/Vol	

@ 20°C	0.93 kg/L (7.8 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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