

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA)

CAS NO. 108-65-6

Product Description

 P.M.A. is a photoresist solvent. A relatively fast-evaporating, moderately hydrophobic glycol ether with low viscosity and excellent properties for solvent-borne systems.

Key Features

- Powerful solvency
- High dilution ratio
- Moderate evaporation rate
- Viscosity control

Application

- Solvent-based coatings.
- Solvent-based silk screen printing inks.
- Solvent in coating systems e.g. PU/isocyanate and epoxy

Acidity as Acetic acid Assay 99.5 Min Autoignition Temperature 333 (631) C C (°F) Blush Resistance @ 80 °F (26.7 °C) 92 % RH Boiling Point @ 760 mmHg 146 (295) Color Pt-Co 10 Max - Critical Pressure 29.7 ATM Critical Pressure 29.7 ATM Critical Formula C₂H1₂C0₃ Evaporation Rate (n-butyl acetate = 1) Lower Upper 7.0 Vol% Upper 7.0 Vol% Upper 1.5 Yol% Upper 7.0 Vol% Preszing Point 1.5 Yol% 1.5 Polar 1.6 1.6 1.6 1.7 Polar 1.6 1.6 1.6 Polar 1.6 Polar 1.6 1.6 Polar 1.6 1.6 Polar 1.6 Polar 1.6 1.6 Polar 1.6	Properties	Typical Value	Unit	Test Based On
Autoignition Temperature 333 (631) °C (°F) Blush Resistance @ 80 °F (26.7 °C) 92 % RH Boiling Point @ 760 mmHg 146 (295) °C (°F) Color Pt-Co 10 Max - Critical Pressure 29.7 ATM Critical Temperature 324.7 °C Empirical Formula Celtus Color Pt-Co 10 Max - Critical Temperature 324.7 °C Empirical Formula Celtus Color Pt-Co 10 Max - Celtus Celtus Color Pt-Co 10 Max - Critical Temperature 324.7 °C Empirical Formula Celtus Celtus Celtus Color Pt-Co 10 Max - Celtus Ce	Acidity as Acetic acid	0.02 Max	wt %	
Blush Resistance @ 80 °F (26.7 °C) 92 % RH Boiling Point @ 760 mmHg 146 (295) °C (°F) Color Pt-Co 10 Max - Critical Pressure 29.7 ATM Critical Temperature 324.7 °C Empirical Formula C ₀ H _{1x} O ₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Evaporation Rate (n-butyl acetate = 1) 0.30 °C (°F) Flash Port (Closed Cup) 16.1 - Polar 16.1 - Polar 6.6 -	Assay	99.5 Min	wt%	
Boiling Point @ 760 mmHg 146 (295) °C (°F) Color Pt-Co 10 Max - Critical Pressure 29.7 ATM Critical Temperature 324.7 °C Empirical Formula C ₈ H ₁₉ O ₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air *** *** Lower 1.5 vol% Upper 7.0 vol% Upper 7.0 vol% Upper 7.0 vol% Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Flash Point (Closed Cup) 42 (108) °C (°F) Hansen Solubility Parameters Hydrogen bonding 6.6 - Hydrogen bonding 6.6 - - Nonpolar 16.1 - - Polar 6.1 - - Total 9.2 - - Heat of Combustion 23.8 kJ/g Julean (Name)	Autoignition Temperature	333 (631)	°C (°F)	
Color Pt-Co 10 Max - Critical Pressure 29.7 ATM Critical Temperature 324.7 °C Empirical Formula C _e H ₁₂ O ₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air Cover 1.5 vol% Upper 7.0 vol/0 1 Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters 42 (108) °C (°F) Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Viscosity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility	Blush Resistance @ 80 °F (26.7 °C)	92	% RH	
Critical Pressure 29.7 ATM Critical Temperature 324.7 °C Empirical Formula Ceft₁₂O₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air Vol% Vol% Lower 1.5 vol% Upper 7.0 vol% Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 29.6 J/g Liquid Viscosity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20°C 1.40 - Solubility 1	Boiling Point @ 760 mmHg	146 (295)	°C (°F)	
Critical Temperature 324.7 °C Empirical Formula C _e H ₁₂ O ₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air	Color Pt-Co	10 Max	<u>-</u>	
Empirical Formula C₀H₁₂O₃ Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air	Critical Pressure	29.7	ATM	
Evaporation Rate (n-butyl acetate = 1) 0.33 - Expansive Limits in Air	Critical Temperature	324.7	°C	
Expansive Limits in Air Lower 1.5 vol% Upper 7.0 vol% Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters *** Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20°C 1.40 - Solubility 1 4 4 In water, @ 20 °C 3 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6	Empirical Formula	$C_6H_{12}O_3$		
Lower Upper 1.5 yool% Upper 7.0 yool% Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters Hydrogen bonding 6.6 - Hydrogen bonding 6.6 - - Nonpolar 16.1 - - Polar 6.1 - - Total 9.2 - - Heat of Combustion 23.8 k.J/g Heat of Vaporization 296 J/g Liquid Viscosity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 <	Evaporation Rate (n-butyl acetate = 1)	0.33	-	
Upper 7.0 vol% Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters *** Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20°C 1.40 - Solubility In water, @ 20 °C 3 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Expansive Limits in Air			
Flash Point (Closed Cup) 42 (108) °C (°F) Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters *** Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20°C 1.40 - Solubility 1n wt % wt % In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Lower	1.5	vol%	
Freezing Point -66 (-87) °C (°F) Hansen Solubility Parameters Freezing Point 6.6 - Hydrogen bonding Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g°C Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Upper	7.0	vol%	
Hansen Solubility Parameters Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Flash Point (Closed Cup)	42 (108)	°C (°F)	
Hydrogen bonding 6.6 - Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Freezing Point	-66 (-87)	°C (°F)	
Nonpolar 16.1 - Polar 6.1 - Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Hansen Solubility Parameters			
Polar Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Hydrogen bonding	6.6	-	
Total 9.2 - Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Nonpolar	16.1	-	
Heat of Combustion 23.8 kJ/g Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Polar	6.1	-	
Heat of Vaporization 296 J/g Liquid Heat Capacity @ 25 °C 1.85 J/g°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Total	9.2	-	
Liquid Heat Capacity @ 25 °C 1.85 J/g/°C Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Heat of Combustion	23.8	kJ/g	
Liquid Viscosity @ 25 °C 0.8 cP (mPa.s) Molecular Weight 132.16 - Refractive Index @ 20 °C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Heat of Vaporization	296	J/g	
Molecular Weight 132.16 - Refractive Index @ 20°C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Liquid Heat Capacity @ 25 °C	1.85	J/g/°C	
Refractive Index @ 20°C 1.40 - Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Liquid Viscosity @ 25 °C	0.8	cP (mPa.s)	
Solubility In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Molecular Weight	132.16	-	
In water, @ 20 °C 16 wt % Water in, @ 20 °C 3 wt % Specific Gravity @ 20 °C/20 °C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Refractive Index @ 20°C	1.40	-	
Water in, @ 20 °C 3 wt % Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Solubility			
Specific Gravity @ 20°C/20°C 0.964 - Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	In water, @ 20 °C	16	wt %	
Surface Tension @ 25 °C 26.9 Dynes/cm Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Water in, @ 20 °C	3	wt %	
Vapor Density (air = 1) 4.6 - Vapor Pressure @ 20 °C 2.8 mmHg	Specific Gravity @ 20°C/20°C	0.964	-	
Vapor Pressure @ 20 °C 2.8 mmHg	Surface Tension @ 25 °C	26.9	Dynes/cm	
	Vapor Density (air = 1)	4.6	-	
Wt/Vol @ 20 °C 0.967 (8.07) Kg/L (lb/gal)	Vapor Pressure @ 20 °C	2.8	mmHg	
	Wt/Vol @ 20 °C	0.967 (8.07)	Kg/L (lb/gal)	

Notes

Typical properties provided are not to be construed as specifications. They are compiled from available information from the supplier and equivalent public resources.

For additional technical, sales and order assistance please contact our sales representative

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