

METHYL ETHYL KETONE

2-BUTANONE, POLY ACTIVATOR

DESCRIPTION

Methyl ethyl ketone, POLY ACTIVATOR, a low boiling, fast evaporating solvent is a **Methyl ethyl ketone, POLY ACTIVATOR**, is a low boiling, fast evaporating solvent colourless, stable liquid, partially miscible with water. **POLY ACTIVATOR** has exceptionally good solvency for many synthetic and natural resins that are used in the formulation of printing inks, lacquers, and other types of coatings.

TYPICAL PROPERTIES

Property	Unit	Method	Value
Purity, min	%m/m	GC	99.5
Water	%m/m	ASTM D1364	0.03
Acidity (as Acetic Acid)	%m/m	ASTM D1613	0.002
Density at 20°C	kg/l	ASTM D4052	0.805
Specific Gravity at 20°C/20°C	-	ASTM D4052	0.806
Specific Gravity at 20°C/20°C	-	ASTM D4052	0.802
Coefficient of Cubic Expansion at 20°C	10 ⁻⁴ /°C	Calculated	13
Refractive Index at 20°C	-	ASTM D1218	1.379
Colour	Pt-Co	ASTM D1209	< 5
Boiling Point	°C	-	80
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	4.0
Relative Evaporation Rate (Ether=1)	-	DIN 53170	3.3
Antoine Constant A #	kPa. °C	-	6.18444
Antoine Constant B #	kPa. °C	-	1259.22
Antoine Constant C #	kPa. °C	-	221.758
Temperature Limits for Antoine Equation #	°C	-	-40 to +90
Vapour Pressure at 20°C	kPa	Calculated	9.5
Vapour Pressure at 50°C	kPa	Calculated	36
Saturated Vapor Concentration at 20°C	g/m ³	Calculated	280
Volatile Organic Compound (VOC)	g/l	EU / EPA	805
Flash Point (Abel)	°C	IP 170	-6
Auto Ignition Temperature	°C	ASTM E659	515
Lower Explosion Limit	%v/v	-	1.8
Upper Explosion Limit	%v/v	-	11.5
Electrical Conductivity at 20°C	pS/m	ASTM D4308	2*10 ⁷
Dielectric Constant at 20°C	-	-	18.5
Freezing Point	°C	-	-86
Surface Tension at 20°C	mN/m	-	25

Viscosity at 20°C	mPa.s	-	0.42
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	9.3
Hydrogen Bonding Index	-	-	10.5
Fractional Polarity	-	-	0.510
Heat of Vaporization at T _{boil}	kJ/kg	-	433
Heat of Combustion (Net) at 25°C	kJ/kg	-	31500
Specific Heat at 20°C	kJ/kg/°C	-	2.19
Thermal Conductivity at 20°C	W/m/°C	-	0.15
Miscibility at 20°C: Solvent in water	%m/m	-	25
Miscibility at 20°C: Water in solvent	%m/m	-	12
Azeotrope with Water: Boiling Point	°C	-	73.4
Azeotrope with Water: Solvent Content	%m/m	-	88.7
Molecular Weight	g/mol	-	72

(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated by means of the Antoine equation: $\log P = A - B/(T+C)$

TEST METHODS

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials : www.astm.org

Energy Institute (IP) : www.energyinst.org.uk

Deutsches Institut für Normung (DIN) : www.din.de

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

STORAGE HANDLING

Provided proper storage and handling precautions are taken we would expect **Methyl Ethyl Ketone** to be technically stable for at least 12 months.

Quality

Methyl ethyl ketone as produced complies with ASTM D740 Type I (Regular grade), Type II (Urethane grade) and DIN 53247. Methyl ethyl ketone does not contain detectable quantities of polycyclic aromatics, heavy metals or chlorinated compounds.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

"High Quality Construction Chemicals"
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The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.