

# Methyl isobutyl ketone

*MIBK(Methylisobutylketone)*

*DATA SHEET*

## Description

Methyl Isobutyl Ketone (MIBK) is a clear liquid with a mild characteristic odor; miscible in oil, soluble in water.

Common name	MIBK(METHYL ISOBUTYL KETONE )
Chemical name	2-methyl-4-pentanone
Molecular formula	C <sub>6</sub> H <sub>12</sub> O
Molecular Weight	100.1602

## Applications

MIBK is primarily used in cellulose-based and resin-based coatings and adhesives. It is also employed in rare-metal extraction. It is used in dewaxing to purify pharmaceuticals, mineral oils, fatty acids, And alcohols. MIBK is also an useful intermediate to produce target molecules, rubber antioxidants.

## Sales specifications

Property	Unit	Spec.	Test method
Appearance		Clear, Liquid	Visual
Oudour		Chacteristic	
MIBK Purity	Wt.%	Min 99.5	ASTM 3329-99
Water	Wt.%	Max. 0.1	ASTM 1364-95
Color	APHA	Max. 10	ASTM D1209-00
Distillation Test			
IBP	°C	Min. 114.0	ASTM D1078-01
DP	°C	Max. 117.0	ASTM D1078-01
Acidity	Wt.%	Max. 0.002	ASTM D1613-02
Density at 20°C	g/ml	0.799~0.802	ASTM D4052-96

## Typical properties

Property	Unit	Value
Appearance		Clear, colorless liquid
Autoignition temperature	°C	449 (840.2°F)
Boiling point(760mmHg)	°C	116.5(389.6°F)
Density at 20 °C	g/cm <sup>3</sup>	0.801
Electrical conductivity at 20°C	pS/m	$3 \times 10^7$
Empirical formula		CH <sub>3</sub> COCH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>
Evaporation rate(Butyl Acetate = 1) (Ether = 1)		1.6 7.2
Flammable limits in air	% vol.	1.3 – 8.0
Flash Point	°C	
Heat of	kJ / kg	30730
Heat of vaporization at T(boiling point)	kJ / kg	364
Azeotrope with Water Boiling Point MIBK content	°C wt %	87.9 75.7
Freezing point	°C	-84.0
Molecular weight		100.16
Miscibility at 20 °C MIBK in water	wt %	2.0
Odor		Slight camphor odor

## Test methods

Copies of Copyrighted test methods can be obtained from the issuing organizations.

American Society for Testing and Materials (ASTM ) : [www.astm.org](http://www.astm.org)

## Storage

Provided proper storage and handling precautions are taken we would expect Diisobutyl ketone to be technically stable for at least 6 months. For detailed advice on Storage and Handling please to refer to the Material Safety Data Sheet on [www.kpb.co.kr](http://www.kpb.co.kr).

## Handling precautions

Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For Detail information, please see Material Safety Data Sheet.

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