

## Description

The 9640 *Methyl Amyl Ketone (MAK)* is a slow evaporating solvent with high activity. It has a low density, which reduces its contribution to VOC content of coatings. Further, it is listed as a fairly inert ingredient and it can be used in some nonfood use applications. Due to its low evaporation rate and low water solubility, it has an extremely high blush resistance even in high humidity environments.

## Applications & Usages

The slow speed drying time of the 9640 makes it a good choice for dip or brush application of acrylic conformal coatings like the MG 419D.

## Benefits and Features

- **Slow evaporation rate**
- **Blush resistant**
- **Hazardous air pollutants compliant**
- **Excellent leveling and gloss**
- **Highly miscible with other common organic solvents**
- **Compatible with most substrates used in electronic parts and enclosures**

**ATTENTION!**  
**INDUSTRIAL OR LABORATORY USE ONLY**  
NOT FOR RETAIL SALE

## Principal Components

Name	CAS Number
heptan-2-one	110-43-0

## Storage Parameters

<i>Properties</i>	<i>Value</i>
Shelf Life @22 °C [72 °F] Storage Temperature <sup>a)</sup>	5 y -20 to 40 °C [32 to 104 °F]

a) Storage below zero is not necessary. Cool, dry, and well ventilated area is recommended.

## Properties

<i>Physical Property</i>	<i>Method</i>	<i>Value</i>
Color Odor Density @25 °C [77 °F] Viscosity @25 °C [77 °F] Flash Point Freezing Point Boiling Point Vapor Pressure @20 °C [68 °F] Solubility in Water Relative Evaporation Rate Volatile Organic Compound (VOC) MIR value	Tag Closed Cup	Clear Sweet 0.81 g/mL 0.8 cP 39 °C [102 °F] -36 °C [-32.8 °F] 152 °C [306 °F] 2.8 hPa [2.1 mmHg] 0.5%(wt) 0.37 (ButAc = 1) 100% [810 g/mL] 2.36
<i>Solubility Parameters</i>		<i>Value</i>
Solubility in water Hansen Solubility Parameters <sup>a)</sup> (cal/cm <sup>3</sup> ) <sup>1/2</sup> ; [MPa] <sup>1/2</sup>	Total Non-Polar Polar Hydrogen Bonding	Slightly soluble 8.6 [17.6] 7.9 [16.2] 2.8 [5.7] 2.0 [4.1]

a) Hansen parameters calculate using component literature values and volume fraction composition.

## Compatibility

**Substrate Compatibility:** The 9640 is compatible with most substrate materials found on printed circuit assemblies.

**Solvent Miscibility:** The 9640 is highly miscible with other common organic solvent. It can be mixed with

- Alcohols
- Aldehydes
- Aromatic and Aliphatic Hydrocarbons
- Ethers
- Glycols
- Glycol Ethers
- Ketones

## Health, Safety, and Environmental Awareness

Please see the 9640 **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

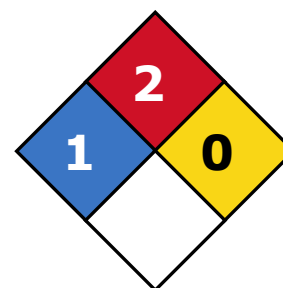
**Environmental Impact:** The 9640 has volatile organic content of 100% [810 g/L]. It is RoHS compliant.

**Health and Safety:** This liquid is flammable and should be kept away from flames and other ignition sources. Avoid breathing in fumes or direct contact with the material.

### HMIS® RATING

<b>HEALTH:</b>	<b>* 1</b>
<b>FLAMMABILITY:</b>	<b>2</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

### NFPA® 704 CODES



*Approximate HMIS and NFPA Risk Ratings Legend:*

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

## Thinning Instructions

Make necessary adjustments according to your paint and spray gun equipment usage instructions. A 1.0 (paint):1.0 (thinner) dilution is a common starting point. If sagging is observed, reduce the thinner ratio.

## Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>	
<b>9640-1L</b>	Can	945 mL	31.9 fl oz	765 g	1.68 lb
<b>9640-4L</b>	Can	3.78 L	1 gal	3.06 kg	6.75 lb

*Contact MG Chemicals if custom packaging or sizes are required*



ISO 9001 Registered Quality System.  
Burlington, Ontario, Canada QMI File # 004008

# Methyl Amyl Ketone (MAK) 9640 Technical Data Sheet

9640

## Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

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## Warranty

*M.G. Chemicals Ltd.* warrants this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

## Disclaimer

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