

# Technical Data Sheet

## Eastman™ MIAK

### Applications

- Auto oem
- Auto refinish
- General industrial coatings
- Paints & coatings
- Process solvents

### Key Attributes

- Excellent solvent activity
- High dilution ratio
- Inert - Nonfood use
- Low density
- Low surface tension
- Non-HAP
- Non-SARA
- REACH compliant
- Readily biodegradable
- Slow evaporation rate
- Urethane grade

### Product Description

Eastman™ MIAK (Methyl Isoamyl Ketone) has high solvent activity, slow evaporation rate, low density, low surface tension, and a high boiling point. These properties make MIAK a very good solvent for high-solids coatings. Because regulations limit the weight of solvent per gallon of coating, formulators favor the use of low-density solvents that help reduce the VOC content of a coating. MIAK is lower in density than ester, aromatic hydrocarbons, and glycol ether solvents with similar evaporation rates. The low density and high activity of MIAK are significant advantages when formulating low-viscosity, high-solids coatings. In addition, MIAK is useful as a polymerization solvent for high solids acrylic resins.

The chemical substances for this product are listed as Inert Ingredients Permitted for Use in Nonfood Use Pesticide Products under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). For details on specific permissions, [click here](#).

### Typical Properties

| Property                  | Typical Value, Units |
|---------------------------|----------------------|
| <b>General</b>            |                      |
| Acidity                   |                      |
| as Acetic Acid            | 0.01 wt % max.       |
| Assay                     | 98.5 wt % min.       |
| Autoignition Temperature  | 424 °C (795 °F)      |
| Azeotropes                |                      |
| BP                        | 94.7 °C (202.5 °F)   |
| Wt % Water                | 44 wt %              |
| Blush Resistance          |                      |
| @ 80°F (26.7°C)           | 89 % RH              |
| Boiling Point @ 760 mm Hg |                      |
| Dry Point                 | 148 °C (298 °F)      |
| Initial                   | 141 °C (286 °F)      |
| Color                     |                      |
| Pt-Co                     | 10 max.              |
| Critical Pressure         | 29.3 ATM             |
| Critical Temperature      | 327.8 °C             |
| Critical Volume           | 421 ml/g·mol         |

|                               |                                  |
|-------------------------------|----------------------------------|
| Dilution Ratio                |                                  |
| Toluene                       | 4.1                              |
| VMP Naphtha                   | 1.2                              |
| Electrical Resistance         | 0.6 Megohms                      |
| Empirical Formula             | C <sub>7</sub> H <sub>14</sub> O |
| Evaporation Rate              |                                  |
| (ether = 1)                   | 24.2                             |
| (n-butyl acetate = 1)         | 0.5                              |
| Expansion Coefficient, per °C |                                  |
| @ 20°C                        | 0.00107                          |
| Flash Point                   |                                  |
| Tag Closed Cup                | 36 °C (96 °F)                    |
| Freezing Point                | -74 °C (-101 °F)                 |
| Hansen Solubility Parameters  |                                  |
| Hydrogen Bonding              | 2                                |
| Nonpolar                      | 7.6                              |
| Polar                         | 2.8                              |
| Total                         | 8.3                              |
| Heat of Combustion            | -979.9 kcal/g·mol                |
| Heat of Vaporization          | 9186 cal/g·mol                   |
| Liquid Heat Capacity          |                                  |
| @ 25°C                        | 59.64 cal/(g·mol)(°C)            |
| Liquid Viscosity              |                                  |
| @ 25°C                        | 0.7 cP (mPa·s)                   |
| Molecular Weight              | 114.19                           |
| Nitrocellulose Solubility     | Active                           |
| Refractive Index              |                                  |
| @ 20°C                        | 1.4078                           |
| Solubility                    |                                  |
| in Water, @ 20°C              | 0.5 wt %                         |
| Water in, @ 20°C              | 1.2 wt %                         |
| Specific Gravity              |                                  |
| @ 20°C/20°C                   | 0.813                            |
| Surface Tension               |                                  |
| @ 20°C                        | 25.8 dynes/cm                    |
| TLV PPM 1998                  | 50                               |
| Vapor Density                 |                                  |
| (air = 1)                     | 3.9                              |
| Vapor Pressure                |                                  |
| @ 20°C                        | 4.5 mm Hg                        |
| @ 55°C                        | 3.7 kPa                          |
| Wt/Vol                        |                                  |
| @ 20°C                        | 0.81 kg/L (6.76 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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