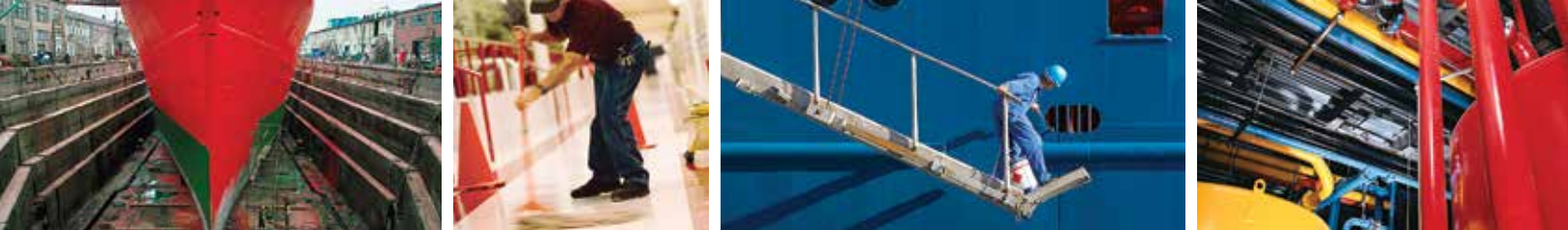


EASTMAN

Eastman specialty ketones

Smart choices for coatings solutions





Eastman performance solvents MAK (methyl *n*-amyl ketone), MIAK (methyl isoamyl ketone), and MPK (methyl *n*-propyl ketone) are smart choices for formulators looking to optimize the balance of performance, sustainability, and value for their products.

When it comes to selecting a solvent for a particular application, manufacturers are faced with a complex choice. The essential challenge for formulators is to develop products that meet the trifocal goal of:

- Exceeding customer performance requirements
- Fulfilling regulatory requirements
- Meeting their cost or profitability targets

Performance, sustainability, and value must be top of mind as formulators finalize their solvent selection.

As a leading supplier of solvents to a variety of industries, Eastman is committed to helping its customers make smart choices in delivering high quality, cost-effective products.

Performance

Solvents exist in coatings formulations for two primary reasons:

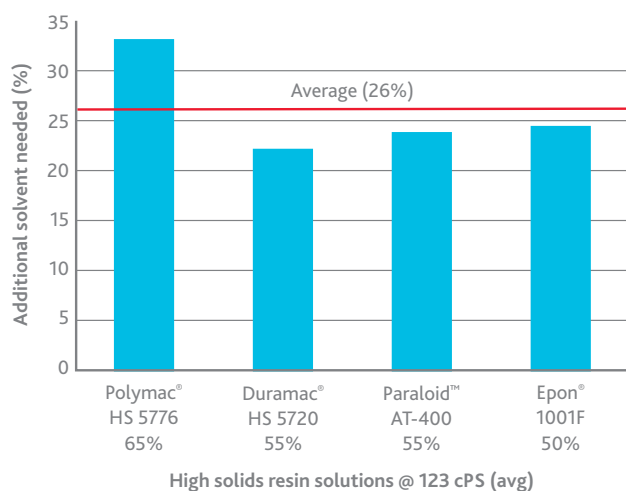
- To reduce viscosity and get solids into a form that can be applied to the substrate
- To enhance film formation as they evaporate and leave the system

Eastman MAK, MIAK, and MPK are well suited to efficiently achieve both primary objectives:

- Their higher solvency and low density equate to fewer pounds of solvent needed to reduce viscosity.
- Eastman MAK and MIAK's unique blend of high solvency and slow evaporation rate keeps them in the system longer, enabling smoother, better films.

Some common resins were cut in both PM acetate and Eastman MAK to achieve equivalent viscosities. Figure 1 illustrates the results.

Figure 1. Additional PM acetate needed to achieve the same viscosity reduction as Eastman MAK





Sustainability

Sustainability continues to be an increasingly important consideration for most industries. Eastman MAK, MIAK, and MPK help manufacturers achieve performance goals while adding low VOC and sustainable fundamentals to their formulation. Possible ways these products may help you achieve your goals:

- **Less solvent needed.** Due to the powerful solvency of Eastman MAK and MIAK, fewer pounds of these solvents are required to achieve a desired solution viscosity compared to other solvents with similar physical and chemical properties.
- **Lower VOCs.** Because of their low density, Eastman MAK and MIAK contribute fewer lb/gal of VOCs to the formulations they go into.
- **Less waste.** Powerful solvency means reduced viscosity at high solids levels which enables the use of equipment capable of higher transfer efficiencies.
- **Fewer defects.** The balanced evaporation rate and solvency of Eastman MAK and MIAK yield dried films with fewer defects.
- **Improved productivity.** Coatings formulated with Eastman MAK and MIAK enable end users to apply their coatings in a wide range of temperature and humidity conditions, allowing a broader application window and improved productivity.
- **Safety.** Eastman MAK, MIAK, and MPK are non-HAP, and they possess relatively high flash points and low vapor pressures. With this combination of properties, they contribute to a safer workplace.

Value

The real driver in choosing any component in a formula is the value it can deliver. At the highest level, value is simply the perceived balance of benefits and cost. Benefits provided by addressing performance and regulatory requirements are obvious ways Eastman MAK, MIAK, and MPK contribute to the value equation.

But assessing the cost side of the equation is often misleading. Many solvents carry a lower price per pound, but that is often not the appropriate measure of cost. Fewer pounds of these products are typically needed to reduce viscosity, so it's important to consider the total system cost to deliver the necessary solvency in an application. Often, fewer pounds of Eastman MAK, MIAK, or MPK will result in a lower total cost even if the price per pound might be higher.

Smart choices for diverse markets

Automotive Refinish and OEM • Marine • Industrial Maintenance • General Industrial
Coil Coatings • Resin Synthesis • Aerospace • Wood Coatings • Graphic Arts
Building and Construction • Electronics • Cleaners

Call your Eastman representative or visit www.eastman.com/solvents to learn more about the benefits of Eastman specialty ketones in your coatings solutions.



**Eastman Chemical Company
Corporate Headquarters**

P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

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