

70920 Methoxypropanol PM

Solvent for Coatings

Methoxypropanol PM has two functional groups - ether and alcohol - that produce solvent properties that are unmatched by any other solvent category. They are excellent solvents for an extensive range of synthetic resins and plastics. In most cases they are compatible with other materials, such as water, alcohols and esters or solvent naphtha and aromatics. This property of material compatibility with other solvents is the key criterion for developing systems of almost unlimited versatility in the field of organic coatings. Methoxypropanol PM's ability to mix completely with water favors their use as coalescing agents in waterborne latex paints and as coupling products in water-soluble synthetic resin systems. It also improves the compatibility of paint components containing traces of moisture and the adhesion of coatings to surfaces containing traces of moisture.

The flash point of Methoxypropanol PM is above 38°C. The mild and only slight odor is also positively noticeable.

Methoxypropanol PM can therefore also be used for interior coatings.

Water-Thinnable Systems

Water-thinnable coatings are increasingly replacing solvent-based coatings.

These coatings contain newly developed synthetic resins that are made soluble by ammonia or amines, for example. Due to its miscibility with water and its high dissolving power for these synthetic resins, Methoxypropanol PM is an excellent coupling agent for this application.

Industrial Spray Coatings and Enamels

Five to ten percent methoxypropanol PM is commonly used as a diluent for sprayed industrial coatings.

Methoxypropanol PM helps eliminate defects in coatings such as white tarnish (blush) and the orange peel effect, ensures the desired viscosity and improves gloss and adhesion.

Building Paints

Methoxypropanol PM is rarely used in oil-modified and similar alkyd resin paints. They are not essential, but improve such formulations in some respects:

The viscosity of an alkyd paint is lowered by up to 25 % if, for example, 3-4 % methoxypropanol PM is added. Thus, the solids content can be increased considerably. Methoxypropanol PM improves flow, hiding power and gloss. Methoxypropanol PM slows down skin formation without negatively affecting adhesion. The dissolving power allows a first coat to be easily dissolved, thus improving adhesion and hiding power.

Epoxy Paints

Methoxypropanol PM is a good solvent for almost all epoxy resins and for their polyamine and polyamide hardeners.

Up to 50 % Methoxypropanol PM can be used in a solvent mixture to dissolve other resins in the system.

The relatively slow evaporation rate is an added advantage, as it allows these epoxy systems to remain liquid longer, enabling near-quantitative curing.

Solvents for Printing Inks and Dyes

Methoxypropanol PM is an excellent solvent for almost all components in printing inks and pastes. They are also characterized by high penetration or through-inking capacity, optimum evaporation rates and low surface tension. Because of their versatility, they are also very often and advantageously used in wood stains, leather dyes, textile printing.

Wood Stains

Methoxypropanol PM has proven to be very useful for wood stains. Common water or oil based stains can alter the wood structure and grain and result in undesirable rough surfaces. Glycol ether-based stains penetrate deeper into the wood without swelling it. Typical solvents for these stains consist of a mixture of up to 25% methoxypropanol PM mixed with an alcohol and/or hydrocarbons. Such formulations have somewhat lower evaporation rates. However, they eliminate the risk of stains and unevenness. Often, the grain then also appears better.

Leather Dyes

Leather dyes are similar to varnishes. They consist of a dye or pigment, a carrier, which may be casein or nitrocellulose, and a solvent. The leather is first pretreated with the carrier, which acts as a color dispersant. If casein is used, the dyed leather is given a final protective layer of nitrocellulose. Methoxypropanol PM controls the flow, penetration and evaporation rate. The combination of nitrocellulose and methoxypropanol PM gives particularly good results.

Pastes and Dyes for Textile Printing

Numerous printing pastes are given an additional measure of "body" by the use of cellulose derivatives of an alkyd resin. Methoxypropanol PM controls the evaporation rate in such preparations. In addition, they support the emergence of bright colors.

Printing Inks

Methoxypropanol PM increases penetration in inks and printing inks and at the same time prevents the formation of blurred lettering as a result of insufficient surface tension. Thanks to the low evaporation rate, the dye can spread evenly over the print. They also prevent residues from forming on the printing rollers. The high solvency of Methoxypropanol PM also means that, as the last component to evaporate, it acts as a solvent for the other components of the ink or coating. This results in sharper contours and high gloss.