Methyl TRIPROXITOL

U5148

Propylene Glycol Ethers

25498-49-1

MTP, TPM, Tri Propylene Glycol mono methyl ether, Methyl tripropylene glycol, [2-(2-Methoxymethyleneoxy)methyleneoxy]-propanol

Shell Chemicals has a series of Propylene Oxide glycol ether derivatives commercially available on a global basis: Methyl PROXITOL (PM), Methyl DIPROXITOL (DPM), Methyl PROXITOL Acetate (MPA), Ethyl PROXITOL (EP), and Ethyl PROXITOL Acetate (EPA). These propylene glycol ethers provide alternatives to the ethers of ethylene glycol, which are under regulatory pressures around the world.

Now Shell Chemicals is bringing an additional Propylene Oxide glycol ether to the market: Methyl TRIPROXITOL (MTP).

This new product allows an improved selection of optimum evaporation characteristics for each application. MTP can be used in the same applications as other glycol ether derivatives but has particularly good properties as coupling agent in household and industrial cleaners, as (tailing) solvent in (ballpoint) inks and coatings. Due to its miscibility with polar and non-polar substances, MTP can be used as coupling and coalescing agent in water-based paint formulations. MTP its mild odor, low skin irritancy, low toxicity and high flashpoint will ensure improved worker, and user comfort, and safety. MTP is a not classified substance.

MTP key features are:
- Powerful solvency
- Low evaporation rate
- Low viscosity
- Coupling ability
- High flash point
- non-VOC (Directive/1999/13/EC)

MTP is comparable to MDP in terms of physical and solvency properties. A few key differences of MTP:

1. Longer evaporation time
2. Higher flash point, and therefore easier to handle
3. Higher boiling point and lower vapor pressure
Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>-</td>
<td>ASTM D4176</td>
<td>Clear and Bright</td>
</tr>
<tr>
<td>Density @20°C</td>
<td>kg/l</td>
<td>ASTM D4052</td>
<td>0.966</td>
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<tr>
<td>Color</td>
<td>Pt-Co</td>
<td>ASTM D1209</td>
<td>&lt; 5</td>
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<tr>
<td>Boiling Point</td>
<td>°C</td>
<td>-</td>
<td>243</td>
</tr>
<tr>
<td>Relative Evaporation Rate (nBuAc=1)</td>
<td>-</td>
<td>ASTM D3539</td>
<td>&lt; 0.01</td>
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<tr>
<td>Relative Evaporation Rate (Ether=1)</td>
<td>-</td>
<td>DIN 53170</td>
<td>&gt; 1000</td>
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<tr>
<td>Vapor Pressure @25°C</td>
<td>kPa</td>
<td>Calculated</td>
<td>&lt; 0.01</td>
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<tr>
<td>Flash Point</td>
<td>°C</td>
<td>ASTM D93</td>
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</tr>
<tr>
<td>Freezing Point</td>
<td>°C</td>
<td>-</td>
<td>-78</td>
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<tr>
<td>Surface Tension @20°C</td>
<td>mN/m</td>
<td>-</td>
<td>30</td>
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<tr>
<td>Viscosity @25°C</td>
<td>mm²/s</td>
<td>ASTM D445</td>
<td>5.5</td>
</tr>
<tr>
<td>Miscibility @20°C: Solvent in Water</td>
<td>% m/m</td>
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<td>complete</td>
</tr>
<tr>
<td>Miscibility @20°C: Water in Solvent</td>
<td>% m/m</td>
<td>-</td>
<td>complete</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>g/mol</td>
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<td>206</td>
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</tbody>
</table>

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM) : www.astm.org
Deutsches Institut für Normung (DIN) : www.din.de

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Applications

Paints & Coatings
- High solids water based paints, Coil, and Wood Coatings, Resin Formulations, Specialty Paints
- Cleaners & Inks
- All-Purpose, Glass, Oven, Industrial and Household Cleaners, Rust and Varnish removers, Wax Strippers, (Ballpoint) inks

Hazard Information

For detailed Hazard Information please refer to the Material Safety Data Sheet on www.shell.com/chemicals

Storage and Handling

Provided proper storage and handling precautions are taken we would expect Methyl TRIPROXITOL to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Material Safety Data Sheet on www.shell.com

Trademark

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