# Addovate® EM

## PU ADDITIVES

**Function**
Emulsifier for the production of polyurethane ester flexible slabstock foam

<table>
<thead>
<tr>
<th><strong>Product description</strong></th>
<th><strong>Product information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical composition:</strong></td>
<td>Polyester flexible slabstock foam for &quot;textile&quot; application: Addovate EM is normally used in combination with Addovate TX for the production of polyester flexible slabstock foam. Addovate EM is used as an emulsifier for water, catalyst (e.g. Addocat 101, Addocat PV, Addocat 117) and the polyester polyol. Addovate EM also improves the open-cell structure of foams. The amount which should be used is between 1.0 and 4.0 parts by weight Addovate EM to 100 parts by weight polyester polyol. The following sequence has proven effective for adding the individual components when manufacturing the catalyst compound: Water, catalyst, Addovate EM, Addovate TX, so a clear, homogeneous mixture is produced. &quot;Low odour&quot; polyester flexible slabstock foam: For the production of &quot;low odour&quot; polyester flexible foam is used as emulsifier/stabilizer Addovate EM in combination with Addovate 3240 and small amounts of silicone stabilizers. Guide formulations may be provided upon request. <strong>WARNING</strong> When mixing with other emulsifiers or additives, it is advisable to carry out laboratory tests for compatibility, as incompatibilities may cause defects in the cellular structure.</td>
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<tr>
<td><strong>Physical appearance:</strong></td>
<td>- in cold water unlimited - in warm water (&gt; 47 °C) becomes cloudy and separates into two phases - freely soluble in polyetherpolyol, light and heavy petrol (gasoline), ethyl alcohol, ethyl acetate, benzene</td>
</tr>
<tr>
<td><strong>Density (20 °C):</strong></td>
<td>52.0 ± 3.0 mg KOH/g</td>
</tr>
<tr>
<td><strong>Freezing point:</strong></td>
<td>5.0 ± 1.0 mg KOH/g</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>Water content</td>
</tr>
<tr>
<td>(ASTM-D 93, DIN EN 22719)</td>
<td>max. 0.5 %</td>
</tr>
<tr>
<td><strong>Solubility:</strong></td>
<td>Viscosity (25 °C)</td>
</tr>
<tr>
<td>- in cold water unlimited</td>
<td>102.5 ± 17.5 mPa.s</td>
</tr>
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<td></td>
</tr>
<tr>
<td><strong>Hydroxyl value</strong></td>
<td>185 °C</td>
</tr>
<tr>
<td><strong>Acid number</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Water content</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity (25 °C)</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Chemical composition:
Polyetherpolyol

### Physical appearance:
colourless to yellow liquid

### Density (20 °C):
approx. 1.0 g/cm³

### Freezing point:
approx. -23 °C

### Flash point:
185 °C

### Solubility:
- in cold water unlimited
- in warm water (> 47 °C) becomes cloudy and separates into two phases
- freely soluble in polyetherpolyol, light and heavy petrol (gasoline), ethyl alcohol, ethyl acetate, benzene

### Hydroxyl value
52.0 ± 3.0 mg KOH/g

### Acid number
5.0 ± 1.0 mg KOH/g

### Water content
max. 0.5 %

### Viscosity (25 °C)
102.5 ± 17.5 mPa.s
Packing
Metal drums, contents 200 kg
Plastic containers, contents 1000 kg

Storage stability
Addovate EM should be stored at a temperature of 10-30 °C. The containers should be resealed tightly after use to prevent contamination by impurities and exposure to moisture. The product has a shelf life of 6 months.

Handling
Consult material safety data sheet (MSDS) for additional handling information for Addovate EM.

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