Baysilone® OF-OH702-4%

Description
OF OH 702-4% silicone fluid is a low molecular weight, non-solvent based, linear polydimethylsiloxane that is terminated with primary carbinol groups capable of normal alcohol reactions. The carbinol group is terminated through a non-hydrolyzable Si-C bond to the silicone polymer.

OF OH 702-4% silicone fluid may be considered for reactions with various polyurethane and polyester polymers to create a hybrid polymer.

Key Features and Benefits
• Functionalized with reactive organic groups capable of forming non-hydrolyzable covalent bonds with a variety of resin systems such as polyurethanes and polyesters.
• Strictly difunctional, and hence virtually no increase of crosslink density.
• Low molecular weight for improved compatibility in resin systems.
• Elegant and virtually permanent means of delivering silicone-like properties to resin systems.
• A hybrid polymer partially composed of OF OH 702-4% silicone fluid may exhibit improved water resistance, flexibility, slip/release, weatherability or thermal stability at both high and low temperatures.
• Virtually 100% silicone actives.
Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>–</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>OH value</td>
<td>weight %</td>
<td>4</td>
</tr>
<tr>
<td>OH value 132</td>
<td>mg\text{KOH} g\text{-1}</td>
<td>132</td>
</tr>
<tr>
<td>Kinetic Viscosity at 25°C</td>
<td>mm\text{²}s\text{-1}</td>
<td>37</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>–</td>
<td>Not soluble in water</td>
</tr>
</tbody>
</table>

The data values of typical physical properties should not be used as specifications that are available if contacting Momentive Performance Materials sales office.

Potential Applications

OF OH 702-4% silicone fluid contains terminal hydroxyalkyl (-CH2-OH) groups. In contrast to the silanol (-Si-OH) terminated dimethylsiloxanes of Silopren* E or Silopren C fluid series, OF OH 702-4% silicone fluid is able to form non-hydrolyzable ether bonds. Therefore, it may be chemically bonded into resin systems that are reactive towards alcohols, like polyurethane sealants, fabric and leather coatings or synthetic leather, potentially imparting durable silicone properties without creep and migration. OF OH 702-4% silicone fluid is hygroscopic and care should be taken to exclude moisture from the containers, as water may interfere in many of the reactions in which OF OH 702-4% silicone fluid is utilized.

Patent Status

Standard copy to come

Product Safety, Handling and Storage

Standard copy to come

Limitations

Standard copy to come
Contact Information
For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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