OphthaSil* 4000 silicone surfactant TDS

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Description

OphthaSil 4000 is a pendant structure silicone block polyether surfactant.

OphthaSil 4000 silicone surfactant may help increase wettability, lubricity or release in contact lens manufacturing.

Key Features and Typical Benefits

- Water Soluble
- Wetting
- Lubricating
- Releasing

*OphthaSil is a trademark of Momentive Performance Materials Inc.*
Potential Applications

- Contact Lens Processing

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW (g/mol)</td>
<td>4000</td>
</tr>
<tr>
<td>Color GVS¹</td>
<td>2</td>
</tr>
<tr>
<td>Specific Gravity 25/25°C</td>
<td>1.066</td>
</tr>
<tr>
<td>Flash Point² (°C)</td>
<td>74[165°F]</td>
</tr>
<tr>
<td>Viscosity @25°C (cSt)</td>
<td>110</td>
</tr>
<tr>
<td>Solvent pH @25°C</td>
<td>7</td>
</tr>
<tr>
<td>Refractive Index @25°C</td>
<td>1.45</td>
</tr>
<tr>
<td>Surface Tension³ (mN/m)</td>
<td>25.1</td>
</tr>
<tr>
<td>Cloud Point⁴ (°C)</td>
<td>64[147°F]</td>
</tr>
<tr>
<td>CMC Weight⁵ (g/100g)</td>
<td>0.005</td>
</tr>
<tr>
<td>Polyether Type</td>
<td>All EO</td>
</tr>
</tbody>
</table>

Typical properties are average data and are not to be used as or to develop specifications.

¹ Gardner Varnish Scale
² Pensky-Martens, Closed Cup, ASTM method D93
³ Surface tension at 25°C on 0.1% (w/w) aqueous solutions either DeNooy Ring or Wihelmy Plate method.
⁴ Cloud Point measured visually on 1% (w/w) aqueous solutions
⁵ Critical Micelle Concentration in water

Availability

OphthaSil 4000 silicone surfactant is currently available in 0.9kg bottles and 18kg pails (typical average weights).

Shelf Life & Storage

The typical shelf life of four years from the date of manufacture of the material will be indicated by the “use before date” on the associated documents when stored in the unopened containers at 43°C or less.

Patent Status

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