New Silicone Oligomeric Coating Agents

**High Hardness & Crack Resistance**
Type X-40-9312

**Features**
- Forms coating layers with high hardness and crack resistance
- Excellent resistance to yellowing and cracking after irradiation with light

**General Properties**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Product name</th>
<th>X-40-9312</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td>Colorless to pale yellow transparent liquid</td>
</tr>
<tr>
<td>Viscosity</td>
<td>mm²/s</td>
<td>250</td>
</tr>
<tr>
<td>Active ingredient</td>
<td>wt%</td>
<td>100</td>
</tr>
</tbody>
</table>

(Note: specified values)

**Yellowing Resistance Test Results**

Test method: Catalyst: D-25 (5 wt %)
Substrate: Glass
Coating method: Bar coater (wet : 30μm)
Curing conditions: 25°C × 1 day → 150°C × 2 h
UV-irradiation test conditions: Sterilization lamp, 25°C × 2 weeks

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Product name</th>
<th>X-40-9312</th>
<th>KR-401N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crack resistance after UV test</td>
<td></td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Appearance after UV test</td>
<td></td>
<td>Colorless transparent</td>
<td>Pale yellow transparent</td>
</tr>
<tr>
<td>ΔYI before and after the UV test</td>
<td></td>
<td>0.2</td>
<td>2.6</td>
</tr>
</tbody>
</table>

(Note: specified values)

**Map of Physical Properties of Coating**

- KR500
- KR400N
- KR401N
- X-40-9250
- X-40-9312

- Poor
- Crack resistance
- Excellent

Pencil hardness