Chemical nature

Lupranol 4005/1/SC10 is a non-reactive polyether polyol which has been grafted with styrene-acrylonitrile (SAN) and contains approximately 10 % solids. It forms a stable dispersion which does not separate under normal storage conditions. This polyol contains a low-emission and low-discolouring antioxidant combination (without BHT).

Applications

Lupranol 4005/1/SC10 is used for the production of flexible PU foams according to the slabstock foaming process.

Compared to foams based on conventional polyether polyols those produced from Lupranol 4005/1/SC10 have better load bearing properties (about 10 – 15 % more hardness if processed with Lupranat T 80 A).

To produce low-emission and low-discolouring HLB-slabstock foams, the antioxidant package has been improved within a broad density range.

Typical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>opaque viscous liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OH Number</td>
<td>44</td>
<td>mg KOH/g</td>
<td>DIN 53 240 *</td>
</tr>
<tr>
<td>Viscosity at 25 °C</td>
<td>730</td>
<td>mPa·s</td>
<td>DIN EN 12 092</td>
</tr>
<tr>
<td>Water Content</td>
<td>≤ 0.08</td>
<td>%</td>
<td>DIN 51 777</td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>1.023</td>
<td>g/cm³</td>
<td>DIN 51 757</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 160</td>
<td>°C</td>
<td>DIN EN 22 719</td>
</tr>
</tbody>
</table>

* Determination of OH Number by phthalic anhydride

Safety advice

If it is intended to use BASF Polyurethanes GmbH materials for the manufacture of consumer goods (e. g. products which will come into contact with foodstuffs or drinking water or products which are in contact with the skin, toys) or medical devices, national and international regulations have to be observed.

Where no regulations exist, consumer goods with intended food contact or medical devices must at least comply with European legislation. We recommend contacting our sales department and/or product-safety-polyurethanes@basf.com.
Especially, in the case that migration tests or tests of trace monomers are recommended in the special legislations by the manufacturer of consumer goods or medical devices, the obligation to fulfill these requirements and to conduct tests on the supplied products is still in the hand of the customer/manufacturer of the final product. BASF Polyurethanes GmbH cannot take over this responsibility for the use of its products from our customers.

The compliance with legal requirements and generally accepted standards for consumer protection has to be proven for the specific application using the final product.

On processing these products, take note of the necessary precautionary measures described in the Material Safety Data Sheets (MSDSs). For further information on safety measures at the processing of polyurethane products consult our Technical Information ‘Safety and Precautionary Measures for the Processing of Polyurethane Systems’.

Supply and storage

Lupranol 4005/1/SC10 is supplied in road tankers and non-returnable drums. After supply the product may be stored under appropriate conditions for at least six months. The storage temperature should be as close as possible to the temperature at which the material will be processed. Short term warming, or cooling of the product to low temperatures, does not damage the product. It should however be noted that at low temperatures viscosity increases markedly and this may cause difficulties in processing. Moist and wet conditions are to be avoided.
Lupranol® 4005/1/SC10

Viscosity Curve

Density Curve