Chemical nature

Lupranol 4010/1/SC15 is a polyether polyol which has been grafted with styrene-acrylonitrile (SAN) and contains mainly primary hydroxyl end groups. This polyol contains about 15 % 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

The preferred use of Lupranol 4010/1/SC15 is alone or in mixture with reactive polyether polyols such as Lupranol 2092 for the production of highly elastic PU foams according to the slabstock foaming process.

HR-slabstock foams made from Lupranol 4010/1/SC15 have higher comfort, improved elasticity and better load bearing properties than conventional foams. This polymer polyol is also suitable for the production of foams with low hardness. Furthermore it can be used for HR-foams which must pass flammability tests such as FMVSS 302 or California 117. It is also a basis for CMHR-slabstock foams using additive flame retardants, possibly by application of melamine.

Typical properties

Appearance: opaque viscous liquid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH Number</td>
<td>29</td>
<td>mg KOH/g</td>
<td>DIN 53 240 *</td>
</tr>
<tr>
<td>Viscosity at 25 °C</td>
<td>1,525</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>1,028</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 4010/1/SC15 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 maintained between 20 °C and 30 °C. The storage temperature should be as close as possible to the temperature at which the material will be processed. Moist and wet conditions are to be avoided.

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Viscosity Curve

Density Curve

Temperature in °C