Lupranol® 2048

Chemical nature

Lupranol 2048 is a trifunctional polyether polyol with high polyoxyethylene content. It contains predominantly primary hydroxyl groups.

Applications

Lupranol 2048 improves cell opening in High Resilience (HR), flexible and semi-rigid moulded and slabstock polyurethane foams. From 2 to 8 parts by weight of Lupranol 2048 is added to the formulation, depending upon the degree of cell-openness required. It can be used as well to produce hypersoft foams. Lupranol 2048 is not fully miscible with the polyether polyols normally used for this application: so the resultant blend is likely to be slightly turbid. This mixture will only have a shelf life of a few days. In case of longer storage it should be thoroughly stirred in order to secure maximum mixing. Formulations that contain more than 2 parts by weight of water are fully compatible.

Typical properties

Appearance: colourless viscous liquid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH Number</td>
<td>41 mg KOH/g</td>
<td>DIN 53 240</td>
</tr>
<tr>
<td>Viscosity at 25 °C</td>
<td>950 mPa-s</td>
<td>DIN EN 12 092</td>
</tr>
<tr>
<td>Water Content</td>
<td>≤ 0.10 %</td>
<td>DIN 51 777</td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>1.09 g/cm³</td>
<td>DIN 51 757</td>
</tr>
<tr>
<td>Colour</td>
<td>≤ 60 Pt/Co, APHA</td>
<td>DIN ISO 6271</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 160 °C</td>
<td>DIN EN 22 719</td>
</tr>
</tbody>
</table>

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 2048 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. Thermal load due to overheating at heating surfaces higher than 60 °C are to be avoided as a deterioration of the product quality would be caused. 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.

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Viscosity Curve

Viscosity in mPa·s

Temperature in °C

Density Curve

Density in g/cm³

Temperature in °C