Chemical nature

Lupranat MX 118/1 is a solvent-free product based on 4,4'-diphenylmethane diisocyanate (MDI) and contains oligomers of high functionality and isomers.

Applications

Lupranat MX 118/1 is used for the manufacture of flexible foams.

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>brown liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCO-Content</td>
<td>32.8</td>
<td>g/100 g</td>
<td>ASTM D 5155-96 A</td>
</tr>
<tr>
<td>Viscosity at 25 °C *</td>
<td>30</td>
<td>mPa·s</td>
<td>DIN 53 018</td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>1.2</td>
<td>g/cm³</td>
<td>DIN 51 757</td>
</tr>
</tbody>
</table>

* at delivery

Delivery

The delivery is by road tankers and in non-returnable drums. Transport temperatures should be between 20 °C and 40 °C. If delivered in drums, extreme cold shocks and storing in direct sunlight should be avoided.

Storage

Lupranat MX 118/1 must be protected from moisture. The ideal storage temperature is 20 to 25 °C. Under these conditions and when moisture is excluded, the shelf life of Lupranat MX 118/1 is at least six months. Drums must be kept airtight. In storage tanks the product should be kept under a dry nitrogen blanket.

If stored at higher temperature viscosity will rise during the time of storage. In extreme cases a precipitate may form which will not be removed by heating.

If the product becomes cold the viscosity will increase. This may lead to problems in processing. Storage for longer periods below 10 °C can lead to partial crystallisation.
Crystallised material must be melted out immediately by short term heating. The product temperature must not exceed 70 °C. Localised overheating must be avoided, as Lupranat MX 118/1 will decompose with the formation of gas at temperatures above 230 °C. Rolling of the drums in a hot air oven is the recommended method in order to dissolve the crystals. After melting out, the contents of the drum must be thoroughly mixed. More detailed information on transport and storage of isocyanates is given in the ISOPA-Guidelines “For Safe Loading / Unloading Transportation Storage of TDI and MDI in Bulk” and “For the Safe Transportation, Unloading & Storage of Packaged TDI & MDI”.

Safety advice and environmental protection

Transportation, storage, processing, waste treatment and disposal must comply with national regulations.

Lupranat MX 118/1 is classified as harmful if inhaled. It causes skin irritation and serious eye irritation. It may cause respiratory irritation. It may cause sensitisation by inhalation and skin contact. It is suspected of causing cancer. It may cause damage to organs though prolonged or repeated inhalation exposure.

National regulations for exposure limits and labelling must also be observed. Before processing the product we recommend reading the safety data sheet. For further information consult our Technical Information “Safety and Precautionary Measures for the Processing of Polyurethane Systems”.

In order to avoid accidents, the residual product in the drums must be handled with care. Any water or moisture which is allowed to enter the drum will react with Lupranat MX 118/1 and release carbon dioxide. Unless action is taken to prevent moisture entry or gas entrapment, the drums will become pressurized and could rupture.

If it is intended to use BASF materials for the manufacture of consumer goods (e. g. products which will come into contact with foodstuffs or with the skin, toys) or medical products, national and international regulations have to be observed. Where no regulations exist, consumer goods or medical products must at least comply with European legislation. We recommend contacting our Sales and our Ecology and Product Safety departments.
Disposal of drums

Residues of MDI remaining in drums must be neutralized. Information on disposal is given in our Technical Information "Safety and Precautionary Measures for the Processing of Polyurethane Systems". Please contact our local offices for further information on national disposal regulations.