Lupranate® M10 Isocyanate
Polymethylene Polyphenylpolyisocyanate

Lupranate M10 Isocyanate is a solvent-free polymeric MDI with a functionality of approximately 2.3. Lupranate M10 Isocyanate is a polymeric MDI which contains a relatively high level of pure MDI. The low functionality and low viscosity of this product are found to be advantageous in formulating potting compounds, microcellular elastomers, and packaging foams. The combination of relatively fast reactivity with slower gel time makes this product an excellent choice for semi-flexible and integral skin foams where it is important to achieve short cycle times while obtaining good flow characteristics. Lupranate M10 Isocyanate is also used with success in carpet backing, adhesive, and sealant applications.

**TYPICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>dark brown liquid</td>
</tr>
<tr>
<td>NCO content, wt.%</td>
<td>32.0</td>
</tr>
<tr>
<td>Viscosity @ 25°C, cps</td>
<td>70</td>
</tr>
<tr>
<td>Hydrolyzable chlorine, ppm</td>
<td>300</td>
</tr>
<tr>
<td>Flash point, °C (COC)</td>
<td>&gt; 200</td>
</tr>
<tr>
<td>Density @25°C, g/cm³</td>
<td>1.22</td>
</tr>
<tr>
<td>Initial boiling point, 5mm Hg, °C</td>
<td>190</td>
</tr>
<tr>
<td>Vapor Pressure @25°C, mm Hg</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

**Storage**

Lupranate M10 Isocyanate is supplied in tank trucks or drums. Once a container has been opened, care should be taken to exclude moisture. The most favorable temperature for storage is 20-35°C. If stored at higher temperatures, or if moisture is not excluded, an undesirable increase in viscosity will occur. Below 20°C, solid crystals may form and settle out, which can alter the performance of the product. The solid crystals contain pure MDI and in this solid form may exhibit the same dimerization characteristics as pure MDI. Unless prompt action is taken to melt the product, subsequent dimerization will proceed and may deteriorate the clarity and assay of the product. Melting the crystals is ideally done by rolling the drum in a hot air oven at 80-100°C. The drum contents should not be heated above 70°C to minimize dimer formation.

**Warning**

Excessive heating or prolonged heating at 80-100°C may cause dangerous pressure build-up. Heating by electrical means is not recommended due to the danger of local overheating, which would result in dimer formation. Melting in a water bath is not recommended because of the potential danger of the isocyanate reacting with water in case of drum leakage. Rolling the drum in atmospheric steam is an alternate procedure that can be used provided care is taken to ensure that the drum does not leak. The shelf life of Lupranate M10 Isocyanate is six months if the temperature is maintained at 25-35°C and moisture is excluded.

**In case of chemical emergency:**

Call CHEMTREC 800-424-9300 or BASF (800-832-HELP) day or night for assistance and information concerning spilled material, fire, exposure and other chemical accidents. Outside the U.S., call (703) 527-3887.
Attention:

This product is sold solely for use by industrial institutions. Refer to our Material Safety Data Sheet (MSDS) regarding regulatory compliance, safety, hazards, spill procedures and disposal of this product. An MSDS as well as additional information on BASF urethane chemicals may be obtained by telephoning BASF Corporation, Urethane Customer Service at (877) 297-3322 or faxing (734) 324-6866.

Important:

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