Lupranate® MP102
Modified MDI

Lupranate MP102 Isocyanate is a liquid, modified short chain prepolymer based on pure 4,4'-diphenylmethane disocyanate (MDI). Lupranate MP102 Isocyanate is used in conjunction with high molecular weight and reactive polyether polyols for the manufacture of high-quality flexible and semi-flexible elastomers and integral skin foams. It is especially suitable for use in the manufacture of polyurethane shoe soles. For some semi-flexible and integral skin foam applications, Lupranate MP102 Isocyanate can be blended with polyisocyanates such as Lupranate M20 isocyanate. It is often used in mixtures with Lupranate MM103 isocyanate for large automotive moldings.

**TYPICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless liquid</td>
</tr>
<tr>
<td>NCO content, wt.%</td>
<td>23.0</td>
</tr>
<tr>
<td>Viscosity @ 25°C, cps</td>
<td>700</td>
</tr>
<tr>
<td>Hydrolyzable chlorine, wt.%</td>
<td>&lt; 500</td>
</tr>
<tr>
<td>Flash point, °C (COC)</td>
<td>&gt; 200</td>
</tr>
<tr>
<td>Density @25°C, g/cm³</td>
<td>1.21</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 MP102 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 25-35°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 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**

Heating by electrical means is not recommended due to danger of local overheating, which would result in dimer formation. Melting in a water bath is not recommended because of 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 MP102 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) 324-6666.

Important:

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