

# Lupranate<sup>®</sup> MM103 BMBcert<sup>™</sup> M1 Isocyanate

Modified MDI

ISCC PLUS and REDcert<sup>2</sup> Certified



*Mass balanced products support and accelerate the substitution of virgin/fossil feedstock with alternative feedstock. BMB products offer the same chemical properties as their conventional equivalents but contribute to saving conventional resources and contribute to reducing CO<sub>2</sub> emissions.*

Lupranate MM103 BMBcert M1 Isocyanate is a liquid carbodiimide modified 4,4'-diphenylmethane diisocyanate. Lupranate MM103 BMBcert M1 Isocyanate serves as the isocyanate component in the production of microcellular urethane elastomers. This product also may be used in combination with high molecular weight polyether polyols for the preparation of high grade flexible, semi-flexible and integral skin foam. It is also used in the preparation of prepolymers for elastomer, sealant, adhesive and coating applications.

## TYPICAL PROPERTIES

Appearance	light yellow liquid
Viscosity @ 25°C, cps	40
Flash point, °C (COC)	199
Density @ 25°C, g/cm <sup>3</sup>	1.22
Initial boiling point, 5mm Hg, °C	190
Nominal functionality	2.2
Vapor Pressure @ 25°C, mm Hg	< 0.00001
NCO content, wt. %	29.5
Hydrolyzable chlorine, ppm	< 300



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### STORAGE

Lupranate MM103 BMBcert M1 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

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 MM103 BMBcert M1 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).

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**Attention:** This product is sold solely for use by industrial institutions. Refer to our Safety Data Sheet (SDS) regarding regulatory compliance, safety, hazards, spill procedures and disposal of this product. An SDS as well as additional information on BASF urethane chemicals may be obtained by visiting [polyurethanes.basf.us](http://polyurethanes.basf.us).

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