



Lupranate[®] MS

4,4' Diphenylmethane Diisocyanate

Lupranate MS, a solid at room temperature, is essentially pure MDI and has a functionality of 2.0. Lupranate MS isocyanate is used in the isocyanate component for the preparation of elastomeric and thermoplastic polyurethanes, flexible and semi-flexible integral skin foams, adhesives, sealants and coatings. The special stabilizer in Lupranate MS isocyanate does not permit use in food-contact applications. Lupranate MS is the product of choice for low volume applications where light color of the finished product is required.

TYPICAL PROPERTIES

Appearance	water white to yellow solid or liquid
NCO content, wt.%	33.5
Melting point, °C	38.5
Purity, wt.%	99.5
Hydrolyzable chlorine, ppm	< 20
Flash point, °C (COC)	199
Density @25°C, g/cm³	1.22
Initial boiling point, 5mm Hg, °C	190
Vapor Pressure @25°C, mm Hg	< 0.00001
2,4' Isomer, wt.%	2

Storage

Lupranate MS Isocyanate is available as a liquid in heated tank trucks or as a solid in drums. The product is moisture sensitive and will yellow when exposed to air, especially under the influence of light. Liquid Lupranate MS Isocyanate should be stored within the relatively narrow temperature range of approximately 40-50°C under nitrogen up to approximately 14 days. It can be stored as solid below 0°C. Under this cold condition and if moisture and air are excluded, the product is storage stable for 6 months. If stored at temperatures other than those cited, dimer formation will be excessive affecting the performance of the product. At room temperature Lupranate MS slowly forms solid dimer of diphenylmethane diisocyanate which appears as turbidity or sediment after melting. This sediment cannot be resolubilized during later processing. Therefore, storage at room temperature is not recommended. If stored as a solid, melting is done by rolling the drum in a hot air oven at 80- 100°C. 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.

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 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 telephoning BASF Corporation, Urethane Customer Service at (877) 297-3322 or faxing (734) 324-6866.

Important:

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.

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