

## Lupranate<sup>®</sup> 5090 Isocyanate

Lupranate<sup>®</sup> 5090 Isocyanate is a liquid prepolymer of pure, diphenylmethane diisocyanate (MDI). The Lupranate<sup>®</sup> 5090 Isocyanate has been formulated for improved low-temperature stability compared to Lupranate<sup>®</sup> MP102 Isocyanate. Lupranate<sup>®</sup> 5090 Isocyanate has the potential to reduce handling and storage issues associated with field-applied, 2-component urethanes.

### TYPICAL PROPERTIES

Appearance	light yellow liquid
NCO content, wt%	23.0
Viscosity @ 25°C, cps	650
Flash point, °C (COC)	> 200
Density @ 25°C, g/cm <sup>3</sup>	1.19
Initial boiling point, 5mm Hg, °C	190
Nominal functionality	2.1
Vapor Pressure @ 25°C, mm Hg	0.00001



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**U.S.:** [www.basf.us/responsiblecare\\_usa](http://www.basf.us/responsiblecare_usa)

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## STORAGE

Lupranate<sup>®</sup> 5090 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 20-30°C. If stored at higher temperatures, or if moisture is not excluded, an undesirable increase in viscosity will occur. Below 10°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 70 - 100°C. The drum contents should not be heated above 70°C to minimize dimer formation.

## WARNING

Excessive heating or prolonged heating at 70°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 potential danger of the isocyanate reacting with water in case of drum leakage. Rolling the drum in atmospheric steam is an alternative procedure that can be used providing care is taken to ensure that the drum does not leak. The shelf life of Lupranate<sup>®</sup> 5090 Isocyanate is six months if the temperature is maintained at 20-30°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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