Product Information

CM – Monomers Division

TECHNICAL DATA SHEET

Document name:	TDS_Lupranat MP102_10233702
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Product:	**Lupranat® MP 102**
PBG-No.:	10233702
Chemical Name:	Isocyanate component

Chemical nature

Lupranat MP 102 is a modified 4,4'-diphenylmethane diisocyanate (MDI). The average functionality is about 2.05.

Applications

Lupranat MP 102 is principally used for the manufacture of shoe soles. It is also used for flexible and semi-rigid foams as well as for RIM parts.

Delivery

The delivery is by road tankers, in containers containing 1000 l and in non-returnable drums. Transport temperatures should range between 20 °C and 40 °C. If transport time is longer than 4 days, we recommend 20 °C to 30 °C. Temperatures below 20 °C should be avoided.

Typical properties

Appearance: colorless to slightly yellowish clear liquid

Density at 25 °C	1.21	g/cm³	BASANT 1413
NCO-content	23.0	g/100 g	BASANT 7952
Viscosity at 25 °C*	650	mPa·s	BASANT 1334

Storage

Lupranat MP 102 must be protected from moisture. The ideal storage temperature is between 20 °C and 30 °C. Under these conditions and if moisture is excluded, Lupranat MP 102 can be stored for at least six months. Drums must be kept airtight. Storage tanks should be blanketed with dry air or with nitrogen.

Longer storage leads to a lasting increase of viscosity depending on the temperature. In extreme cases a precipitate may form which will not be removed by heating.

Prolonged storage at temperatures below + 20 °C can lead to partial crystallization.

Crystallized material must be melted out immediately by short term heating in a hot air oven. Product temperature must not exceed 60 °C. Local overheating must be avoided, as Lupranat MP 102 will decompose with formation of gas at temperatures above 230 °C. Rolling of the drums in a hot air oven is the recommended method of dissolving the crystals. After melting out, the contents of the drum must be thoroughly mixed.
More detailed information on transport and storage of isocyanates is given in the ISOPA-Guidelines “For Safe Loading / Unloading Transportation Storage of TDI and

MDI in Bulk" and "For the Safe Transportation, Unloading & Storage of Packaged TDI & MDI".

Safety advice and environmental protection

Labelling, transportation, storage, processing, waste treatment and disposal must comply with national regulations.

Occupational exposure limits are to be observed.

Lupranat MP 102 is classified as harmful if inhaled. It causes skin irritation and serious eye irritation. It may cause respiratory irritation. It may cause sensitization by inhalation and skin contact. It is suspected of causing cancer. It may cause damage to organs though prolonged or repeated inhalation exposure.

Before processing the product, we recommend reading the safety data sheet. For further information consult our Technical Information leaflet "Safety and Precautionary Measures for the Processing of Polyurethane Systems".

To avoid accidents, the residual product in the drums must be handled with care. Any water or moisture which is allowed to enter the drum will react with Lupranat MP 102 and release carbon dioxide. Unless action is taken to prevent moisture entry or gas entrapment, the drums will become pressurized and could rupture.

If it is intended to use BASF materials for the manufacture of toys or consumer goods (e. g. products which will come into contact with foodstuffs or with the skin) or medical products, national and international regulations have to be observed. Where no regulations exist, consumer goods or medical products must at least comply with European legislation. We recommend contacting our Sales and our Ecology and Product Safety departments.

Disposal of drums

Residues of MDI remaining in drums must be decomposed. Please contact our local agencies for further information on national disposal regulations.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.