

Technical Data Sheet

Lupranat MM103
Revision 8

Valid from: 01/03/2024
Until: 01/03/2027



Lupranat MM103

Chemical nature

Lupranat MM 103 is a carbodiimide-modified diphenylmethane-4,4-diisocyanate (MDI). The average functionality is about 2.2.

Applications

Lupranat MM 103 is used for the production of flexible polyurethanes such as microcellular elastomers, flexible and semi-rigid foams as well as for compact RIM parts. It is also used for the manufacture of coatings and adhesives.

Typical properties

Appearance:	bright yellow, clear liquid		
NCO-content	29.5	g/100 g	Basant 7952
Acidity as HCl	4	mg/kg	Basant 6788
Viscosity at 25 °C*	40	mPa·s	Basant 1334
Density at 25 °C	1.22	g/cm ³	

Delivery

The delivery is by road tankers, in containers containing 1000 l and in non-returnable drums. Transport temperatures should be between 20 °C and 40 °C. If the material is in transit for more than 4 days, a transport temperature of 20 °C to 30 °C is recommended. Temperatures below 20 °C should be avoided.

Storage

Lupranat MM 103 must be protected from moisture. The ideal storage temperature is 20 °C to 30 °C. Under these conditions and when moisture is excluded, the shelf life of Lupranat MM 103 is at least six months. Drums and IBC's 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

Erstellt	Geprüft	In Kraft gesetzt	Version
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precipitate may form which can not be removed by heating.

Storage for longer periods below + 20 °C can lead to partial crystallisation.

Crystallised material must be melted out immediately by short term (max. 48 hours) heating. The product temperature must not exceed 60 °C. Local overheating must be avoided, as Lupranat MM 103 can possibly react with the formation of gas as consequence.

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

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

Occupational exposure limits are to be observed.

Lupranat MM 103 is classified as harmful if inhaled. It causes skin irritation and serious eye irritation. It may cause respiratory irritation. It may cause sensitisation by inhalation and skin contact.

National regulations for exposure limits and labelling must also be observed. Before processing the product we recommend reading the safety data sheet.

In order 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 MM 103 and release carbon dioxide. Unless action is taken to prevent moisture entry or gas entrapment, the drums will become pressurized and could rupture.

This BASF material may not be used for the manufacture of materials and articles intended to get in contact with food or drinking water.

If it is intended to use BASF materials for the manufacture of medical devices, toys or consumer goods (e.g., products which will come into contact with the skin), please contact your BASF's Sales Manager and Product Stewardship department.

Disposal of drums

Residues of MDI remaining in drums / IBC's must be decomposed. Please contact our local offices for further information on national disposal regulations.

The data contained in this document shall constitute the agreed contractual quality of the product at the time of passing of risk. The data is reviewed at regular intervals as part of our quality assurance programme. Neither this data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or fitness for a specific purpose. No liability may therefore be derived from the data contained herein

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