

Product Information

CM – Monomers Division

TECHNICAL DATA SHEET

Document name: TDS_Lupranat MP105_11009766
Revision: 10 issued: March 13, 2025

Product: **Lupranat® MP 105**
PBG-No.: 11009766
Chemical Name: Isocyanate component

Chemical nature Lupranat MP 105 is a modified 4,4'-diphenylmethane diisocyanate (MDI). The average functionality is about 2.4.

Applications Lupranat MP 105 is used for the manufacture of rigid and flexible integral skin foams. It is also used for the production of coatings, adhesives, and flexible foams.

Delivery The delivery is by road tankers, in containers containing 1.000 l and in non-returnable drums or returnable IBCs.

	container	quantity	temperature
Lupranat MP105	insulated container		10 - 40°C
Lupranat MP105	drum	250 kg	10 - 40°C
Lupranat MP105	IBC	1.200 kg	10 - 40°C

Typical properties Appearance: brown liquid

Density at 25 °C	1.22	g/cm ³	BASANT 1413
NCO-content	28.5	g/100 g	BASANT 7952
Viscosity at 25 °C*	120	mPa·s	BASANT 1334

Storage Lupranat MP 105 must be protected from moisture. The ideal storage temperature is 25 °C. Under these conditions and if moisture is excluded, Lupranat MP 105 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 + 5 °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 105 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.

Product Information

CM – Monomers Division

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.

Lupranat MP 105 is classified as harmful if inhaled. It is irritating to the eyes, respiratory system and skin and may cause sensitization 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 / IBC must be handled with care. Any water or moisture which is allowed to enter the drum will react with Lupranat MP 105 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 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.