

Methylene diphenyl Di-Isocyanate (MDI) Pure MDI



Property	Specification	Analytical Method
Appearance	Liquid: Clear liquid Solid: White to light Yellow	Visual
Purity (Wt. %)	Min. 99.5	2-2.9.3-1059
4,4'-MDI (Wt. %)	Min. 97.0	2-2.9.3-1059
NCO (Wt. %)	Min. 33.2	ASTM D5155-14 Method A
Crystallization Point (°C)	< 38.0	H900-3000
Acidity as HCL (Wt.%)	Max. 0.01	ASTM 5629-11

⇒ The current manufacturing technology of most isocyanates is based on the phosgenation of primary amines.

■ Application areas

KM-100 is commonly used to manufacture:

- ✓ Shoe soles – used to produce prepolymers for shoe soles
- ✓ Elastomers – used to produce adhesives, films and linings, and abrasive wheels and other mechanical items that require abrasion and solvent resistance
- ✓ Urethane sealants – used in construction applications
- ✓ Cast elastomers – for production of articles such as roller blade wheels
- ✓ Flexible foams – used for the fabrication of bedding, furniture, automotive seating, flexible packaging and carpet underlay; this is the largest market application for MDI
- ✓ "Foamed-in-place" polyurethane plastics – ranging from soft and sponge-like to hard and porous for use in furniture, packaging, insulation and boat building
- ✓ Polyurethane coatings – used on leather, wire, tank linings and masonry

■ Handling and storage conditions

Use only with adequate ventilation. Do not eat, drink, or smoke in working area. Never use welding/cutting torch near storage containers, even if empty, because even residual product can ignite explosively. Product must be stored as a liquid at 41°C to 45°C under a dry nitrogen blanket or as a

Temperature (°C)	-18	-12	-5	10-35	41-45	>50
Storage Life Days	300	200	70	note *	30	note *

solid below -15 °C, better below -18°C. For more information see table below.

* Dimer formation increases significantly in these temperature ranges. So recommended to avoid these conditions.

■ Packing details

In 220 lit (225 kg Net.) new steel drum, each 4 drums strapped on a wooden pallet.

■ Licensor: Chematur Engineering (CEAB), Sweden.