



Chemind
HI-TEC POLYMERS

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Product Data Sheet

CHEMIND ISO™ 10-100

Crude MDI

Product Description

CHEMIND ISO™ 10-100 is a dark brown liquid mixture of diphenylmethane-4,4'-diisocyanate (MDI) with isomers and homologues of higher functionality.

Applications

CHEMIND ISO™ 10-100 forms the Part B isocyanate component of many Chemind Hi-Tec Polymers rigid, flexible, and integral skin foam systems.

Quality Assurance

Each batch of **CHEMIND ISO™ 10-100** is manufactured in accordance with company QA policy and should comply with the reactivity data shown below. It is however, equally important that the user verifies such specification and uses the product with due care and with full regard to the product safety requirements.

Typical Product Data

Data @ 22°C Component Temperature.

NCO Content	31±1	%
Viscosity	220±70	mPa.s
Specific Gravity	1.23±0.02	g/ml
Acidity	Approx. 500	ppm HCl

Clean Up

It is important to clean up any leakage or spillage of polyurethane as quickly as possible, before hardening occurs. Chemind GP Solvent, Xylene, MEK & Acetone are suitable for general cleaning.

Use adequate safety equipment to prevent eye and skin contamination, such as safety glasses and impervious (butyl rubber) gloves.

Fully cured isocyanate or polyurethane residue can be completely removed using Chemind NMP Cleaner. This material will dissolve the residue. However, it will also dissolve many other polymers it contacts such as neoprene and viton O-rings, fibre packing etc. This necessitates dismantling of the item to be cleaned and removal of any non-metal components before immersion in heated Chemind NMP Cleaner. Fluorocarbon polymers such as Teflon are impervious and can be immersed if required.

Impervious gloves (butyl rubber) and safety goggles should be worn at all times when handling Chemind NMP Cleaner.

A satisfactory method for heating and using the Chemind NMP Cleaner is to heat the cleaner in a stainless steel or porcelain coated, thermostatically controlled, "chip fryer". The thermostat should be set to a temperature of between 80°C and a maximum of 110°C. Immerse the component in the heated cleaner and allow it to soak for 10 minutes. Remove the component and wipe off any partially dissolved residue. Repeat the operation until the component is clean. Avoid scraping off softened residue, as damage to the component may result. Under no circumstances should any orifices in the component (i.e. impinger nozzles) be cleaned using a wire, as distortion of the orifice will result, affecting the future performance of the dispensing equipment.

Storage

Part B - Isocyanate Component (CHEMIND ISO™ 10-100 Crude MDI)

This component should be stored under cover at temperatures ranging between 15°C and 25°C.

Under these storage conditions, this material will have a shelf life of approximately 6 months.

Storage temperatures below 10°C and above 30°C should be avoided. Exposure to low temperatures can lead to crystallisation of the material. The crystals can cause hose or machinery filter blockages, resulting in "off-ratio" polyurethane production. Exposure to high temperatures can cause partial polymerisation/dimerisation and thickening of the material.

As the isocyanate component will react with atmospheric moisture (forming solid particles which can interrupt dispensing equipment operation), partially used drums must be tightly sealed when not in use.

Water contamination of this material must be avoided. Any water present on the drum rim must be wiped away completely before removing the drum bung. This component will react with water to produce carbon dioxide gas. As a result, drums should be sealed from the atmosphere before, during and after use. Isocyanate drums suspected of being contaminated with water should not be sealed, as a potentially dangerous internal pressure build up can occur, leading to possible drum rupture.

Handling Precautions

Refer to M.S.D.S. (Material Safety Data Sheets) for **CHEMIND ISO™ 10-100**.

Operators must have full awareness of the Material Safety requirements before any work is undertaken.

CHEMIND ISO™ 10-100 isocyanate contains diphenylmethane-4,4'-diisocyanate (MDI). It is an irritant and allergic sensitiser of moderate toxicity. Avoid contact with skin or eyes. Avoid breathing vapour and use only in well-ventilated areas.

This component will react with water to produce carbon dioxide gas. Isocyanate drums suspected of being contaminated with water should not be sealed as an internal pressure build up may occur, which could lead to drum rupture.

Impervious gloves (butyl rubber), safety goggles or full-face shield, coveralls and chemical resistant safety boots should be worn when using this product.

Packing

CHEMIND ISO™ 10-100

20 Kg & 250 Kg steel drums, 1200 Kg IBC

Product Risk

The **CHEMIND ISO™ 10-100** is not intended for use by other than experienced operators. The data herein requires experience and knowledge to attain correct interpretation and outcome. The user must undertake all relevant tests to determine the suitability for the intended application, as such determination of fitness of purpose for product use, is the sole responsibility of the purchaser.

Statements made in this bulletin are for the assistance of our customers. They are based on our experience and judgement but must not be regarded as amounting to a legal warranty or as involving any liability on our part.