



# Product Data Sheet I-BOND<sup>®</sup> MDF PM 4390

I-BOND<sup>®</sup> MDF PM 4390 is a standard functionality polymeric diphenyl methane diisocyanate (MDI).

## APPLICATION

I-BOND<sup>®</sup> MDF PM 4390 was developed specifically for use in the production of Fibreboard (MDF) / (HDF) to be used as a standard resin in face and/or core layer, or in hybrid systems in combination with (M)UF resins.

For more information about this product, please contact the nearest Huntsman technical centre or contact us at www.ibondwood.com.

## TYPICAL PROPERTIES

| Property                 | Value                 | Unit  | Method   |
|--------------------------|-----------------------|-------|----------|
| Appearance               | brownish clear liquid |       |          |
| NCO value                | 30.75                 | %     | PU/IV-1  |
| Viscosity (25 °C)        | 225                   | mPa.s | PU/VIS-1 |
| Acidity                  | 115                   | ppm   | PU/AC-1  |
| Hydrolysable chlorine    | <= 2000               | ppm   | PU/HC-1  |
| Specific gravity (25 °C) | 1.23                  |       | PU/SPG-1 |

### STORAGE AND HANDLING

Containers of I-BOND<sup>®</sup> MDF PM 4390 should be kept properly closed and stored indoors in a well-ventilated area under normal factory conditions. Storage at temperatures ranging from 20 - 30 °C provides a convenient viscosity for handling. Storage at low temperature is not recommended because it may lead to some crystallisation; this material must therefore be protected from frost. Storage at temperatures above 50°C is not recommended, since this can lead to the formation of insoluble solids and also the viscosity build-up increases on extended storage. Under the recommended storage conditions and if protected from humidity and contaminants, i.e. in properly sealed drums, cans, etc., I-BOND<sup>®</sup> MDF PM 4390 has a storage life of 6 months at the customer.

In case of storage in bulk containers, please contact our Sales Representative for further details. Detailed information on how to obtain optimum bulk storage conditions, is available in the ISOPA document Guidelines for Safe Loading/ Unloading, Transportation & Storage of TDI and MDI. Reaction with atmospheric moisture, is prevented by storing I-BOND<sup>®</sup> MDF PM 4390 in carefully sealed containers under a dry air atmosphere.

During handling, the product must be protected from water ingress and from atmospheric moisture. Containers should be re-sealed immediately after each sampling. The reaction of isocyanates with water leads to the formation of



insoluble urea's and carbon dioxide gas, which can lead to pressure build-up in closed containers. Containers used for I-BOND® MDF PM 4390 must therefore be absolutely dry. The precautions necessary when handling I-BOND® MDF PM 4390, i.e., MDI, and the decontamination procedures recommended to be used in case of spillage, are described fully in the publication PU 193-1E; MDI-based compositions: Hazards and safe-handling procedures.

#### **HEALTH AND SAFETY**

The appropriate health and safety advice can be found in the safety data sheet for I-BOND® MDF PM 4390 available on request. The applicable Safety Data Sheet should be reviewed by customer before handling the Huntsman product. All users of I-BOND® MDF PM 4390 are advised to read the publication PU 193-1E; MDI-based compositions: Hazards and safe-handling procedures.

For further information, please contact your nearest sales office: <u>http://www.huntsman.com/PU\_customer\_service</u>

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