

Product description

Aliphatic polyisocyanate (HDI biuret). As the hardener component for lightfast polyurethane coating systems.

Applications

Desmodur® N 75 MPA/X is used primarily as the hardener component for lightfast two-component polyurethane coatings with high resistance to chemicals and weathering, very good gloss retention and outstanding mechanical properties. Preferred co-reactants are polyacrylate or polyester polyols. The main applications for systems based on Desmodur® N 75 MPA/X are as air- and force-drying coatings for automotive and industrial finishing, for wood, furniture and plastics and for corrosion protection.

Form supplied

approx. 75 % in 1-methoxypropylacetate-2/xylene, 1 : 1

Specification

Property	Test Condition	Value	Unit	Standard
NCO content		16.5 ± 0.3	%	M105-ISO 11909
Non-volatile content	2.2 g / 120 min / 100 °C	75 ± 1	%	M020-ISO 3251
Viscosity	at 23 °C	250 ± 75	mPa*s	M014-ISO 3219/A.3
Color value (Hazen)		≤ 40		M017-EN 1557
Monomeric HDI		< 0.38	%	M106-ISO 10283

Typical Values

Property	Test Condition	Value	Unit	Standard
Viscosity	at 25 °C	approx. 150	mPa*s	M014-ISO 3219/A.3
Equivalent weight		approx. 255		
Flash point		approx. 38	°C	DIN 53 213/1
Density at 20 °C		approx. 1.07	g/ml	DIN EN ISO 2811

Solubility / thinnability

Desmodur® N 75 MPA/X can be thinned with esters, ketones and aromatic hydrocarbons such as ethyl acetate, butyl acetate, methoxypropylacetate, acetone, methyl ethyl ketone, methyl isobutyl ketone, cyclohexanone, toluene, xylene, solvent naphtha® 100 and mixtures thereof. Generally speaking, it has good compatibility with the solvents listed. However, the solutions formed must be tested for their storage stability. Only PU grade solvents should be used (max. 0.05 % water, absence of reactive groups such as hydroxyl or amino groups). Aliphatic hydrocarbons are unsuitable as solvents. Desmodur® N 75 MPA/X should not be thinned to below a solids content of 40 %. Prolonged storage of a solution with a lower binder content may result in turbidity and sedimentation.



Compatibility

Generally speaking, Desmodur[®] N 75 MPA/X can be mixed with the following products: aliphatic polyisocyanates such as Desmodur[®] N 3200, ultra N 3300, N 3400, ultra N 3600 and Desmodur[®] ultra Z 4470; aromatic polyisocyanates such as Desmodur[®] L/ultra L, HL and IL/ultra IL; polyester polyols such as Desmophen[®] 651, 670 and polyacrylates; polyether polyols such as Desmophen[®] 1380 BT. However, the compatibility of the combinations used should always be tested.

Storage

Storage in original sealed Covestro container.
Recommended storage temperature: 0 - 30 °C.
Protect from moisture, heat and foreign material.

General information: The product is sensitive to moisture. Storage at higher temperatures will result in increase of color and viscosity.

Storage time

Covestro represents that, for a period of nine months following the day of shipment as stated in the respective transport documents, the product will meet the specifications or values set forth in section "specifications or characteristic data" above, what ever is applicable, provided that the product is stored in full compliance with the storage conditions set forth in and referenced under section "storage" above and is otherwise handled appropriately. The lapse of the nine months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, Covestro recommends to test such a product if it still meets the specifications or the set values. Covestro does not make any representation regarding the product after the lapse of the nine months period and Covestro shall not be responsible or liable in any way for the product failing to meet specifications or the set values after the lapse of the nine months period.

Health and Safety Information

Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. Information is available in several forms, e.g., in particular in the currently valid safety data sheets and product labels. For further information contact your Covestro representative.

[The Product Safety First Program | Covestro](#)

Disclaimer

General

The manner in which you use our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products to determine suitability for your processing and intended uses. Your analysis must at least include testing to determine suitability from a technical, health, safety, and environmental and regulatory standpoint. Such testing has not necessarily been done by Covestro, and Covestro has not obtained any approvals or licenses for a particular use or application of the product.

Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request.



All information and including technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed by you that you assume and hereby expressly release indemnify us and hold us harmless from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

Non Medical and non Food Contact

This product is not designated for the manufacture of a medical device or of intermediate products for medical devices (1). This product is also not designated for other specifically regulated applications (e.g. including cosmetics, plant protection, fertilisers, plant strengtheners, food processing, food contact and others). If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices or for other specifically regulated applications Covestro must be contacted in advance to provide its agreement to sell such product for such purpose. Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or cosmetic applications must be made solely by the purchaser of the product without relying upon any representations by Covestro.

1) Please see the [Guidance on Use of Covestro Products in a Medical Application](#) document.

Sample

Any samples provided by Covestro are for testing purposes only and not for commercial use.

Typical value

These values are typical values only. Unless explicitly agreed in written form, they do not constitute a binding material specification or warranted values

Contact

Please use our [contact form](#) or contact us directly by sending an e-mail to technical-datasheets@cx.covestro.com .
