

HDI Low Viscosity Covestro N3600

Characterization :

Aliphatic polyisocyanate (low-viscosity HDI trimer).

Use as the hardener component for flexible, lightfast polyurethane coating systems.

Specification:

Property	Value	Unit of measurement	Method
NCO content	$23.0 \pm 0.5 \%$	%	M105-ISO 11909
Viscosity at 23 ° C	$1,200 \pm 300$	mPa • s	M014-ISO 3219 /A.3
Color value (Hazen)	≤ 40		M017-EN 1557
Monomeric HDI	≤ 0.25	%	M106-ISO 10283

Other data*:

Property	Value	Unit of measurement	Method
Viscosity at 25 ° C	approx. 1,100	mPa • s	M014-ISO 3219 /A.3
Equivalent weight	approx. 183		
Flash point	approx. 158	° C	DIN 53 213/1
Density at 20 ° C	approx. 1.16	g/ml	DIN EN ISO 2811

Solubility / thinnability :

Desmodur® N 3600 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 3600 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 3600 can be mixed with the following products: Aliphatic polyisocyanates such as Desmodur®N 100, N 75, N 3200, ultra N 3300, N 3400 and Desmodur®Z 4470; aromatic polyisocyanates such as Desmodur® L/ultra L, HL and IL/ultra IL; polyester polyols such as Desmophen® 670 and polyacrylates. However, the compatibility of the combinations used should always be tested.

Desmodur® N 3600 is not compatible with branched polyester polyols such as Desmophen®651 or polyether polyols such as Desmophen® 1380 BT.

Properties / Applications:

Desmodur® N 3600 is used primarily as the hardener component f

or 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 3600 are air- and force-drying coatings for automotive OEM, automotive refinishing, transportation, industrial finishing and plastics.

On account of its low viscosity, Desmodur®N 3600 is particularly suitable for the formulation of high-solids coatings and can also be used as the hardener for aqueous two-component polyurethane coatings.

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 at significant lower temperatures will result in solidification. This solidification is reversible by briefly heating the product without adversely affecting the quality of the product.

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, whatever 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.

E_mail us : info@allhdi.com