

HYPERDESMO[®]-POLYUREA-2K-HC

Two-Component, Sprayable, Hot-Cure Polyurea for Waterproofing & Protection.

DESCRIPTION

HYPERDESMO[®]-POLYUREA-2K-HC is a two-component polyurea system, composed of 100% solids, for application by plural component spraying equipment.

It is highly elastic and has a polymerization profile specially formulated for enhanced adhesion. It is highly recommended for commercial and industrial applications which require high levels of abrasion resistance and impact strength.

Minimum total consumption: 1.5-2.0 kg/m².



In the case of dark colours in direct UV exposure, a protective topcoat of HYPERDESMO[®]-T or HYPERDESMO[®]-ADY-2K is required.

RECOMMENDED FOR

Sealing of cementitious surfaces.

Waterproofing and protection of:

- PU and polystyrene insulation foam,
- floors,
- roofs,
- pipes,
- tanks.

LIMITATIONS

Not recommended for:

- unsound substrates.



In the case of dark colours in direct UV

exposure, a protective topcoat of HYPERDESMO[®]-T or HYPERDESMO[®]-ADY-2K is required.

FEATURES & BENEFITS

- Quick curing - gel time 30 sec (unaffected by humidity and weather).
- Bubble and defect free membrane.
- 100% solids, of which, more than 85% urea groups.
- No plasticizers.
- No heavy metal toxic catalysts.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 350 °C.
- Resistance in the cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties: High tensile and tear strength, high abrasion resistance.
- Good chemical resistance.
- Moisture vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Special primers available for almost every substrate.

APPLICATION PREREQUISITES

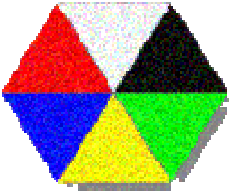
Concrete substrate conditions (standard):

- Hardness: R₂₈ = 15Mpa.
- Humidity: W < 10%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

Primer selection for special conditions and substrates:

- Humid substrate: AQUADUR or UNIVERSAL PRIMER-2K-4060.





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- Substrate with high porosity: PRIMER-PU.
- Humid substrate with high porosity: AQUADUR or UNIVERSAL PRIMER-2K-4060.
- Negative pressure or rising humidity (tanks): AQUADUR.



When using UNIVERSAL PRIMER-2K-4060 on non-porous concrete substrates, it is recommended that the primer be thinned with 5-10 % SOLVENT-01 prior to use.

APPLICATION PROCEDURE

Clean the surface using a high pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed. Fill surface irregularities with the necessary product.

Priming:

Apply the required primer following the guidelines above.

Application:

Drums of components should be heated to 25° C

prior to mixing or dispensing. Please contact our technical department for information on setting up plural component dispensing machines. Do not walk on membrane for 24 hours after application.

CONSUMPTION

Minimum total consumption: **1.5-2.0 kg/m²**.

CLEANING

Cured polyurea is very difficult to remove. Spillages should be kept to a minimum and cleaned up immediately. A special solvent is available for cleaning and flushing of the lines.

PACKAGING

200 kg drums.

SHELF LIFE

Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of 5-25 °C.

SAFETY INFORMATION

The MSDS (Material Safety Data Sheet) is available on request.

TECHNICAL SPECIFICATIONS

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION	
			COMP. A	COMP. B
Viscosity (BROOKFIELD)	cP	ASTM D2196-86, @ 25 °C	1,000	1,500
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	1.04	1.10
			Cured membrane: ~1.00	
Gel time	sec	-	20-30	





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Cure time	hours	-	24
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The cured membrane:

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	350
Hardness	Shore A Shore D	ASTM D2240 / DIN 53505 / ISO R868	90 40
Tensile strength at break @ 23 °C	(N/mm ²)	ASTM D412 / DIN 52455	15
Percent elongation @ 23 °C	%	ASTM D412 / DIN 52455	> 400
Tear propagation resistance	[N/mm]	-	4.5
Water vapour transmission	gr/m ² .hr	ASTM E96 (Water Method)	0.8

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