

GRADASEAL POLYUREA HB 2K
Flexible, Aromatic, 2 Component Hybrid
Spray Polyurea

Product Technical Document
Issue: 21.10.2018
Revised:

DESCRIPTION

POLYUREA HB 2K is a fast setting, rapid curing, 100% solids, flexible, aromatic, polyurea , two component, hybrid spray polyurea that can be applied to suitably prepared concrete, fiberglass and metal surfaces. It is suitable to apply truck bed surfaces.

TYPICAL USES

- Cargo Linings
- Boat Linings
- Waterproof Decking
- Industrial Flooring
- Containment Areas
- Truck Bed Surfaces
- Fiberglass Coating

EATURES

- Zero VOC (100% Solids)
- Abrasion and impact resistance
- Quick drying
- Excellent Thermal Stability
- Low Temperature Flexibility
- Good Chemical Resistance
- Coats Carbon or Mild Steel Metals without Primer
- Seamless
- Odorless

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MIXING

POLYUREA HB 2K may not be diluted under any circumstances. Thoroughly mix POLYUREA HB 2K Part-A (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 25°C before application. Recommended surface temperature must be at least 15°C above the dew point. POLYUREA HB 2K should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used. Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 60°C-65 °C. Adequate pressure and temperature should be maintained at all times.

Table.¹ Technical data of the POLYUREA HB 2K

Mix Ratio By Volume	1A:1B
Pot Life @66 °C	3-6 sec
Tack free time (depend on thickness and substrate)	20-40 sec
Recoat time	0-6 sec
Density (side A&B combined)	8,80 lb/gal
Viscosity @ 150-160 °F (66,5-71 °C)	
Part A	120 ± 20 cps
Part B	100 ± 20 cps
Hardness, ASTM D-2240	50 ± 3 D
Tensile, ASTM D-412	3500±100 psi
Tear, ASTM D-412	455±50 pli
Elongation-ASTM D-412	350%-50%
Water Vapor Permeability, ASTM E-96	0,390 perm-inch
Service Temperature- Dry	-20 °F to 250 °F
Service Temperature-Wet	-40 °F to 120 °F
VOC content	0 gm/lit
Return to Service (Foot traffic)	1-4 hours
Return to Service (Vehicle traffic)	>24 hours
Recommended Applied Thickness	>2mm
Taber Abrasion Resistance (ASTM D4060)	6 mg loss
Water absorption (ASTM D 471, 23 °C, 24 hours)	< 0,5 % loss

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Pull off-strength (minimum) ASTM D4541: Inter Coat Adhesion (within recoat time) Concrete (Shot Blasted,) substrate failure occurred Concrete (primed) substrate failure occurred Steel (80 um blasted)	Excellent >550 psi >550 psi >950 psi
Lineal Shrinkage	1-2%
Weather test (Type QUV Weatherometer-3000 hrs exposure)	No cracking. Color change, gloss reduction and chalking are observed.
Flash Point	>200 °F

(1) These physical properties are obtained with Graco Foam Cat 200 at 2000 psi, with Gusmer GX7-400 mechanical purge gun at 71 °C. Different machine and parameters will change these properties.

STORAGE

POLYUREA HB 2K has a shelf life of 6 months from date of manufacture, in factory-sealed containers. Part-A and Part-B drums are recommended to be stored above 15°C. Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground. If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use. Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and curative material.

[QUALITY INSURANCE MANAGEMENT – ISO 9001]
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[QUALITY INSURANCE MANAGEMENT – OHSAS 18001]