

PRODUCT DESCRIPTION

Polyflex 311 is a high-performance general purpose Polyurea membrane. It is designed for general industrial application where abrasion resistance and waterproofing is needed.

PRODUCT FEATURES

- Protective membrane on metal, masonry, wooden reservoirs, silos and many kinds of pipes and stone slabs
- Can be used to repair or replace existing membrane
- Application on geo textile to form ponds, to retain overflow, prevent effluent leakage, water and petroleum product leakage.
- Excellent resistance to the calorific impact

TYPICAL USES

- Excellent for garage and parking decks
- Can be used for truck bed liners
- Mining industries
- Can be used to repair or replace an existing membrane
- Pipe applications (exterior)

TECHNICAL DATA

Color:	Available in several colors	Flash Point:	> 149°C (300.2°F)
Type of Cure:	2 components	V.O.C.:	None
Binder:	Polyurea	<u>Drying times:</u>	
Solids by volume:	100 %	Gel Time:	10 - 15 seconds
Solids by Weight:	100 %	Tack Free:	20 – 30 seconds
Theoretical Coverage of 1 mil:	1604 ft ² / US gallon	To recoat:	12 hours
D.F.T. at 25 microns:	149 m ² / 3.78 litres	Hard:	8 hours
Recommended D.F.T.	30 - 100 750 - 2500	Catalyst:	301C
Resin viscosity:	1100 CPS @ 25°C (77°F)	Ratio:	1:1
Isocyanate viscosity:	600 CPS @ 25°C (77°F)	Shelf life:	1 year
		Packaging:	18.93 litres (5 US gallons) 205 litres (55 US gallons)

Keep in cool and dry area
*revised on March 28, 2011

APPLICATION GUIDE

SURFACE PREPARATION

*See Polyval's Polyurea Application Guide

CLEANING INSTRUCTIONS

Cleaning agent: Toluene, Xylene, MEK. To reduce the risk of fire, use glycol ether acetate or any environmentally friendly chlorinated solvent

APPLICATION PROCESS

Plural component heated pump. In order to obtain the optimum results outlined below system must be capable of applying at a pressure greater than 2,500 PSI at a temperature of 70°C (160°F). Before application, the receiving coat surface must be cleaned of dirt, soluble salts, dust, oils grease, chalking, and contaminants. Normal preparation includes vacuum, blow-off, SSPC-SP-1 "solvent cleaning," or water-wash containing salt solubilizing agents. This product is normally applied over previously primed surfaces. For more details on the surface preparation of the primer, see that specific data sheet. Scuff sanding is required before recoating. Clean in accordance with SSPC-SP-1 "Solvent cleaning" before recoating.

Take care to ensure that proper film thickness is achieved. For more information, consult the Steel Structures Painting Council (SSPC) publication, Good Painting Practice.

PHYSICAL PROPERTIES

Properties under tension:

(ASTM D 412-C) Ultimate Elongation = 370 %
 (ASTM D 412-C) Tensile Strength = 13.79N/mm² (2000 PSI)

Resistance to tearing:

(ASTM D 624-C) Tear strength = 63.9 N/mm (365 PLI)

Impact resistance:

(ASTM D 2794) Direct @ 77°F (25°C): > 160 in-lb (>18 joules)
 Reverse @ 77°F (25°C): > 160 in-lb (>18 joules)
 Direct @ -4°F (-20°C): > 160 in-lb (>18 joules)
 Reverse @ -4°F (-20°C): > 160 in-lb (>18 joules)

Indication of hardness:

(ASTM D 2240) 45 Shore D

Mandrel Bend test: (ASTM D-522)

Pass at -45°C (-49°F)
 (Mandrel ¼ "in.)

Taber abrasion resistance:

(ASTM D-4060)
 1000 cycles, 1000g load

Abrasion wheel type	Average weight loss
CS - 10	N.D.
CS - 17	22.9 mg
H - 18	N.D.

See the material safety data sheet and product label for complete safety and precaution requirements.

DISCLAIMER:

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice. Consult your representative for a current data sheet. The foregoing may not be altered except by an agreement signed by the officers of the manufacturer."

Chemical resistance information is currently being updated according to ASTM standards Please contact your local representative for an update.