



DESCRIPTION

Polyflex 401 is a high performance, aromatic polyurea membrane. It provides excellent abrasion and shock absorbing characteristics and can be used in a great variety of climatic conditions while continuing to offer excellent durability. Provides excellent protection especially when service conditions require flexibility and protection in cold and below freezing temperatures. Used in numerous high demand situations including: material handling equipment, containment applications, gravel guards and roofing applications.

PRODUCT FEATURES

- Outstanding impact resistance
- Excellent flexibility under extreme cold temperatures
- Provides an excellent waterproof protection on rigid urethane insulation
- Protective membrane on metal, masonry, wooden reservoirs, silos and many kinds of pipes and stone slabs
- Application on geotextile to form ponds, to retain overflow, prevent effluent leakage, water and petroleum product leakage.
- Repair or replace existing membranes
- Excellent abrasion resistance
- Rubberized membrane with excellent elongation

RECOMMENDED USES

- Excellent for garage and parking decks
- Can be used for truck bed liners
- Containment and secondary containment floors
- Material handling equipment
- Gravel guard application
- Can be used to repair or replace an existing membrane
- Roofing applications
- Pulp and paper mills
- Pipes

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	Drying times:	
Solids by volume:	100 %	Gel Time:	20 seconds
Solids by Weight:	100 %	Tack Free:	10 minutes
Theoretical Coverage of 1 mil:	1604 ft ² / US gallon	To recoat:	12 hours
D.F.T. at 25 microns:	149m ² / 3.78 litres	Hard:	8 hours
Recommended D.F.T.	30 - 100 mils	Catalyst:	401C
	750 –2500 microns	Ratio:	1:1
Resin viscosity:	900 CPS @ 25°C (77°F)	Shelf life:	1 year
Isocyanate viscosity:	600 CPS @ 25°C (77°F)	Packaging:	18.93 litres (5 US gallons) 205 litres (55 US gallons)

Revised 3/7/2013

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 enviro-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)

(ASTM D 412-C)

Ultimate Elongation = 900 %
 Tensile Strength = 10.35N/mm² (1500 PSI)

Resistance to tearing:

(ASTM D 624-C)

Tear strength = 42.1 N/mm (240 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)

75 Shore A

Dielectric strength:

(ASTM D-149-97a)

Not Available

Mandrel Bend test:

(ASTM D-522)

Pass at -45°C (-49°F)

Taber abrasion resistance:

(ASTM D-4060)

1000 cycles, 1000g load

Abrasion wheel type	Average weight loss
CS - 17	5.0 mg
H - 18	318 mg

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." © Polyval Coatings Inc. Polyflex and Polyval are registered trademarks of Polyval Coatings Inc. All Rights Reserved.

Keep in cool and dry area. See the material safety data sheet and product label for complete safety and precaution requirements.

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