

PRODUCT DESCRIPTION

Polyflex 202 is a high-performance Polyurea membrane with high chemical resistance. Polyflex has both high hardness and good flexibility to provide long term durability. It is specially designed for constant immersion in petroleum products.

PRODUCT FEATURES

- Especially appropriate to waterproof surfaces or tanks containing chemical or petroleum products.
- Chemical resistant primary containment
- Chemical resistant secondary containment
- Provides an excellent waterproof protection on steel and other substrates
- Good anti-corrosive protection for steel
- Can be used to repair or replace an existing membrane
- Application on geo textile to form ponds, to retain overflow, prevent water and petroleum product linkage
- Provides better flexibility than epoxy linings

TYPICAL USES

- Containment and lining for Petrochemical Cargo
- Refineries
- Chemical processing facilities
- Water and waste water treatment facilities
- Pulp and paper mills
- Steel and concrete tanks
- Food processing facilities
- Concrete and steel structures
- Floors in severe chemical service
- 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	<u>Drying times:</u>	
Solids by volume:	100 %	Gel Time:	5 - 10 seconds
Solids by Weight:	100 %	Tack Free:	15 - 20 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 mils	Catalyst:	202C
	750 - 2500 microns	Ratio:	1:1
Resin viscosity:	950 CPS @ 25°C (77°F)	Shelf life:	1 year
Isocyanate viscosity:	1000 CPS @ 25°C (77°F)	Packaging:	18.93 litres (5 US gallons) 205 litres (55 US gallons)

Keep in cool and dry area
*revised on September 15,
2009

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 = 240 %
 (ASTM D 412-C) Tensile Strength = 20.7 N/mm² (3000PSI)

Resistance to tearing:

(ASTM D 624-C) Tear strength = 105 N/mm (600 PLI)

Indication of hardness:

(ASTM D 2240) 55 – 60 Shore D

Dielectric strength:

(ASTM D-149-97a) = 17.6 KV/mm (447 V/mil)

Taber abrasion resistance:

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

Abrasion wheel type	Average weight loss
CS - 17	22.4 mg
H - 18	181.0 mg

Chemical Resistance	ASTM D-1308 (72 hours)* secondary containment		ASTM D – 543 Immersion at 23°C (73.4°F) *		
Acetone	C	Hydrofluoric acid 20 %	R	Crude Oil	R
Ammonium Hydroxide 26 BE	R	Kerosene	R	Diesel	R
Caustic Potash (koh)	R	Methanol	C	Gasoline	C
Citric Acid 25 %	R	Methyl Ethyl Ketone	C	Kerosene	R
Crude Oil	R	Nitric acid 25 %	NR	Mazout	R
Diesel	R	Sulfuric acid 25 %	R	Xylene	NR
Ethyl acetate	C	Sulfuric acid 50 %	C		
Hydrochloric acid 20 %	R	Xylene	C		
R = Recommended				R = Recommended	
C = Conditional, slight color or gloss change				C = Conditional	
NR = Not Recommended				NR = Not recommended	

*This guide is for general information only. For further information, consult your Polyval representative

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.