

POLYFLEX 202

HI-CHEM

DESCRIPTION

Polyflex 202 is a high-performance Polyurea membrane with superior chemical resistance properties. With both high hardness and good flexibility, it provides long-term durability. Polyflex 202 is specially engineered for constant immersion in petroleum products.

FEATURES

- Especially appropriate for waterproofing surfaces and 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 leakage
- Provides better flexibility than epoxy linings

RECOMMENDED USES

- Containment and lining for Petrochemical Cargo
- Refineries
- Chemical processing facilities
- Water and wastewater 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.: 0

Binder: Polyurea **Drying times:**

950 CPS @ 25°C (77°F)

Solids by volume: 100 % **Gel Time:** 5 - 10 seconds Tack Free: 15 - 20 seconds Solids by Weight: 100 %

Theoretical Coverage of 1 mil: 1604 ft² / US gallon To recoat: 12 hours D.F.T. at 25 microns: 149 m² / 3.78 litres Hard: 8 hours Recommended D.F.T.: 30 - 100 mils 202C Catalyst:

> 750 - 2500 microns Ratio: 1:1 Shelf life:

Isocyanate viscosity: 1000 CPS @ 25°C (77°F) Packaging: 18.93 litres (5 U.S. gallons)

205 litres (55 U.S. gallons)

1 year

Revised 6/5/2013



Resin viscosity:



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APPLICATION GUIDE

SURFACE PREPARATION: See Polyval's Polyurea Application Guide

CLEANING INSTRUCTIONS: Cleaning agent: Tolulene, 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:

Indication of hardness:

(ASTM D 412-C) (ASTM D 412-C)

Ultimate Elongation = 240 % Tensile Strength = 20.7 N/mm² (3000PSI)

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Resistance to tearing:

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

Dielectric strength:

(ASTM D 2240)

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

55 - 60 Shore D

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	С	Hydrofluoric acid 20 %	R	Crude Oil	R
Ammonium Hydroxide 26 BE	R	Kerosene	R	Diesel	R
Caustic Potash (KOH)	R	Methanol	С	Gasoline	С
Citric Acid 25 %	R	Methyl Ethyl Ketone	С	Kerosene	R
Crude Oil	R	Nitric acid 25 %	NR	Mazout	R
Diesel	R	Sulfuric acid 25 %	R	Xylene	NR
Ethyl acetate	С	Sulfuric acid 50 %	С		
Hydrochloric acid 20 %	R	Xylene	С		
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.

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.

