

PRODUCT DESCRIPTION

Polyflex PW is a **NSF61** listed high performance Polyurea coating/lining for both steel and concrete tanks. Polyflex PW offers superior service life in a variety of climatic conditions for potable water.

PRODUCT FEATURES

- Specially designed for piping and tanks which contain potable, fresh and salt water.
- Superior anti-corrosive protection for steel
- Protective membrane on metal, masonry, wooden reservoirs, silos and many kinds of pipes and stone slabs
- Results in a smooth seamless membrane and aesthetic surface
- 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.
- Approved by **NSF61**
- Back to service after 24 hours
- No Voc's and low odor



Certified to
ANSI/NSF 61

TYPICAL USES

- Potable water tank linings
- Water and waste water treatment plants
- Food processing Facilities
- Pulp and paper mills
- Corrosion protection for steel
- Chemical Processing Facilities
- Pipes

TECHNICAL DATA

| | | | |
|---------------------------------------|----------------------------------|-------------------------|---|
| Color: | Beige | 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: | 5 - 10 seconds |
| Solids by Weight: | 100 % | Tack Free: | 15 - 20 seconds |
| Theoretical Coverage of 1 mil: | 1604 ft ² / US gallon | To recoat: | 10 seconds to 4 hours |
| D.F.T. at 25 microns: | 149m ² / 3.78 litres | Hard: | 30 minutes |
| Recommended D.F.T. | 30 - 100 mils | Back to service: | 24 hours @ 24°C (75°F) |
| | 750 - 2500 microns | Catalyst: | 915635 |
| Resin viscosity: | 550 CPS @ 25°C (77°F) | Ratio: | 1:1 |
| Isocyanate viscosity: | 500 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 February 12,
2010

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 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 = 400 %
 (ASTM D 412-C) Tensile Strength = 13.6 N/mm² (1972 PSI)

Resistance to tearing:

(ASTM D 624-C) Tear strength = 87.5 N/mm (500 PLI)

Linear Thermal Expansion:

(ASTM E381-00) modified Mean coefficient of Linear Expansion from -30°C to -40°C = 168 µm/m°C

Resistance in compression:

(ASTM D 1621-00) = 2776.6 kPa (10 %)

Flexural Secant Modulus at 2 % strain: (ASTM D790-00)

= 165.4 kN/m

Resistance to interperate:

Conditions (ASTM G-63) No cracking, peeling or loss of integrity after 2000 hours.

Water Permeability:

(NFP D 84-515) 0.0036 perm@1630 micron (65 mils) thick sample

Indication of hardness:

(ASTM D 2240) 90 - 95 Shore A
 47 - 53 Shore D

Dielectric strength:

(ASTM D-149-97a) = 19.3 KV/mm (490 V/mil)

Flexibility at a cold temperature:

(ASTM) D-3111 Conditioned at - 40°C (- 40°F) for 24 hours
 Tested at 23°C (73.4°C) with mandrel ½ inches

Slip resistance:

(ASTM F -1679) Overall average COF: > 0.97

Cold bending:

(ASTM D2136-94) accept

Impact resistance:

(ASTM D746-95) accept

Water Absorption

(ASTMD-471) 24 hours at ambient temperature, 1.5 %

Taber abrasion resistance:

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

| Abrasion wheel type | Average weight loss |
|---------------------|---------------------|
| CS - 10 | 17.0 mg |
| CS - 17 | 23.0 mg |
| H - 18 | 310 mg |

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.