



### DESCRIPTION

**Polyflex PW** is a **NSF61 CERTIFIED** high-performance Polyurea lining for use on both steel and concrete water tanks. Polyflex PW offers superior service life in a variety of climatic conditions for potable water. **RAPID RETURN TO SERVICE.**

### PRODUCT FEATURES

- Specially designed for piping and tanks that 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 & aesthetic surface
- Repair or replace existing membranes
- Application on geotextile to form ponds, to retain overflow, prevent effluent leakage, water and petroleum product leakage.
- Approved by **NSF61**
- Back to service in as little as 24 hours
- NO VOC's and low odor



Certified to  
ANSI/NSF 61

### RECOMMENDED 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
- Pipe linings
- Refineries

### TECHNICAL DATA

<b>Color:</b>	Beige and blue	<b>Flash Point:</b>	> 149°C (300.2°F)
<b>Type of Cure:</b>	2 components	<b>V.O.C.:</b>	None
<b>Binder:</b>	Polyurea	<b>Drying times:</b>	
<b>Solids by volume:</b>	100 %	<b>Gel Time:</b>	5 - 10 seconds
<b>Solids by Weight:</b>	100 %	<b>Tack Free:</b>	15 - 20 seconds
<b>Theoretical Coverage of 1 mil:</b>	1604 ft <sup>2</sup> / US gallon	<b>To recoat:</b>	10 seconds to 4 hours
<b>D.F.T. at 25 microns:</b>	149m <sup>2</sup> / 3.78 litres	<b>Hard:</b>	30 minutes
<b>Recommended D.F.T.</b>	30 - 100 mils	<b>Back to service:</b>	24 hours @ 24°C (75°F)
	750 - 2500 microns	<b>Catalyst:</b>	915635
<b>Resin viscosity:</b>	550 CPS @ 25°C (77°F)	<b>Ratio:</b>	1:1
		<b>Shelf life:</b>	1 year

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 = 400 %  
Tensile Strength = 13.6 N/mm<sup>2</sup> (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 k N/m

**Resistance to interperate:**  
Conditions (ASTM G-63)

No cracking, peeling or loss of integrity after 2000 hrs.

**Water Permeability:**  
(NFP D 84-515)

0.0036 perm@1630 micron (65 mils) thick sample

**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

**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 %

**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.