

Polyflex 201PW

polyurea

WASSER
ADVANCED COATINGS TECHNOLOGY

Product Description

Wasser Polyflex 201 PW is an NSF 61 listed, high performance polyurea coating/lining for steel and concrete tanks. Wasser Polyflex 201 PW offers superior service life in a variety of climatic conditions for potable water or chemical service.

Product Features

- Can be applied over Wasser MCU primer in as little as 4 hours.
- Can be placed back in immersion water service in as little as 24 hours.
- Can be top coated with Wasser MCU or Wasser 102 Rapid Thane Polyaspartic in as little as 1 hour.
- Provides a protective membrane/lining having superior performance properties when compared to market standards when placed in a wide variety of different climatic conditions.
- Excellent for use in geo-textile application.

Area of Use

Substrates

Steel

- Steel
- Concrete
- Ductile Iron
- Geo-textile
- Concrete (CMU)
- Galvanized Metal
- Aluminum / Non-Ferrous Metal

Possible Uses

- Potable Water Tanks
- Water and Waste Water Treatment Facilities
- Chemical Processing Facilities
- Refineries
- Pulp and Paper Mills
- Food Processing Facilities
- Dry Holds/Wet Holds

Ready Reference Information

Color: Several Colors available (Only off-white or blue are certified for NSF 61 service)

Type of cure: 2 component

Resin Type: Polyurea

***Solids by volume:** 100%

***Solids by weight:** 100%

V.O.C. None



Recommended dry film thickness/coat: 30-100 mils (762-2540 µm)

Theoretical Coverage: At 1 mil: 1,604 ft²/gal (25 µm: 39.41m²/l)

Ratio: 1:1 by volume

Catalyst: WP201PWA or 915635 for NSF-61 certification

Pot Life: N/A

DRY TIMES

Gel Time	5-10 seconds
Tack Free	10-30 seconds
Re-coat Maximum¹	12 hours
Hard Dry	8 hours
Immerse	24 hours

¹Scuff sanding required before re-coating with Wasser Polyflex 201 PW outside of this time frame.

Recommended Systems

Used with primers:

Steel: MC-Miozinc 100, MC-Zinc 100, MC-Ferroclad 100 PW

Concrete: MC-Universal 100, MC-CR 100

Compatible Coatings

Can be top-coated in one hour with:

MC-Ferrox A 100
MC-Luster 100
MC-Shieldcoat 100
MC-Antigraffiti 100
Wasser Polyflex 102 Rapid Thane Polyaspartic

**Note: Other systems are available. Contact your Wasser Representative to answer any questions*

Surface Preparation

See Wasser's Polyurea Application Guide

Ver. 20/07/01

Application Information

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 140° - 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 such as MC-Zinc 100, MC-Miozinc 100 or MC-Ferroclad 100 PW, MC-CR 100 or Geo-textile.

Scuff sanding is required before re-coating. Clean in accordance with SSPC-SP-1 "Solvent cleaning" before re-coating.

Take care to ensure that proper film thickness is achieved. For more information, consult the Steel Structures Painting Council (SSPC) publication, Good Painting Practice.

Performance Testing Data

Properties under tension:

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

Resistance to tearing:

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

Linear Thermal Expansion:

(ASTM E-381-00) Mean coefficient of Linear Expansion from modified -30°C to -40°C = 168 µm/m°C

Indication of hardness:

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

Dielectric strength:

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

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"

Resistance in compression:

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

Flexural Secant Modulus at 2 % strain:

(ASTM D-790-00) = 165.4 kN/m

Resistance to imterperate conditions:

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

Water Permeability:

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

Slip resistance:

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

Cold bending:

(ASTM D-2136-94) accept

Impact resistance:

(ASTM D-746-95) accept

Water Absorption:

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

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): 120 in-lb (13.56 joules)
Reverse @ -4°F (-20°C): 100 in-lb (11.35 joules)

Taber abrasion resistance:

(ASTM D-4060) 1000 cycles, 1000g load	Abrasion wheel type	Average weight loss
	CS - 10	6.9 mg
	CS - 17	22.9 mg
	H - 18	362 mg

Certifications and Qualifications

ANSI/NSF 61 Certification



Ordering Information

Product Numbers: WP201PWA (Catalyst),
WP201PWB (Resin)
(Only off-white or blue are certified for NSF 61 service)

Package Size: 5 gallon pails (10 gallon sets)
55 gallon drums
(110 gallon drum sets)
Order in sets only

Shelf Life: 1 year

Safety Precautions

Precaution:

See the material safety data sheet and product label for complete safety and precaution requirements.

"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." Contact your Wasser Representative for current Product Data Sheets.