

Powercrete® PW Liquid Epoxy



Product Description

Powercrete PW is an **NSF 61 45°C (113°F) approved** liquid epoxy polymer coating designed for use as a pipe lining for potable and wastewater pipes and storage tanks. Powercrete PW is also very effective for slurries and abrasive applications. PW offers maximum protection from corrosion as it provides high adhesion to bare steel and ductile iron along with superior abrasion resistance.

Product Applications

- ID / OD Coating for: Potable & Wastewater Pipes & Storage Tanks
- Directional Drilling
- Pipe Bends, Fittings, Valves & Odd Shapes
- Any bare steel structure in need of protection



Product Features & Benefits

- 100% Solids Liquid Epoxy; No V.O.C.s and no isocyanates
Safe to use
- Bisphenol A Epoxy
Suitable for pipeline operating temperature to 55°C (131°F)
- Suitable for Potable Water
NSF 61 approved - Certificate # 71120
- Same Formula can be Hand or Spray Applied
Flexibility in difficult to coat field conditions
- Excellent Wetting Properties to Bare Steel
Exceptional adhesion, cathodic disbondment and soil stress resistance on bare steel

Product Properties

Property	Condition	Test Method	Typical Value	
			US Imperial	Metric
Specific Gravity	(Mixed)	ASTM D-3289-03	1.79	1.79
Compressive Strength		ASTM C-109	10,000 psi	70 MPa
Hardness	(Shore D)	ASTM D-2240	85	85
Thin Film Water Absorption		ASTM D-570	1.2 %	1.2 %
Dielectric Strength	(Oil)	ASTM D-149	450 volts/mil	17.7 volts/micron
Resistance to Acids & Alkalies		ASTM C-581	Excellent	Excellent
Adhesion to				
FBE		ASTM D-4541	2,500 psi	17 MPa
Bare Steel		ASTM D-4541	3,000 psi	20 MPa
Impact Resistance	(40 mils thickness)	ASTM G-14-88	66 inch lbs	7.7 Joules (7.7 Nm)
Flexibility	(@ -18°F (0°C))	NACE RP-0394	0.7 - 1.4 °	0.7 - 1.4 °
Tabor Abrasion	(CS-17 wheel, wear cycles)	ASTM D-4060-95	1562 cycles/mil	61 cycles/micron
Cathodic Disbondment	30 days			
43°C (110°F)		ASTM G-95	< 0.31 inch	< 8 mm

Product Selection Guide

Maximum Operating Temp	55°C (131°F)	Color	Tan or Black
Compatible Line Coatings	FBE, CTE	Typical Single Coat Thickness	
Mixing Ratio		Manually Applied	0.5 mm (20 mils)
By Volume	9.75:1 Part A to B	Spray Applied	0.5 mm (20 mils)
By Weight	100:5.5 Part A to B	Recoat Interval (Spray)	
Surface Profile Recommended	2.5 - 4.0 mils	@ 21°C, 70°F	37 - 111 minutes
	64 - 100 microns	@ 65°C, 150°F	11 - 14 minutes
Surface Preparation	SA 2 1/2	Clean Up	Acetone, MEK
	SSPC-10 - Near-White		
	SSPC-SP5 - White		

Typical Application

Hand Apply

Spray Apply

Waste Factor



Theoretical Coverage Rates

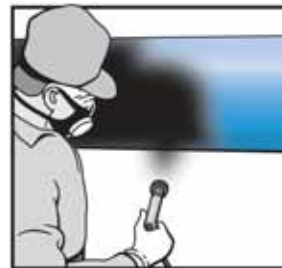
425 mil-sq. ft./litre
1605 mil-sq. ft./US gallon
1.0 mm-m²/litre

Recommended Tip Sizes

Tip Size	Pipe Size (DN)
331	to 12" (DN300)
419/431	12"-16" (DN300-400)
519/531	16"-24" (DN400-600)
619/631	24"-48" (DN600-1200)

Flow Rates (approx.)
19tip = 1.1 L / min.
31tip = 2.8 L / min.

Note: Fluid pressure at tip approx. 3,500 psi.



(approx.)	
10%	Kit Application
15%	20" + pipe OD
25%	14"-18" pipe OD
35%	2"-12" pipe OD

Temperature Considerations

If the surface to be coated is below 10°C (50°F), preheating of the substrate is recommended. Preheat temperatures should not exceed 82°C (180°F) prior to the application.

Note: The application should only be done when the temperature of the steel is at least 3°C (5°F) higher than the dew point, as recommended by NACE.

Storage & Handling

For optimum performance, store Powercrete® PW epoxy products in a dry, well-ventilated area. Maintain products in original packaging and sealed until just before use. Avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental conditions or contaminates.

NOTE:
Avoid prolonged storage at temperatures above 40°C (104°F) or below 5°C (40°F).

Cure Times

Pot Life: 4 Lbs (1.8 Kg) Kit, @ 25°C (77°F) 22 minutes
Spray application

Gel Time: 40 mils, @ 27°C (80°F) 37 minutes

Dry Time: 40 mils, @ 27°C (80°F) 2.5 hours

65 Shore "D" Reading: 40 mils, @ 27°C (80°F) 7.75 hours

75 Shore "D" Reading: 40 mils, @ 27°C (80°F) 10 hours

Application Temp Range": -30 to 100°C

-20 to 212°F

Shelf Life:(stored in specified conditions): 2 years

CURE SCHEDULE: 24 Hours at 25°C and 10 days at 43°C +/- 3°C for drinking water pipe internal coating, after spray application, standard 61 by NSF

Ordering Information

Powercrete PW is available in three (3) packaging options:

Drum

Part A: 40 Gal / 151 L (600 Lbs/272 Kg)
Part B: 55 Gal / 208 L (450 Lbs/205 Kg)

Pail

Part A: 5 Gal / 19 L (75 Lbs/34 Kg)
Part B: 5 Gal / 19 L (40 Lbs/18 Kg)

Kit Options (Part A and B in proper mix ratio by weight)

20 Lbs / 9 Kg (1.3 Gal / 5 L)
10 Lbs / 4.5 Kg (0.67 Gal / 2.5 L)
4 Lbs / 1.8 Kg (0.27 Gal / 1 L)
2 Lbs / 0.9 Kg (0.13 Gal / 0.5 L)





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