

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 & Customer Benefits

- 100% Solids Liquid Epoxy
No V.O.C.s and no isocyanates
- Bisphenol A Epoxy
Suitable for pipeline operating temperatures to 45°C (113°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

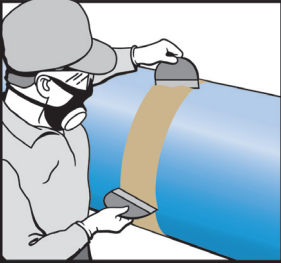
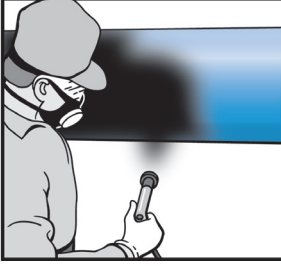
Product Properties

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	18 kV/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 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	45°C (113°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	2.5 - 4.0 mils	@ 21°C, 70°F	37 - 111 minutes
(Recommended)	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-m ² /litre		(approx.)													
	Recommended Tip Sizes		10% Kit Application													
	<table border="1"> <thead> <tr> <th>Tip Size</th> <th>Pipe Size (DN)</th> <th>Flow Rates (approx.)</th> </tr> </thead> <tbody> <tr> <td>331</td> <td>to 12" (DN300)</td> <td>19tip = 1.1 L / min.</td> </tr> <tr> <td>419/431</td> <td>12"-16" (DN300-400)</td> <td>31tip = 2.8 L / min.</td> </tr> <tr> <td>519/531</td> <td>16"-24" (DN400-600)</td> <td></td> </tr> <tr> <td>619/631</td> <td>24"-48" (DN600-1200)</td> <td></td> </tr> </tbody> </table>		Tip Size	Pipe Size (DN)	Flow Rates (approx.)	331	to 12" (DN300)	19tip = 1.1 L / min.	419/431	12"-16" (DN300-400)	31tip = 2.8 L / min.	519/531	16"-24" (DN400-600)		619/631	24"-48" (DN600-1200)
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Note: Fluid pressure at tip approx. 3,500 psi.																

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 contaminants.

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
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:	2 years

Ordering Information

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

Drum

Part A: 39 Gal / 148 L (600 Lbs/272 Kg)
 Part B: 55 Gal / 208 L (450 Lbs/204 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 / 5.1 L)
 10 Lbs / 4.54 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)

EZ Cartridge Repair Kit

375 ml Side-by-side cartridge (box of 10) for patch and repair
 EZ cartridge repair gun also available.



Covalence Specialty Materials warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Covalence Specialty Materials written instructions. Since many installation factors are beyond the control of Covalence Specialty Materials, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection herewith. Covalence Specialty Materials liability is stated in the standard terms and conditions of sale. Covalence Specialty Materials makes no other warranty either expressed or implied. All information contained in this technical data sheet is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.



www.covalencecpg.com

Local Distributor / Representative:

For contact details of local Distributors / Representatives please visit www.covalencecpg.com.

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