

# Powercrete® J Liquid Epoxy



## Product Description

Powercrete J is the ultimate girth weld coating for FBE and CTE coated pipe. It is a 100% solids, high-build, liquid epoxy and can be used as mainline coating, for repairs & rehabilitation of pipelines operating at maximum temperatures up to 55°C (130°F) and other metal structures. This 2-component, solvent-free epoxy can easily achieve a dry film thickness of up to 20 mils in a single pass.

## Product Applications

- Pipe Bends, Fittings, Valves & Odd Shapes
- Mainline Coating as well Pipeline Repair & Rehabilitation
- Girth Welds / Field Joints
- Directional Drilling
- Water Pipe OD
- Jetty piles, off-shore & marine structures
- Any bare steel structure in need of protection

## Product Features & Benefits

- 100% Solids Epoxy; No V.O.C.s and no isocyanates  
Safe to use
- Bisphenol A Chemistry  
Suitable for pipeline operating temperatures to 55°C (130°F)
- Excellent Mechanical Properties  
Can be used in directional drill and thrust bore applications
- High Build in a Single Application  
Cost saving formulation can build 20 mils in one pass
- 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	1.70	1.70
Compressive Strength		ASTM C-109	16,000 psi	110 MPa
Hardness	(Shore D)	ASTM D-2240	85+	85+
Thin Film Water Absorption	(Saturated)	ASTM D-570	0.85 %	0.85 %
Dielectric Strength	(Oil)	ASTM D-149	485 volts/mil	19 volts/micron
Resistance to Acids & Alkalies		ASTM C-581	Excellent	Excellent
Adhesion to				
FBE		ASTM D-4541	3,280 psi	22 MPa
Bare Steel		ASTM D-4541	3,850 psi	26 MPa
Impact Resistance	(40 mils thickness)	ASTM G-14-88	66 inch lbs	7.7 Joules (7.7 Nm)
Flexibility	(@ -18°C (0°F))	NACE RP-0394	0.75 °	0.75 °
Tabor Abrasion	(CS-17 wheel, wear cycles)	ASTM D-4060-95	1,250 cycles/mil	49 cycles/micron
Cathodic Disbondment				
55°C (130°F)	30 days	ASTM G-95	0.33 inch	8.5 mm
50°C (122°F)	90 days	ASTM G-95	0.63 inch	16.0 mm
Holiday Detection	Holiday free	ISO :21809-3 & CSA Z245.20 ASTM G 62 Method B	125 Volts per mil 84 Volts per mil	5 Volts per micron 3.3 Volts per micron

## Product Selection Guide

Maximum Operating Temp	55°C (130°F)	Color	Brown
Compatible Line Coatings	FBE, CTE	Typical Single Coat Thickness	
Mixing Ratio		Manually Applied	20 mils (0.5 mm)
By Volume	4.8:1 Part A to B	Spray Applied	20 mils (0.5 mm)
By Weight	100:11.2 Part A to B	Recoat Interval (Spray)	
Surface Profile Recommended	2.5 - 4.0 mils 63.5 - 101.6 microns	@ 21°C, 70°F	26 - 83 minutes
Surface Preparation	SA 2 1/2 SSPC-10 - Near-White SSPC-SP5 - White	@ 65°C, 150°F	7 - 10 minutes
		Clean Up	Acetone, MEK

## Typical Application

**Powercrete® J**

Hand Apply

Spray Apply

Waste Factor



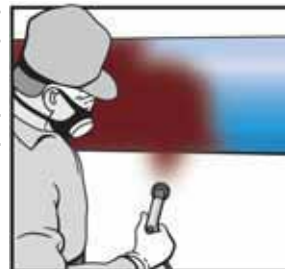
### Theoretical Coverage Rates

425 mil-sq. ft./litre  
1605 mil-sq. ft./US gallon  
1.0 mm-m<sup>2</sup>/litre

### Recommended Tip Sizes

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)	

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



(approx.)

Waste Factor	Kit Application
10%	20" + pipe OD
15%	14"-18" pipe OD
25%	2"-12" pipe OD
35%	

## 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 93°C (200°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® J 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)	20 minutes
Spray Application	
Gel Time: 20 mils, @ 27°C (80°F)	30 minutes
Dry Time: 20 mils, @ 27°C (80°F)	105 minutes
65 Shore "D" Reading: 20 mils, @ 27°C (80°F)	4.20 hours
75 Shore "D" Reading: 20 mils, @ 27°C (80°F)	5.20 hours
Application Temp Range:	-30 to 100°C
	-20 to 212°F
Shelf Life(stored in specified conditions):	2 years

## Ordering Information

Powercrete® J comes is available in three (3) packaging options:

### Drum

Part A: 40 Gal / 153 Ltr (600 Lbs / 272 Kg)  
Part B: 48 Gal / 183 Ltr (400 Lbs / 183 Kg)

### Pail

Part A: 5 Gal / 19 Ltr (75 Lbs / 34 Kg)  
Part B: 4.8 Gal / 18 Ltr (40 Lbs / 18 Kg)

**Kit Options:** (Part A and B in proper mix ratio by weight)  
1.4 Gal / 5.4 Ltr (20 Lbs / 9 Kg)  
0.7 Gal / 2.7 Ltr (10 Lbs / 4.5 Kg)  
0.3 Gal / 1.1 Ltr (4 Lbs / 1.8 Kg)  
0.14 Gal / 0.5 Ltr (2 Lbs / 0.9 Kg)



**IBERRY**  
PLASTICS CORPORATION  
AND SUBSIDIARIES  
CORROSION PROTECTION GROUP  
[www.berrycpg.com](http://www.berrycpg.com)

### The leading global partner in protecting the integrity of critical infrastructure.

Berry Plastics warrants that the product(s) represented within conform(s) to its/their chemical and physical description and is appropriate for the use as stated on the respective technical data sheet when used in compliance with Berry Plastics' written instructions. Since many installation factors are beyond the control of Berry Plastics, the user is obligated to determine the suitability of the products for the intended use and assume all risks and liabilities in connection herewith. Berry Plastics' liability is stated in the standard terms and conditions of sale. Berry Plastics makes no other warranty either expressed or implied. All information contained in the respective technical data sheet(s) should be used as a guide and is subject to change without notice. This document supersedes all previous revisions. Please see revision date on the right.

Local Distributor / Representative:

For contact details of local Distributors / Representatives  
Please visit [www.berrycpg.com](http://www.berrycpg.com).

Headquarters  
Franklin, MA, USA  
Tel: +1 508 918 1714  
US Toll Free: +1 800 248 0149  
Fax: +1 508 918 1910  
CPG@berrypastics.com

Houston, TX, USA  
Tel: +1 713 676 0085  
US Toll Free: +1 888 676 7202  
Fax: +1 713 676 0086  
CPGH@berrypastics.com

Tijuana, Mexico  
Tel USA +1 858 633 9797  
Fax US: +1 858 633 9740  
Tel Mexico: +52 664 647 4397  
Fax Mexico: +52 664 607 9105  
CPGTJ@berrypastics.com

Westerlo, Belgium  
Tel. +32 14 722500  
Fax +32 14 722570  
CPGE@berrypastics.com

Baroda, India  
Tel: +91 2667 264721  
Fax: +91 2667 264724  
CPGIN@berrypastics.com