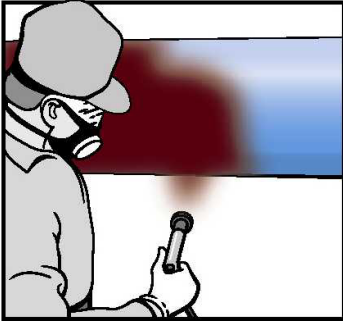
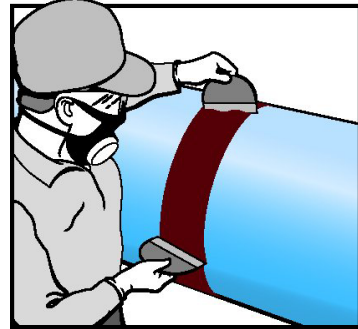




Powercrete® J-22



Solvent free two part, medium pot life epoxy coating primarily designed for hot airless spray or manual application for use on bare steel pipeline girth welds, as well as the rehabilitation of existing pipelines. Due to its excellent corrosion, mechanical, and abrasion properties, Powercrete® J-22 is the corrosion coating of choice for Pipelines Operating up 176°F (80°C).



Product description

Powercrete® J-22 is a derivative of Powercrete, using the same resins with an alternate hardener. The result is an epoxy based polymer concrete that retains all of the mechanical protection properties of the original Powercrete, and has the added benefits of excellent corrosion protection and faster curing rates. It is a highly abrasion and impact resistant corrosion coating that is applied over clean, bare steel.

Powercrete® J-22 was specifically developed and tested for **use on pipeline girth welds, and is also used extensively as a mainline rehabilitation coating**. It is compatible with plant applied fusion bonded epoxy and coal tar enamel coated pipe. It can also be used for many pipeline, marine, and industrial applications.

Powercrete® J-22 is designed for hot airless spray or manual application. When spray applied, each spray pass results in a thickness of approximately 0.020" (0.508mm), and multiple passes may be applied in order to build up to the desired thickness. When manually applied, it is mixed and poured onto the pipe surface. Then it is smoothed with a Powercrete® J-22 trowel to a uniform thickness. SHORE D hardness scale of 75 and is therefore ready to be used for most applications.

When Powercrete® J-22 is spray applied at an atmospheric temperature of about 90°F (32°C), it gels to a smear free surface in about 20 minutes. It is hard after 2 hours, and will cure in less than 4 hours. After 4 hours, it has a typically minimum reading on the Shore D hardness scale of 75 and is therefore ready for use. It may be applied at temperatures below 50°F (10°C) if the pipe is heated during the application and cure. Once it is fully cured, Powercrete® J-22 has excellent abrasion and impact resistance. It also provides an excellent cathodic disbondment rating on pipelines operating at less than 176°F (80°C).

Should any damage occur to the Powercrete® J-22 the area can be repaired easily by using the same material over the clean and dry surface.

Product features/benefits

- Excellent cathodic disbondment resistance.
- Maximum adhesion to bare steel.
- Excellent mechanical properties.
- Excellent resistance to water immersion, seawater, and ground waters over a broad pH range.
- 100% volume solids content, no V.O.C.'s.

Product selection guide

- | | |
|---------------------------------|-----------------------------------------|
| • Maximum operating temperature | 176°F (80°C) |
| • Compatible line coatings | FBE, CTE |
| • Recommended pipe preparation | SA 2 ^{1/2} or SSPC-10/SSPC-SP5 |

Product thickness (DFT)

- Single coat – brush applied 0.020" (0.508 mm)
- Single coat – spray applied 0.020" (0.508 mm)

Product properties

	ENGLISH	METRIC	TEST METHOD
Specific Gravity	1.70	1.70	
Compressive Strength	16,041 psi	110,500 kilopascals	ASTM C-109
Thin Film Water Absorption	0.2%	0.2%	ASTM D-570-98
Dielectric Strength (in oil)	485 volts/mil	19.1 volts/micron	ASTM D-149
Resistance to Acids and Alkalies	Excellent	Excellent	ASTM C-581
Adhesion to Fusion Bonded Epoxy	>3,280 psi	>22,600 kilopascals	ASTM D-4541
Adhesion to Coal Tar Enamel*	>320 psi	>2,200 kilopascals	ASTM D-4541
Adhesion to Bare Steel > 2 mils surface profile	>3,850 psi	>26,500 kilopascals	ASTM D-4541
Impact Resistance Film thickness 36 mils	113.6 inch lbs	13.25 Nm	ASTM G14-88
Flexibility degrees per pipe diameter @ 0°F	0.57-0.4°	0.57-0.4°	NACERP-0394-94
CS-17 Wheel, wear cycles	1,010 cycles/mil	39.8 cycles/micron	ASTM D-4060-95
Cathodic Disbondment			
2 hrs, 212°F (100°C)	0.14 inch	3.5 mm	ASTM G-8
28 days 140°F (60°C)		13.8mm	ASTM G95-87
28 days 203°F (95°C)		13.5mm	ASTM G95-87

* Exceeds internal bond of the coal tar enamel

Ordering information

Powercrete® J22 products are available:

- In drums: Base: PC-J22-PART-A-43.6GAL-164.9L (600 lb/272.2 kg)
Hardener: PC-J22-PART-B-55GAL-208.3L (450 lb/204.1 kg)
- In pails: Base: PC-J22-PART-A-5.5GAL-20.6L (75 lb/34 kg)
Hardener: PC-J22-PART-B-4.9GAL-18.5L (40 lb/18.1 kg)
- In kits containing base and hardener in the proper 4.8 PART A : 1 PART B by volume
PC-J22-2lb-0.9kg-kit (0.16GAL-0.6L)
PC-J22-4lb-1.8kg-kit (0.32GAL-1.21L)
PC-J22-10lb-4.5kg-kit (0.8GAL-3L)
PC-J22-20lb-9kg-kit (1.6GAL-6L)

Mixing Ratio: 4.9 : 1 PART A to PART B by volume
100 : 11.2 PART A to PART B by weight.

Application accessories such as stirrers, pads and rollers are also available and may be ordered separately, see datasheet accessories.

Tyco Adhesives warrants that the product conforms to its chemical and physical description and its appropriate for the use stated on the technical data sheet when used in compliance with Tyco Adhesives' written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection herewith. Tyco Adhesives' liability is stated in the standard terms and conditions of sale. Tyco Adhesives 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.

Headquarters:

Tyco Adhesives L.P.
1400 Providence Hwy
Norwood, MA 02062 USA
Int'l Tel: +1 781 440-6161
US Toll Free: +1 800 248-0149
Fax: +1 781 440-6271
E-mail: CPG@tycoadhesives.com

In the Americas:

Tyco Adhesives
1675 Suite C Brandywine Avenue
Chula Vista, CA91911 USA
Tel: Mexico +52 664 607 0926
Tel: US +1 619 4 24 42 59
Fax: Mexico +52 664 623 64 63
Fax: US +1 619 4 24 42 58
E-mail: CPGTJ@tycoadhesives.com

Tyco Adhesives (Houston)
11010 Wallisville Road
Houston, TX 77013 USA
Tel: +1 713 676 0085
US Toll Free: +1 888 676 7202
Fax: +1 713 676 0086
E-mail: CPGH@tycoadhesives.com

In Europe, Middle East, Africa,

Asia & Pacific:
Tyco Adhesives B.V.B.A.
Nieuwlandlaan B15
B-3200 Aarschot, Belgium
Tel: 32 16 55 36 00
Fax: 32 16 55 36 74
E-mail: CPGE@tycoadhesives.com

Tyco
Adhesives
Corrosion Protection Group
The common denominator in Corrosion Prevention
www.TycoAdhesives.com

Local agent/Distributor: