

MPCI Product Data Sheet
Revision Date: November 2005

Correz™Flex

Flexible Chemical Resistant Coating

PRODUCT DESCRIPTION

Correz™Flex is a three part epoxy silicate coating that provides exceptional flexibility and chemical protection in demanding environments. The coating is a unique formulation of epoxy and titanium ethyl silicates that enable an ambient cure system, yielding a final coat that is uniformly strong throughout. The coating is VOC compliant, with no hazardous materials and is safe and easy to apply by air or airless spray equipment or brush. When curing, a strong interpenetrating network forms within a unique epoxy base to provide exceptional toughness, adhesive strength, hardness, and crack resistance. The silicate and additional fillers provide superior resistance to caustics, dilute acids, and petroleum solvents.

FEATURES

- Excellent topcoat for rugged outdoor equipment
- Resists cracking and delamination
- Exceptional flexibility
- Long service life: ~10 years
- Provides a strong substrate for topcoats
- Suited for most pulp and paper, chemical processing, petroleum, and manufacturing environments
- Superior adhesion on a wide range of primed and unprimed materials
- Direct-to-metal application and finish/primer capabilities
- Reduces application, logistics, and maintenance costs
- Good thermal cycling resistance
- Excellent chemical resistance
- Tolerant of surface variability

USES

- Liners for tanks that hold particularly aggressive chemicals
- Liners for rail cars and trucks that carry aggressive chemicals
- Steel structures
- In its anti-corrosive form: structural steel in an environment of wafting caustic steam

SUBSTRATES AND SURFACE PREPARATION

General

Surfaces must be clean and as dry as conditions permit. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. Pitted and corroded substrate may require decontamination with a salt remover solution in water.

Carbon Steel

Immersion: SSPC-SP5

Insulated (recommended): SSPC-SP10

Insulated (minimum): SSPC-SP6

Surface Profile: 2.5 – 3.0 mils

Limited Access: SSPC-SP11 is a suitable preparation method for small and hard to access areas or when sandblasting is prohibited.

Stainless Steel

Same as Carbon Steel.

Galvanized Steel

General: surface preparation should not remove the protective galvanized plating. Clean surface per SSPC-SP1.

Aluminum

Same as galvanized steel.

Concrete

Prepare in accordance with SSPC SP-13.

Previously Painted Surfaces

Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 5B rating in accordance with ASTM D3359 “X-Scribe” adhesion test.

CHEMICAL RESISTANCE

Correz™Flex is resistant to most organic and inorganic type reagents. It is resistant to alkalis, dilute acids, acid/alkaline, and neutral salt solutions.

Resistant to most organic solvents.

APPLICATION EQUIPMENT

Spray Application (General)

This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional Spray

Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.

Airless Spray

- Pump Ratio: 30-1 (min)
- GPM Output: 3.0 (min)
- Material Hose: 3/8" I.D. (min)
- Tip Size: 0.015" – 0.031"
- Output PSI: 2100 – 2300
- Filter Size: 50 mesh

Brush and Roller (General)

Multiple coats may be required to obtain desired appearance, recommended dry film thickness, and adequate hiding. Avoid excessive re-brushing, re-rolling.

Brush

Use a medium bristle brush

Roller

Use a short-nap synthetic roller cover with phenolic core.

MIXING AND THINNING

Mixing

Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Ratio: 12:7:1 (A:B:C)

Thinning: None

Pot Life: 1 hrs @ 72°F, 3 hrs if sealed.

CLEANUP AND SAFETY

Cleanup

Use isopropyl alcohol, MEK, or acetone. In case of spillage, absorb and dispose per local regulations.

Safety

Follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Wear appropriate Personnel Protective Equipment.

Caution

Flammable material – keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shipping Weight: 1 Gallon Kit – 10.68 lbs.
5 Gallon Kit – 50.6 lbs.

Flash Point: Part A: 78°F, Part B: 148°F, Part C: 77°F

Storage Temperature & Humidity: Store indoors at 32°F to 100°F, at ambient Relative Humidity

APPLICATION CONDITIONS				
Condition	Material	Surface	Ambient	Humidity
Normal	60-85°F	60°F	60-90°F	40 - 70%
Minimum	50°F	50°F	50°F	20%
Maximum	100°F	90°F	110°F	95%

CURING SCHEDULE			
Surface Temp.	Dry to Recoat	Dry to Topcoat	Final Cure
50°F	1 hr to 24 hrs	3 hrs	7 days
90°F	1 hr to 24 hrs	3 hrs	7 days

TECHNICAL DATA	
Characteristics	Correz™ Flex
Generic Type	Epoxy - Silicate
Mix Ratio by volume	12:7:1
Temperature resistance	
Continuous	250°F
Percent (%) Solids by volume	88%
VOC	1.15 lbs/gal (137.94 grams/liter)
Dry film thickness per coat	10 - 12 mils
Wet film thickness per coat	14 - 16.5 mils
Theoretical coverage	1440 mil sq. ft. per gallon
Application temperature	50°F Ambient or above
Cure time: To recoat	Minimum 1 hr @ 50°F
Weight per gallon	9.48 lbs
Pot life: @ 50°F	2 hrs
@ 75°F	1 hrs
@ 90°F	0.5 hrs
Shelf life	6 months

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