

Selection & Specification Data

Generic Type Flake-Reinforced Phenalkamine Epoxy Zinc

Description This two-component, high build zinc-rich primer exhibits outstanding moisture tolerance during application, low temperature cure capability, and very fast cure time to speed up the painting process. It contains an inert flake reinforcement (micaceous iron oxide, MIO) to further enhance the coating's strength and performance. This coating is ideal for industrial and marine environments to provide galvanic corrosion protection for steel. Due to its unique properties, this zinc primer can be applied as part of a two coat system instead of a typical three coat system of zinc primer, intermediate coat of epoxy, and finish coat of epoxy, polyurethane, etc. The labor, cure time, and materials required for the intermediate coat can be saved while providing similar or better dry film thickness and corrosion protection. Its fast cure properties makes it ideal for shop and field applications where quick throughput and turnaround times are desired.

Features

- High build, (5-10 mils DFT), pinhole free coating
- High zinc loading per square foot
- Provides cathodic protection plus durable barrier coating
- Excellent moisture tolerance during application and cure
- Fast cure response (topcoat and handle times)
- Low temperature cure
- Two components, less handling, less labor
- MIO flake reinforced, stronger and better protection
- Low VOC; Low HAPS
- Excellent wetting properties and adhesion

Color Standard: Green 0300. Grey 0700 and Red 0500 available upon request.

Gloss Flat

Primer Self-priming

Dry Film Thickness 5 - 10 mils (127 - 254 microns) per coat

*Lower thickness is possible. Consult Technical Service.

Solids Content By Volume 75% +/- 2%

HAPs Values As supplied: 0.21 lbs/solid gal

Theoretical Coverage Rate

1203 ft²/gal at 1.0 mils (29.5 m²/l at 25 microns)
 241 ft²/gal at 5.0 mils (5.9 m²/l at 125 microns)
 120 ft²/gal at 10.0 mils (3.0 m²/l at 250 microns)

Allow for loss in mixing and application.

VOC Values

Thinner 214 7 oz/gal: 2.05 lbs/gal (245 g/l)
 Thinner 225 E 7 oz/gal: 1.76 lbs/gal (211 g/l)
 As Supplied 1.76 lbs/gal (211 g/l)

These are nominal values and may vary with color.

Limitations Epoxies eventually chalk in sunlight exposure

Topcoats Acrylics, Epoxies, Polyurethanes

Substrates & Surface Preparation

General Remove all contaminants per SSPC-SP 1.

Steel SSPC-SP6 with a 2.0-3.0 mil (50-75 micron) surface profile for maximum protection.

Mixing & Thinning

Mixing Power mix separately, then combine and power mix in the following proportions.
 1 Gallon Kit = Part A: 0.8 Gallon; Part B: 0.2 Gallons
 4 Gallon Kit = Part A: 3.2 Gallons; Part B: 0.80 Gallon

Thinning Thinning not normally required. May be thinned up to 6% by volume with Carboline Thinner 214. To minimize VOC may be thinned up to 6% by volume with Thinner 225E.

Ratio 4:1 (Part A to Part B)

Pot Life 2 hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating becomes too viscous to use.

Application Equipment Guidelines

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General) The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss, Graco, and WIWA.

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: 45:1 (min)
 Volume Output: 2.5 gpm min. (9.5 l/min min.)
 Material Hose: 3/8" I.D. min. (9.5mm min.)
 Tip Size: 0.017-0.021" (0.43-0.53 mm)
 Output Pressure: 3500-4000 psi
 PTFE packings are recommended and available from pump manufacturer.

Brush & Roller (General) For small areas only.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Minimum	45 °F (7 °C)	35 °F (2 °C)	35 °F (2 °C)	0%
Maximum	90 °F (32 °C)	120 °F (49 °C)	100 °F (38 °C)	95%

Industry standards are for substrate temperatures to be above the dewpoint. Special thinning and application techniques may be required above or below normal conditions. Do not apply to substrates with ice or ice crystal formation. Dehumidify or raise the temperature to eliminate ice on the substrate.

Carbozinc[®] 608 HB

Curing Schedule

Surface Temp.*	Dry to Topcoat Minimum	Dry to Handle
35 °F (2 °C)	4 Hours	28 Hours
60 °F (16 °C)	1 Hour	8 Hours
75 °F (24 °C)	30 Minutes	4 Hours
90 °F (32 °C)	15 Minutes	2 Hours

* These times above are based on 50% relative humidity and 5.0-10.0 mil (125-250 micron) dry film thickness. Higher film thickness, insufficient ventilation and/or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity and/or condensation on the surface during curing can interfere with the cure, can cause discoloration and/or may result in a surface haze or blush. Any haze or blush must be removed by water washing before topcoating.

Maximum recoat is 90 days @ 75°F. If the maximum recoat times have been exceeded, the surface must be abraded to create mechanical anchor profile prior to topcoating.

Cleanup & Safety

- Cleanup** Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
- Safety** Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.
- Ventilation** When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved supplied air respirator.
- Caution** This product contains flammable solvents. Keep away from sparks and open flames.

Packaging, Handling & Storage

- Shelf Life** Part A: 6 months @75°F(23°C)
Part B: 24 months @75°F(23°C)
Actual stated shelf life when kept at recommended storage conditions and in original unopened containers.
- Shipping Weight (Approximate)** 1 Gallon Kit: 23 lbs
4 Gallon Kit: 91 lbs
- Storage Temperature & Humidity** 40-110°F(4°C-43°C)
0-95% Relative Humidity
- Flash Point (Setaflash)** • Part A: 119°F (48°C)
• Part B: 88°F (31°C)
- Storage** Store Indoors. KEEP DRY



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