

SELECTION & SPECIFICATION DATA

Generic Type	Polyamide Modified Zinc-Rich Epoxy
Description	Carbozinc 85 is a two component, polyamide, organic zinc filled coating designed to provide cathodic protection to steel in environments exposed to marine and industrial environments with severe weather and chemical fumes. Provides superior corrosion protection from undercutting. Excellent for use on structural steel, petrochemical applications, pulp and paper mills, bridges, piping, tanks, sewage treatment plants, electrical generating plants, and marine applications. Carbozinc 85 is QPL Approved under MIL-DTL-24441D for MIL-DTL-24441/19C, F-159 Type III; when manufactured at the registered location.
Features	<ul style="list-style-type: none"> • High zinc loading • Excellent corrosion protection • Low VOC • Easy two-component mixing
Color	Grey (0700)
Finish	Flat
Dry Film Thickness	2 - 4 mils (51 - 102 microns) per coat
Total Zinc Dust in Dry Film	By Weight: 85%
Solids Content	By Volume 64% +/- 2%
Theoretical Coverage Rate	1027 ft ² /gal at 1.0 mils (25.2 m ² /l at 25 microns) 513 ft ² /gal at 2.0 mils (12.6 m ² /l at 50 microns) 257 ft ² /gal at 4.0 mils (6.3 m ² /l at 100 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 2.50lbs./gal (300 g/l) Thinner 45 : 5 oz/gal: 2.65 lbs/gal (318 g/l) 5 oz/gal w/ #229; 2.69 lbs/gal (322 g/l) These are nominal values.
Dry Temp. Resistance	Continuous: 400°F (204°C)
Topcoats	May be coated with Epoxies or Polyurethanes depending on exposure and need.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	SSPC-SP6 with a 1.0-3.0 mil (25-75 micron) profile. SSPC-SP2 or SP3 for touch-up.
Weathered Zinc Rich Primer	Remove zinc salts with power washing and a stiff bristle brush scrubbing or sweep blast and allow to dry before coating.

SUBSTRATES & SURFACE PREPARATION

Special Instruction | Do not apply if material, substrate or ambient temperature are outside of ranges listed under "Application Conditions". Stripe coat crevices, welds and sharp angles before spraying to optimize performance. Topcoating is recommended for optimum protection.

MIXING & THINNING

Mixing | Thoroughly mix each component using mechanical agitation making sure pigment does not remain on the bottom of can. Pour the Part A into the Part B (mixing ratio by volume: 1 part Part A to 4 parts Part B) and mix well. After mixing, pour through a 30-60 mesh screen. If thinner is required, thin only after mixing Part A with Part B. Allow 15 minutes minimum induction time at 75°F. Do not mix more than can be applied during the product's useful pot life. Continue to agitate the mixture during application of the product to keep the zinc pigment from settling out and the product uniform.

Thinning | Normally not required but may use the following:
Preferred Thinner Uses and Application:
Spray: Up to 5 oz/gal (4%) with Thinner 229.
Alternate Compatible Thinners for atmospheric service:
Carboline Thinner 10

Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio | Part A: 0.5 gals.
Part B: 2.0 gals.

Pot Life | 4 hours at 75°F and 2 hours at 85°F. In order to maintain application properties, mix (activate) only what can be applied in 4 hours. Allow minimum 15 minutes induction time at 75°F.

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) | Use a 50% overlap, when spraying, to avoid pinholing and holidays. Clean equipment before extended periods of downtime to prevent equipment blockage. Keep pressure pot at the level of the applicator to avoid fluid line blockage due to product weight. Blow back coating in fluid lines at intermittent shutdowns. Continue agitation of the product during application.

Conventional Spray | Mix continuously.
Fluid Nozzle: 0.070"
Atomization Pressure: 50 psi
Pot Pressure: 15-30 psi

Airless Spray | Use PTFE packings and mix continuously.
Material Hose: 3/8" I.D. (min.)
Tip Size: 0.019"
Output PSI: Minimum 3000 psi
Filter Size: 60 mesh

Brush | Natural bristle or nylon/polyester, for striping and repair of small areas only.

Roller | Not recommended.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	120°F (49°C)	90°F (32°C)	90%

CURING SCHEDULE

Surface Temp.	Dry to Topcoat	Dry to Touch
50°F (10°C)	48 Hours	8 Hours
60°F (16°C)	24 Hours	4 Hours
70°F (21°C)	12 Hours	2 Hours
90°F (32°C)	6 Hours	1 Hour

These times are based on a 3.0 mil (75 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. Minimum dry to handle time is 6 hours at 75°F/24°C. Maximum recoat time is 7 days at 70°F/21°C.

CLEANUP & SAFETY

Cleanup	For high flash point solvents use Thinner 229. Otherwise 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. Use adequate ventilation and wear gloves or use protective cream on face and hands. Keep container closed when not in use.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 36 months at 75°F Part B: 12 months at 75°F *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers
Storage Temperature & Humidity	40-100°F (4-38°C); 0-95% RH Store Indoors.
Storage	Store Indoors.
Shipping Weight (Approximate)	2.5 Gallon Kit - 65 lbs (30 kg)
Flash Point (Setaflash)	Part A: 102°F (39°C) Part B: 110°F (43°C)

WARRANTY

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