

STEELZ™ CR

Epoxy Mastic Steel Coating



PRODUCT DESCRIPTION

A two component, high solids, high build, flake filled, Phenolic Epoxy Mastic. STEELZ™ CR is based on a cycloaliphatic polyamine cured Epoxy. STEELZ™ CR Epoxy can be used as a one coat, 20 mil dry film Epoxy on horizontal surfaces. This unique coating has excellent chemical, abrasion, impact, and weather resistance with outstanding adhesion to marginally prepared surfaces as well as clean blasted surfaces.

PRODUCT FEATURES

1. Self priming on steel.
2. Low Temp. Hardener will cure to 25°F.
3. Excellent chemical resistance to acids, caustics and many solvents.
4. Performs well over epoxy mortars and concrete surfaces.
5. Excellent as a secondary containment coating.
6. Excellent as a coating for internal tank linings.
7. Meets all EPA and other air pollution regulations. V.O.C. is less than one pound per gallon.
8. Outstanding impact, flexibility and abrasion resistance.
9. Capable for high film build, wraps around edges in one coat.
10. Meets USDA requirements.

TECHNICAL DATA

COLORS: White, Lt. Gray, Med. Gray, Dark Gray, Brick Red, Beige

***60° GLOSS:** Gloss

VOLUME SOLIDS: 92% ± 2%

COVERAGE (Theoretical): 1475 sq. ft. per gallon @ 1 mil

RECOMMENDED DRY THICKNESS: 5-12 dry mils @ 125-295 sq. ft. per gal.

MIXING RATIO: 4:1 by Volume. 4 parts of Base (Part A) to 1 part of Hardener (Part B)

INDUCTION TIME: None

THINNING: Up to 20% S-74 per mixed gallon

POT LIFE @ 75°F: 2 hours (Regular Cure)
1 hour (Low Temp. Cure)

RECOAT TIME @ 75 °F: 7-8 hours (Regular Cure)
5-6 hours (Low Temp. Cure)

APPLICATION: Spray, roll or brush

APPLICATION TEMP.: 50 - 120°F (Regular Cure)
40 - 100°F (Low Temp.Cure)

DRY SERVICE TEMP.: 220°F

SHELF LIFE: Minimum 12 months

PACKAGING: 5 gal and 1 gal kits

V.O.C.: .60 lbs/gal (72 GMS/Liter)

*Gloss will exhibit slight variation when brushed or rolled due to orientation of fillers. This will not affect performance.

CHEMICAL RESISTANCE **SPLASH/SPILLAGE – SECONDARY CONTAINMENT**

| | | |
|------------------------|--------------------------|----------------------|
| 70% Sulfuric Acid | 10% Calcium Hypochlorite | Black Liquor |
| 20% Acetic Acid | 10% Sodium Hypochlorite | Carbon Tetrachloride |
| 20% Nitric Acid | 5% Hydrogen Peroxide | Jet Fuel |
| 50% Citric Acid | Ethyl Acetate | Crude Oil |
| 36% Hydrochloric Acid | Xylene | Distilled Water |
| 50% Sodium Hydroxide | Trichlorethylene | Fresh & Salt Water |
| 20% Ammonium Hydroxide | Lactic Acid | Hydrogen Sulfide |

For use in internal tank linings, contact Garon Products Inc. for recommendation.

PRODUCT USES

Recommended for structural steel, tank linings, vessels, equipment, pipe racks, storage tanks, towers, in chemical processing plants, pulp and paper mills, sewage and wastewater treatment facilities, fertilizer plants, refineries, electric generating stations, coal handling sites, mines and marine installations.

SURFACE PREPARATION

Best method is a near white abrasive blast (SSPC-SP10) but STEELZ™ CR will perform well over minimally prepared surfaces depending on service requirements. Because of the lack of “standards” for minimal surface preparation, test applications should be made to determine adequate surface cleanliness and compatibility with existing paint.

- a. **Steel**: Remove oil, grease and other chemical contaminants by solvent wipe or steam cleaning. Abrasive blast to a “Commercial” (SSPC-SP6) or “Near White” (SSPC-SP10) metal finish.
- b. **Galvanized Steel/Aluminum**: Solvent clean per SSPC-SP1 or steam clean. Sweep blast to achieve a minimum 1 mil profile. Apply one (1) coat of Steelz™ Shield HV as a primer at 3-4 mils DFT.
- c. **Previously Painted Surfaces**: Solvent clean per SSPC-SP1 and/or power wash. Remove loose existing paint by wire brush or other hand tools. Feather edges. Make test application to check for compatibility.
- d. **Epoxy Mortars**: Surface to be coated should be free of all contamination. Observe the manufacturer’s recoat time recommendations.

MIXING INSTRUCTIONS

Stir each component to a uniform consistency using an explosion proof variable speed drill with a Jiffy mixer. Then mix four (4) parts Base A with one (1) part Hardener B for three (3) minutes using the powered Jiffy mixer. When applying STEELZ™ CR in cool or cold conditions, store material at 65-75°F 1-2 days prior to application. STEELZ™ CR may be reduced up to 20% S-74 per mixed gallon. Do not substitute reducers.

V.O.C.

| | | | |
|--|--|--|--|
| <u>Unthinned</u> .60 lbs/gal (72 GMS/Liter) | <u>Thinned 5%</u> .90 lbs/gal (108 GMS/Liter) | <u>Thinned 10%</u> 1.15 lbs/gal (138 GMS/Liter) | <u>Thinned 20%</u> 1.62 lbs/gal (195 GMS/Liter) |
|--|--|--|--|

APPLICATION PROCEDURE

Airless Spray

Gun
Pump
Tip Range
Hose
Pressure

Graco

Silver Plus
33:1 Extreme
019"-.025"
1/2" ID
2500-3000 psi

Conventional Spray

Gun
Fluid Tip
Air Cap
Atomizing Pressure
Pot Pressure
Hose

DeVilbiss

MBC 510 or JGA
D
64 or 704
40 psi
50 psi
1/2" ID

When spraying, use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes. Do not apply to surfaces below 40°F or above 120°F. Do not apply over dew or frost. Do not apply if the temperature is within 5° of the Dew Point.

Brush - use pure bristle brush

Roller - medium nap phenolic core, non-shed cover

CURE TIME

| <u>TEMPERATURE</u> | <u>REGULAR CURE</u> | | <u>LOW TEMPERATURE CURE</u> | |
|--------------------|-----------------------|-----------------------|-----------------------------|-----------------------|
| | <u>MINIMUM RECOAT</u> | <u>MAXIMUM RECOAT</u> | <u>MINIMUM RECOAT</u> | <u>MAXIMUM RECOAT</u> |
| 90°F | 4-6 hours | 3 days | 3-4 hours | 1 day |
| 75°F | 7-8 hours | 7 days | 5-6 hours | 2 days |
| 45°F | 36-48 hours | 10 days | 24-36 hours | 5 days |
| 35°F | | | 72-96 hours | 14 days |

Times may be longer for thickness above 5 dry mils. For safety and proper product curing, good ventilation is necessary when painting indoors or in confined areas. Be sure the batch numbers are all the same to provide uniform color. Epoxy coatings may yellow or darken during application and after final cure. Low temperature cure hardener colors will be a little darker than the regular cure. This will affect the color but will have no effect on the performance of the product. Heaters that emit carbon dioxide and carbon monoxide can cause the coating to yellow. For maximum exterior gloss and color retention apply a topcoat of Steelz™ Top UV polyurethane.

CAUTIONS

STEELZ™ CR Base is flammable. STEELZ™ CR Hardener is corrosive. Keep away from all sources of ignition during mixing, application and cure. The Hardener (Part B) and mixtures of Base (Part A) with Hardener (Part B) can cause eye and skin burns as well as allergic reactions. The use of goggles, fresh air masks or NOISH approved respirators, protective skin cream and protective clothing is a recommended standard practice when spraying coatings. This product is sold without warranty as to performance expressed or implied. Users are urged to make their own tests to determine the suitability for their particular conditions.

**SEE MATERIAL SAFETY DATA SHEET FOR FULL SAFETY PRECAUTIONS
STEELZ™ CR IS FOR PROFESSIONAL AND INDUSTRIAL USE ONLY. KEEP
AWAY FROM CHILDREN. NOT FOR RESIDENTIAL USE**

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