

SELECTION & SPECIFICATION DATA

Generic Type	Cross-linked Epoxy
Description	A high solids, high build rust inhibitive epoxy primer with excellent corrosion resistance for long-term protection of the exterior of railcars. May be applied by standard or plural component airless equipment and is easily applied by brush or roll method for touch up. Performs extremely well under a wide variety of topcoats.
Features	<ul style="list-style-type: none"> • Excellent corrosion protection • Very smooth finish to enhance topcoat appearance • Tough, flexible and impact resistant • Good abrasion resistance • VOC compliant to current AIM regulations • Easy 1:1 ratio for convenience
Color	Salmon (0400)
Finish	Satin
Primer	Self-priming. May be applied over organic and inorganic zinc rich primers. A mist coat may be required to minimize bubbling over zinc rich primers.
Dry Film Thickness	<p>3 mils (76 microns) for mild environments and as an intermediate coat over inorganic zincs 4 - 6 mils (102 - 152 microns) for more severe environments</p> <p>Do not exceed 8.0 mils (200 microns) in a single coat. Excessive film thickness over inorganic zincs may increase damage during shipping or erection.</p>
Solids Content	By Volume 77% +/- 2%
Theoretical Coverage Rate	<p>1235 ft²/gal at 1.0 mils (30.3 m²/l at 25 microns) 412 ft²/gal at 3.0 mils (10.1 m²/l at 75 microns) 206 ft²/gal at 6.0 mils (5.1 m²/l at 150 microns) Allow for loss in mixing and application.</p>
VOC Values	<p>As Supplied : 1.6 lbs/gal (192 g/l) Thinner 2 : 2.2 lbs/gal (264 g/l) @16 oz/gal Thinner 228 : 2.2 lbs/gal (271 g/l) @16 oz/gal</p> <p>These are nominal values and may vary slightly with color.</p>
Dry Temp. Resistance	<p>Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)</p> <p>Discoloration and loss of gloss is observed above 200 °F (93 °C)</p>
Limitations	Not recommended for immersion service. Epoxies may lose gloss, discolor and chalk when exposed to sunlight.
Topcoats	May be coated with Acrylics, Epoxies, Alkyds, 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.
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SUBSTRATES & SURFACE PREPARATION

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

MIXING & THINNING

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

Thinning | Spray: Up to 16 oz/gal (12%) with Thinner 2
Brush: Up to 16 oz/gal (12%) with Thinner 228
Roller: Up to 16 oz/gal (12%) with Thinner 228
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 | 1:1 Ratio (A to B)

3 Hours at 75 °F (24 °C)

Pot Life | Pot life ends when coating loses body and begins to sag.
Pot life times will be less at higher temperatures. Thinning rates above 16 oz/gal will shorten the working time to 2 hours.

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) | 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.

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: 0.017-0.021"
- Output PSI: 2100-2300
- Filter Size: 60 mesh

PTFE packings are recommended and available from the pump manufacturer.

Brush & Roller (General) | Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive rebrushing or re-rolling. For best results, tie-in within 10 minutes at 75 °F (24 °C).

Brush | Use a medium bristle brush.

Roller | Use a short-nap synthetic roller cover with solvent resistant core.

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)	125°F (52°C)	110°F (43°C)	90%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Topcoat	Maximum Recoat Time w/ Acrylics	Maximum Recoat Time w/ Epoxies	Maximum Recoat Time w/ Polyurethanes
50°F (10°C)	16 Hours	24 Hours	14 Days	30 Days	90 Days
60°F (16°C)	12 Hours	16 Hours	14 Days	30 Days	90 Days
75°F (24°C)	6 Hours	8 Hours	14 Days	30 Days	90 Days
90°F (32°C)	3 Hours	4 Hours	14 Days	15 Days	30 Days

These times are based on a 4.0 mil (100 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting or sanding before the application of additional coats.

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. Keep container closed when not in use.
Ventilation	When used in enclosed areas and product is thinned, 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 respirator.
Caution	This product may contain flammable solvents as supplied or when thinned. Consult MSDS for specifics. 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

Shelf Life	Part A & B: Min. 24 months at 75 °F (24 °C) *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
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Carboguard[®] 877

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Storage Temperature & Humidity | 40-110 °F (4-43 °C) Store indoors. 0-100% Relative Humidity

Shipping Weight (Approximate) | 2 Gallon Kit - 29 lbs (13 kg)
10 Gallon Kit - 143 lbs (65 kg)

Flash Point (Setaflash) | Part A: 69 °F (21 °C) Part B: 60 °F (16 °C)

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.