

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Epoxy Amide
<b>Description</b>	A 1:1, high solids polyamide epoxy designed to provide very good corrosion resistance as a single coat, direct-to-metal (DTM) exterior coating for rail cars and other structures. While all epoxies will chalk and yellow under UV exposure, this coating has good color and gloss retention better than most.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Single coat direct to metal high solids epoxy</li> <li>• Very Low HAPS</li> <li>• Easy one coat high build coverage</li> <li>• Excellent adhesion</li> <li>• Very good resistance to corrosion and spillage /splash of mild chemical</li> <li>• Good initial gloss and very good color &amp; gloss retention</li> </ul>
<b>Color</b>	Per customer requirements
<b>Gloss</b>	80-90+ per customer requirements (ASTM D523 @ 60° angle)
<b>Dry Film Thickness</b>	4 - 6 mils (102 - 152 microns) per coat Do not exceed 12 mils (300 microns)
<b>Solids Content</b>	By Volume 72% +/- 3%
<b>Theoretical Coverage Rate</b>	1155 ft <sup>2</sup> /gal at 1.0 mils (28.3 m <sup>2</sup> /l at 25 microns) 289 ft <sup>2</sup> /gal at 4.0 mils (7.1 m <sup>2</sup> /l at 100 microns) 192 ft <sup>2</sup> /gal at 6.0 mils (4.7 m <sup>2</sup> /l at 150 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : Per EPA Method 24: 2 lbs / gal (288 g/l)

## SUBSTRATES & SURFACE PREPARATION

<b>Steel</b>	Severe service applications – blasted to SSPC-SP-10 to a 1.5-2.5 mil angular profile Lesser service applications – blasted to SSPC-SP-6 Surface to be free of all looser rust, dirt, grease and other contaminants
<b>Aluminum</b>	Remove all surface contaminants and treat with Strathmore's Wash Primer or equivalent

## PERFORMANCE DATA

**All test data was generated under laboratory conditions. Field testing results may vary.**

Test Method	Results
Adhesion (ASTM D3359)	5A (no peeling or removal)
Conical Mandrel (ASTM D522)	Passes 1/8"
Hardness (ASTM D3363)	4H - 5H
Impact Resistance (ASTM D2794)	Up to 120 lbs.in (Direct) and 60 lbs.in (Rev)

**QUV Resistance (ASTM G154):** Gray chalk, 19 gloss units, 460 hrs- QUV UVA-340 Bulb **Chemical Resistance:** No effect on film of various chemicals on 4 hrs and 8 hrs spot tests.

### MIXING & THINNING

<b>Mixing</b>	Agitate thoroughly each component before combining Mix (combine) 1:1 by volume Part A and Part B Agitate thoroughly again after combining Allow 20 minutes @75°F (23°C) of induction time to attain maximum gloss
<b>Thinning</b>	5-15 % by volume maximum, consult Carboline for recommendations If necessary reduce up to 15% after combining components Thinners #2, #10, #231, #235, #245 or #94 are suitable.
<b>Ratio</b>	1:1 Part A to Part B
<b>Pot Life</b>	6 hours @ 70°F (21°C)

### 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.

<b>Airless Spray</b>	<ul style="list-style-type: none"><li>• 45:1 Airless spray equipment</li><li>• Tip Size: 0.017 to 0.021</li><li>• Pump Pressure: 2500-3500 psi (17-24 MPa)</li></ul> <p>To minimize or eliminate thinner use in-line heated equipment with insulated hoses to reach application vis. Do not exceed 165°F (74°C).</p>
----------------------	--

### APPLICATION PROCEDURES

**General** | Designed to be applied direct to metal in a single or two coat application.

### APPLICATION CONDITIONS

Condition	Surface
Minimum	50°F (10°C)

Must be a minimum of 5°F (3°C) above the dew point during the surface preparation and coating application.

### CURING SCHEDULE

Surface Temp.	Touch Dry	Dry to Handle	Maximum Recoat Time	Minimum Recoat Time
70°F (21°C)	3 Hours	5 Hours	NR	NR
72°F (22°C)	NR	NR	7 Days	12 Hours

**Force Cure** | If car is force dried, 1 hr minimum air dry @ 75°F (23°C) before oven. Then force dry @ 145°F (60°C) for 1 hour, adjusting for ambient maximum conditions

### CLEANUP & SAFETY

**Cleanup** | MEK may be used for clean up. Batch mixed material will set up in the lines and equipment if left overnight. With plural component equipment, be sure to flush from the mixing head through the delivery hose and guns.

---

## CLEANUP & SAFETY

---

<b>Safety</b>	Handle with care. Before and during use, observe all safety labels on packaging and paint containers and follow all caution statements on this product data sheet. Consult Safety Data Sheet (SDS) for this product and follow all local or national safety regulations. Employ normal workmanlike safety precautions.
<b>Ventilation</b>	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 ensure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator.

---

## PACKAGING, HANDLING & STORAGE

---

<b>Packaging</b>	55 gal drums or 5 gal pails
<b>Shelf Life</b>	Generally one year from date of manufacturing when kept at recommended storage conditions at 70°F (21°C) and in original unopened containers.  Do not use material beyond shelf life.
<b>Storage Temperature &amp; Humidity</b>	40 - 110°F (4 - 43°C). 0 - 100% relative humidity
<b>Storage</b>	Store indoors with containers tightly closed.
<b>Flash Point (Setflash)</b>	Part A: 31°F (-0.6°C) Part B: 55°F (13°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.