

## Selection & Specification Data

<b>Generic Type</b>	Amine-Cured Novolac Epoxy
<b>Description</b>	<u>Glass flake-filled coating with dense cross-linking that exhibits excellent immersion resistance to high temperature sour crude oil and deionized water.</u> Glass reinforcement provides added abrasion resistance, permeation resistance and internal reinforcement. 1205 exhibits very good acid resistance.
<b>Features</b>	<ul style="list-style-type: none"> <li>▪ Excellent resistance to deionized and demineralized water up to 200°F (93°C).</li> <li>▪ Excellent resistance to sour crude oil up to 200°F (93°C).</li> <li>▪ Excellent abrasion resistance and chemical resistance.</li> <li>▪ Excellent thermal shock resistance.</li> <li>▪ VOC compliant to current AIM regulations.</li> </ul>
<b>Color</b>	Red (0500); Gray (5742)
<b>Finish</b>	Satin
<b>Primers</b>	Self-priming. May be applied over epoxies and phenolics as recommended.
<b>Topcoats</b>	Not recommended
<b>Dry Film Thickness</b>	15.0 mils (375 microns) minimum to be achieved in 1 or 2 coats.
<b>Solids Content</b>	70% ± 2%
<b>Theoretical Coverage Rate</b>	1117 mil ft <sup>2</sup> (27.9 m <sup>2</sup> /l at 25 microns) Allow for loss in mixing and application
<b>VOC Values</b>	As supplied: 2.1 lbs/gal (255 g/l) Thinned: 13 oz/gal w/ #213: 2.6 lbs/gal (307 g/l) 13 oz/gal w/#2 2.5 lbs/gal (307 g/l) These are nominal values.
<b>Dry Temp. Resistance</b>	Continuous: 300°F (149°C) Non-Continuous: 350°F (177°C) Discoloration and loss of gloss is observed above 200°F (93°C).
<b>Temperature Resistance (Immersion)</b>	Deionized Water: 200°F (93°C) Demin. Water: 200°F (93°C) Sour Crude Oil: 200°F (93°C) It is recommended that metal tanks operating above 140°F (60°C) be insulated.

## Substrates & Surface Preparation

<b>General</b>	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.	
<b>Steel</b>	<u>Immersion:</u>	SSPC-SP5
	<u>Non-Immersion:</u>	SSPC-SP6
	<u>Surface Profile:</u>	2.0-3.0 mils (50-75 micron)
<b>Concrete</b>	<u>Immersion:</u>	Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258-92 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing.

## Performance Data

Test Method	System	Results	Report #
ASTM D3359 Adhesion (Elcometer)	Blasted steel 2 cts	800 psi	08352
Temperature Cycling Test	Modified Freeze/Thaw test cycling from 0°F – 425°F for 11 days	No blistering, cracking or checking. No delamination or loss of adhesion.	SR 332

Test reports and additional data available upon written request.

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## Application Equipment

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

**Conventional Spray** Pressure pot equipped with dual regulators, ½" I.D. minimum material hose, .110" I.D. fluid tip and appropriate air cap.

**Airless Spray** Pump Ratio: 45:1 (min.)  
GPM Output: 3.0 (min.)  
Material Hose: ½" I.D. (min.)  
Tip Size: .035-.041"  
Output PSI: 2200-2500  
Teflon packings are recommended and available from the pump manufacturer.

**Brush** Recommended for touch up and striping of welds only. Use a natural bristle brush with full strokes. Avoid rebrushing.

**Roller** Not recommended.

## Mixing & Thinning

**Mixing** Power mix separately, then combine and power mix. **Allow 30 minute induction time at 75°F.** DO NOT MIX PARTIAL KITS.

**Ratio** 4:1 Ratio (A to B)

**Thinning** May be thinned up to 13 oz/gal (10%) #213. For application on horizontal surfaces, may be thinned up to 13 oz/gal (10%) with Thinner #2. Agitate #213 before use. #213 will have a thick viscous appearance which is normal. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

**Pot Life** 3 Hours at 75°F (24°C)  
Pot life ends when coating loses body and begins to sag. Pot life times will be less at higher temperatures.

## Cleanup & Safety

**Cleanup** Use #2 Thinner 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 MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

**Ventilation** When used as a tank lining or 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. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

**Caution** This product contains flammable solvents. 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.

## Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	65°-85°F (18°-29°C)	65°-85°F (18°-29°C)	65°-85°F (18°-29°C)	30-60%
Minimum	55°F (13°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	110°F (43°C)	100°F (38°C)	85%

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. & 50% Relative Humidity	Dry to Handle	Dry to Recoat or Topcoat	Final Cure for Immersion & Maximum Recoat Times
50°F (10°C)	18 Hours	48 Hours	21 Days*
60°F (16°C)	12 Hours	32 Hours	14 Days
75°F (24°C)	6 Hours	16 Hours	7 Days
90°F (32°C)	3 Hours	8 Hours	4 Days

These times are based on a 15.0 mil (375 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. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting prior to the application of additional coats. For force curing, contact Carboline Technical Service for specific requirements. \*Note: Final cure temperatures below 60°F (16°C) are not recommended for tank linings.

## Packaging, Handling & Storage

**Shipping Weight (Approximate)** 1 Gallon Kit 12 lbs (5.5 kg) 5 Gallon Kit 58 lbs (26.3 kg)

**Flash Point (Setaflash)** Part A: 70°F (21°C)  
Part B: 63°F (17°C)

**Storage (General)** Store Indoors.

**Storage Temperature & Humidity** 40° - 110°F (4° - 43°C)  
0-90% Relative Humidity

**Shelf Life** 24 months at 75°F (24°C)



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