

SELECTION & SPECIFICATION DATA

Generic Type	Polyamido-Amine Epoxy
Description	All-purpose, high-build, solvent-free, spray, brush or roll epoxy mastic coating with applications in all industrial markets and for almost all substrates. Product has excellent wetting properties making it ideal for direct-to-substrate (steel or concrete) surface-tolerant applications.
Features	<ul style="list-style-type: none"> • Surface tolerant characteristics to existing finishes and SP2, SP3-cleaned steel • Single-coat application in most instances • High-build capability • Self-priming and primer/finish capabilities • Excellent abrasion and moisture resistance • True brush & roll characteristics • VOC compliant to current AIM regulations
Color	White (1864) and Gray (C705) are standard colors
Finish	Gloss Epoxies lose gloss upon UV (exterior) exposure.
Primer	Self-priming. May be applied over inorganic zinc primers and other tightly adhering coatings. A mist coat may be required to minimize bubbling over inorganic zinc primers. Do not apply over latex coatings.
Dry Film Thickness	3 - 12 mils (76 - 305 microns) per coat Do not exceed 18.0 mils (450 microns) per coat with 954 HB. Film build decreases with pot life.
Solids Content	By Volume 99% +/- 2%
Theoretical Coverage Rate	1588 ft ² /gal at 1.0 mils (39.0 m ² /l at 25 microns) 529 ft ² /gal at 3.0 mils (13.0 m ² /l at 75 microns) 132 ft ² /gal at 12.0 mils (3.2 m ² /l at 300 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : Trace 10 g/l Thinner 2 : 20 oz/gal: 0.9 lbs/gal (112 g/l) Thinner 76 : 20 oz/gal: 0.97 lbs/gal (117 g/l) Use Thinner 76 for projects requiring non-photochemically reactive solvents.
Limitations	This product will yellow with age but can be topcoated if yellowing can not be tolerated (See Topcoats). Epoxies lose gloss and eventually chalk upon UV (exterior) exposure.
Topcoats	May be coated with Acrylics, 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 2.0-3.0 mil (50-75 micron) surface profile for maximum protection. SSPC-SP2 or SP3 when abrasive blasting can not be performed.

SUBSTRATES & SURFACE PREPARATION

Galvanized Steel	For optimum performance sweep blast cleaning is recommended.
Concrete or CMU	Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing. Mortar joints should be thoroughly cured for a minimum of 15 days at 75°F (24°C) and 50% relative humidity or equivalent. Self-priming or prime with suitable block filler.
Drywall & Plaster	Joint compound and plaster should be fully cured prior to coating application. Self-priming or prime with specific Carboline primers as recommended.
Previously Painted Surfaces	Sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scratch" adhesion test.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	May be thinned up to 15 oz/gal (13%) with Thinner #2 or to 16 oz/gal (13%) with Thinner #76. Additive 8506 may be used to reduce dry times. (Consult Tech Service for this option). 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)
Pot Life	90 minutes at 75°F (24°C). When using Additive 8506, pot life is 45 minutes 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.

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, 0.052" I.D. fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 45:1 (min)* GPM Output: 3.0 (min.) Material Hose: 1/2" I.D. (min.) Tip Size: 0.019"-0.027" Output PSI: 3500-4000 Filter Size: 30 mesh – Part A; 60 mesh – Part B *PTFE packings are recommended and available from the pump manufacturer. Heated plural component spray equipment or thinning will aid in application of 954 HB. Recommended temp of Part A and B is 115°F to 125°F.
Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and hiding. Avoid excessive re-brushing or rerolling.

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Brush | Use a medium natural bristle brush.

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

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	45°F (7°C)	45°F (7°C)	0%
Maximum	90°F (32°C)	110°F (43°C)	110°F (43°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. For best results on rough cementitious surfaces, spray apply at 16 to 20 wet mils (400-500 microns) and then back roll into the surface.

CURING SCHEDULE

Surface Temp.	Dry to Recoat & Topcoat w/ other finishes	Final Cure General	Maximum Recoat Time
45°F (7°C)	72 Hours	28 Days	120 Days
60°F (16°C)	32 Hours	14 Days	90 Days
75°F (24°C)	24 Hours	7 Days	60 Days
90°F (32°C)	12 Hours	4 Days	30 Days
105°F (41°C)	8 Hours	24 Hours	15 Days

With additive 8506 (2 oz/gal) @ 75°F (24°C), Dry to Recoat & Topcoat time is 17 hours, Maximum recoat time is 30 days, and Final Cure time is 4 days.

These times are based on a 12.0 mil (300 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, 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. Wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. User should test and monitor exposure levels to insure all personnel are below guidelines.

Carboguard[®] 954 HB

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: Min. 24 months at 75°F (24°C) Part B: 24 months at 75°F (24°C) **Except for custom colors: 12 months *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	40° -110°F (4°-43°C) 0-90% Relative Humidity
Storage	Store Indoors.
Shipping Weight (Approximate)	<u>2 Gallon Kit</u> - 25 lbs (12 kg) <u>10 Gallon Kit</u> - 125 lbs (57 kg)
Flash Point (Setaflash)	Part A: >205°F (96°C) Part B: >205°F (96°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.