

Selection & Specification Data

Generic Type	Polyamido-Amine Epoxy
Description	A solvent-free epoxy designed and uniquely formulated for use as a lining for aluminum casting quench pits. In many cases it can be used as a one-coat system direct to steel or concrete. Has excellent wetting and flow properties and can be spray, brush or roller applied. It has a workable pot life (90 minutes at 75°F) and while plural spray equipment may be used, it is not required.
Features	<ul style="list-style-type: none"> ▪ Low Odor. ▪ Very high solids. ▪ Excellent wetting and flow properties. ▪ Easy 1:1 mix ratio. ▪ One coat system for a variety of substrates including CMU. ▪ VOC compliant to current AIM regulations.
Color	Black (C900) only.
Finish	High Gloss. (Epoxyes lose gloss, discolor and eventually chalk in sunlight exposure.)
Primers	Normally self-priming. May be applied over existing epoxy-type coatings.
Topcoats	Normally not topcoated.
Dry Film Thickness	10.0-15.0 mils (375-425 microns) in one or more coats. Do not exceed 20.0 mils (500 microns) per coat.
Solids Content	By Volume: 99% ± 1%
Theoretical Coverage Rate	1604 mil ft ² (39.0 m ² /l at 25 microns) 134 ft ² at 15 mils (3.3 m ² /l at 375 microns) Allow for loss in mixing and application.
VOC Values	As supplied: 0.04 lbs./gal (5 g/l) EPA Method 24: 0.08 lbs./gal (10 g/l) These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C) Discoloration and loss of gloss is observed above 200°F (93°C).
Limitations	Not recommended for prolonged contact with ketones and alcohols.

Substrates & Surface Preparation

General	Remove all oil or grease from the surface to be coated with Thinner 2 or Surface Cleaner 3 (refer to Surface Cleaner 3 product data sheet) in accordance with SSPC-SP1.
New Steel	SSPC SP6 with a 2.0-3.0 mil (50-75 micron) surface profile for maximum protection. Self-priming or prime with specific Carboline primers defined in <i>Market Guides</i> or as recommended by your Carboline sales representative. SSPC-SP2 or SP3 for previously painted or weathered surface.
Immersion Service	Abrasive blast to a Near White Metal Finish in accordance with SSPC-SP 10 and obtain a 1.5-3 mil (40-75 micron) blast profile.
Previously Painted or Weathered	SSPC-SP1/SP2/SP3 to achieve an oxide free substrate. Self-priming or prime with specific Carboline primers defined in <i>Market Guides</i> . Sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test.
Cementitious Surfaces	Concrete should be cured at least 28 days at 70°F (21°C) and 50% RH or equivalent time. Remove fins and other protrusions by stoning, sanding or grinding. Abrasive blast to open all surface voids and remove all form oils, incompatible curing agents, hardeners, laitance and other foreign matter and produce a surface texture similar to that of medium grit sandpaper. Voids in the concrete may require surfacing. Blow or vacuum off sand and dust.
CMU	Surface should be prepared in accordance with ASTM D4261-83 and mortar cured at least 15 days at 70°F (21°C) and 50% RH or equivalent time.

Typical Chemical Resistance

Exposure	Immersion	Splash & Spillage	Fumes
Acids	N/R	Very Good	Excellent
Alkalies	N/R	Very Good	Excellent
Solvents	N/R	Very Good	Excellent
Salt	Very Good	Excellent	Excellent
Water	Excellent	Excellent	Excellent

MULTI-GARD® 955 CP

Application Equipment

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.

General Guidelines:

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 such as Binks, DeVilbiss and Graco.

Conventional Spray

Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .052" I.D. fluid tip and appropriate air cap.

Airless Spray

Pump Ratio: 30:1 (min)
GPM Output: 3.0 (min.)
Material Hose: ½" I.D. (min.)
Tip Size: .021"-.027"
Output PSI: 2500-3000
Filter Size: 60 mesh
Teflon packings are recommended and available from the pump manufacturer.

Brush & Roller (General)

Use a good quality natural bristle brush or a short to heavy nap roller with a phenolic core. Roller nap choice will depend on the roughness of the surface to be coated. Avoid excessive rebrushing and rerolling. Two coats may be required to obtain desired appearance, hiding and recommended dry film thickness.

Mixing & Thinning

Mixing

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

Ratio

1:1 Ratio (A to B)

Thinning

Normally not required. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life

90 minutes at 75°F (24°C). 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 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 insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator.

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	70°-80°F (21°-27°C)	70°-80°F (21°-27°C)	70°-90°F (21°-32°C)	0-75%
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. & 50% Relative Humidity	Dry to Recoat & Topcoat	Maximum Recoat Time	Final Cure
45°F (7°C)	72 Hours	60 Days	28 Days
60°F (16°C)	24 Hours	45 Days	14 Days
75°F (24°C)	16 Hours	30 Days	7 Days
90°F (32°C)	12 Hours	15 Days	4 Days
105°F (41°C)	8 Hours	7 Days	24 Hours

These times are based on a 10.0-15.0 mils (375-425 micron) dry film thickness (these times may be shortened by elevating the temperature of the surface using suitable equipment). 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.

Aluminum Casting Pit Applications: Cure before service. For aluminum casting pit applications, the minimum cure before placing into service is 8 hours at 75°F (24°C), and conforms to the "hydrodynamic durability" and "time to Immersion" parameters.

Packaging, Handling & Storage

Shipping Weight (Approximate)	<u>0.5 Gallon Kit</u> 6.25 lbs. (4 kg)	<u>2 Gallon Kit</u> 25 lbs. (12 kg)	<u>10 Gallon Kit</u> 125 lbs. (57 kg)
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Flash Point (Setaflash)	Multi-Gard 955 CP Part A: >205°F (96°C) Multi-Gard 955 CP Part B: >205°F (96°C)
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Storage Temperature & Humidity	40° -110°F (4°-43°C) Store indoors. 0-90% Relative Humidity
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Shelf Life	Part A: Min. 24 months at 75°F (24°C) Part B: 12 months at 75°F (24°C)
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***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**



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