Multi-Gard® 955 CP

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Polyamido-Amine Epoxy
Description	A solvent-free epoxy designed and uniquely formulated for use as a coating for aluminum casting quench pit environments. It has been tested by the Aluminum Association and found suitable for this use. 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	• 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 (Epoxies lose gloss, discolor and eventually chalk in sunlight exposure.)
Primer	Normally self-priming. May be applied over existing epoxy-type coatings.
Dry Film Thickness	10 - 15 mils (254 - 381 microns) per coat Do not exceed 20.0 mils (500 microns) per coat.
Solids Content	By Volume 99% +/- 2%
Theoretical Coverage Rate	1588 ft²/gal at 1.0 mils (39.0 m²/l at 25 microns) 159 ft²/gal at 10.0 mils (3.9 m²/l at 250 microns) 106 ft²/gal at 15.0 mils (2.6 m²/l at 375 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 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.
Topcoats	Not Recommended Not normally topcoated.

SUBSTRATES & SURFACE PREPARATION

General	Remove all oil or grease form 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.

SUBSTRATES & SURFACE PREPARATION

Steel	SSPC SP6 with a 2-3 mil (50-75 micron) surface profile for maximum protection (self-priming). SSPC SP2 or SP3 is suitable for projects where abrasive blasting is not permitted.
Concrete or CMU	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.
Previously Painted Surfaces	SSPC-SP1/SP2/SP3 to achieve an oxide free substrate. Self-priming or prime with specific Carboline primers defined in Market Guides. Sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 “XScribe” adhesion test.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
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.
Ratio	1:1 Ratio (A to B)
Pot Life	90 minutes at 75°F (24°C). 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 equipment 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: 30:1 (min)* GPM Output: 3.0 (min.) Material Hose: ½” I.D. (min.) Tip Size: 0.021”-0.027” Output PSI: 2500-3000 Filter Size: 60 mesh *PTFE 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 re-brushing and re-rolling. Two coats may be required to obtain desired appearance, hiding and recommended dry film thickness.

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	Maximum Recoat Time	Final Cure General
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.

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 SDS for this product. Employ normal workmanlike safety precautions.

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.

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.

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

Storage | Store Indoors.

PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)	2 Gallon Kit - 25 lbs. (12 kg) 10 Gallon Kit - 125 lbs. (57 kg)
Flash Point (Setaflash)	Multi-Gard 955 CP Part A: >205°F (96°C) Multi-Gard 955 CP 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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.