Carboguard 874

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Modified Polyamido-Amine Epoxy
Description	• High performance, high solid epoxy with excellent corrosion protection used either as primer or as an intermediate coat over steel and zinc primers • Can be topcoated with a broad variety of high performance finish coats
Features	• Self priming • VOC compliant to current AIM regulations • Meets requirement of ISO 12944:2018 C5 High and CX Extreme when used as a part of predefined paint system • MIO version is available • Excellent film build and edge protection • Good abrasion resistance • Excellent surface tolerance
Color	Colors (0500) red, (0700) grey, and aluminum grey. For other colors, contact StonCor ME.
Finish	Semi-Gloss
Primer	May be applied over zinc rich primers. A mist coat may be required to minimize bubbling over inorganic zinc rich primers.
Dry Film Thickness	102 - 203 microns (4 - 8 mils) per coat
Solids Content	By Volume 80% +/- 2%
Theoretical Coverage Rate	31.5 m²/l at 25 microns (1283 ft²/gal at 1.0 mils) 7.9 m²/l at 100 microns (321 ft²/gal at 4.0 mils) 3.9 m²/l at 200 microns (160 ft²/gal at 8.0 mils) Allow for loss in mixing and application.
VOC Value(s)	As Supplied : 200 g/l
Dry Temp. Resistance	Continuous: 121°C (250°F) Non-Continuous: 149°C (300°F) Discoloration and loss of gloss is observed above 121°C (250°F).
Limitations	Epoxies lose gloss, discolor and eventually chalk in sunlight exposure. Discoloration is more pronounced with this product. Not recommended for immersion service.
Topcoats	Acrylics, alkyds, epoxies, polyurethanes

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	For most applications: SSPC-SP10 (ISO 8501 Sa 2 ½) to obtain a blast profile of 1.0-2.0 mils (25-50 microns).

SUBSTRATES & SURFACE PREPARATION

Galvanized Steel	Galvanizing requires a roughened surface for optimum adhesion/performance of high build epoxies. Remove any contaminants per SSPC SP1; ensure there are no chemical treatments that may interfere with adhesion; and abrade the surface to establish a suitable roughness (typically 1 mil). SSPC-SP7 or SP11 are acceptable methods.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	• Airless Spray: Up to 15% with Thinner #80 • Brush & Roller: Up to 5% with Thinner #80
Ratio	4:1 Ratio (A to B) By Volume
Pot Life	3 Hours at 25°C Pot life ends when coating thickens and loses application properties. 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	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, 0.070” I.D. fluid tip and appropriate air cap.
Airless Spray	• Pump Ratio: 30:1 (min.)* • GPM Output: 2.5 (min.) • Material Hose: 3/8” I.D. (min.) • Tip Size: 0.015”-0.021” • Output PSI: 2100-2300 • Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 75°F (24°C).
Brush	Use a medium bristle brush.
Roller	Use 3/8” nap phenolic core roller.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	5°C (41°F)	5°C (41°F)	0%
Maximum	32°C (90°F)	52°C (126°F)	43°C (109°F)	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.	Dry to Touch	Dry to Recoat	Maximum Recoat Time
25°C (77°F)	3 Hours	7 Hours	NR
35°C (95°F)	2 Hours	5 Hours	NR

These times are based on 50% relative humidity and 4.0-8.0 mil (100-200 micron) dry film thickness for atmospheric exposures. 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.
****NR** The desired level of intercoat adhesion with extended recoat time can be achieved if the existing coating is intact, tightly adherant, clean, dry and free from any contaminants. Appropriate mechanical cleaning is to be done if surface shows any defect. Contact StonCor ME Technical Service for further details.

CLEANUP & SAFETY

Cleanup
Use Thinner #80. 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. 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, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life
Part A & B: Min. 12 months at 75°F (24°C)

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

Shipping Weight (Approximate)
19 liter kit (Approximately 30 kg)

PACKAGING, HANDLING & STORAGE

Storage Temperature & Humidity	Storage Temperature: 40° -110°F (4°-43°C) Relative Humidity: 0-100%
Flash Point (Setaflash)	Part A: <25°C Part B: <25°C
Storage	Store indoors

WARRANTY

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