Carboguard® 824

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy polyamide
Description	Carboguard 824 is a VOC compliant, two coat, epoxy polyamide system for use where marine coating regulations are restricted to a maximum VOC of 340 g/l or 2.8 lb/gal. The system is specifically formulated for use in immersion service; it is highly versatile and may also be used as an intermediate coating for a variety of industrial applications. Carboguard 824 is for use over properly prepared steel and aluminum substrates that will be subject to exposure in harsh industrial and marine environments.
Features	• Immersion grade epoxy • Excellent for harsh marine or industrial exposures • Qualified under MIL-DTL-24441D Type IV • Approved for UFGS 09 97 13.27
Color	• F-151 Haze Grey [Carboline color: 2725] • F-152 White (SAE-AMS STD 595 color 27886) [0820] • F-152 Parchment (SAE-AMS STD 595 color 27886) [C275] • F-153 Dark Grey [2748] • F-156 Red [2290] • F-160 Black [C900] Other colors may be available upon request. Contact your Carboline representative for availability.
Dry Film Thickness	4 - 6 mils (102 - 152 microns) per coat
Solids Content	By Volume 66% +/- 2%
Theoretical Coverage Rates	1058 ft²/gal @ 1 dry mil
Theoretical Coverage Rate	1059 ft²/gal at 1.0 mils (26.0 m²/l at 25 microns) 265 ft²/gal at 4.0 mils (6.5 m²/l at 100 microns) 176 ft²/gal at 6.0 mils (4.3 m²/l at 150 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 2.36 lbs/gal (284 g/l)
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
Limitations	Epoxies may lose gloss, discolor and chalk when exposed to sunlight.

SUBSTRATES & SURFACE PREPARATION

General	All surfaces must be thoroughly cleaned to remove dirt, grease, mill scale, loose rust, chalk, and any other contaminants that can reduce adhesion via SSPC-SP1 solvent cleaning. Primer required for most substrates.
Previously Painted Surfaces	All previously painted surfaces should be cleaned thoroughly to remove surface contamination. Rinse well and allow to dry. Scrape loose, scaly, peeling paint and sand the edges smooth, remove any rust and scale from ferrous metal. If the paint is glossy, sand to dull the surface. Test for compatibility with existing coatings.

SUBSTRATES & SURFACE PREPARATION

Metal	Abrasive blasting is recommended to remove rust and mill scale. Solvent clean surfaces according to SSPC-SP1, then perform a commercial blast to SSPC-SP6 for mild exposures. For immersion service and severe environments, solvent clean surfaces according to SSPC-SP1 first, then perform a near-white blast SSPC-SP10.

MIXING & THINNING

Mixing	Thoroughly stir each component separately with a power mixer. Pour component B into component A and mix well with power mixer before use. Mix 1 part by volume of Part A with 1 part by volume of Part B. No induction time necessary above 60°F. If reduction is required add appropriate solvent only after both components have been blended together completely. Do not mix more than can be applied in 4 hours @ 77°F. At temperatures below 60°F, 30 minutes induction time is recommended and should be considered when calculating pot life
Thinning	Thin for spraying with Thinner #248 to a maximum of 12 fluid ounces per gallon. Thin only if allowed by local air quality & air pollution regulations.
Ratio	1:1 mix ratio by volume (Part A to Part B)
Pot Life	4 hours min at 77°F

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.

Conventional Spray	Use 65 to 70 psi atomizing air pressure, 30 to 40 psi fluid pressure. Thinning up to 5% by volume may be required for spray applications.
Airless Spray	Apply using 30:1 pump Material Hose: 3/8" x 150’ max Tip Size: .013-.017" High Pressure Filter: 30 Mesh
Roller	Roll using a 3/8" lambs wool or synthetic cover. Keep roller wet. Roll in one direction, rewet, then cross roll.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	90°F (32°C)	135°F (57°C)	120°F (49°C)	85%

Industry standards are for the substrate temperatures to be 5°F (3°C) above the dew point. It is recommended to maintain this restriction during the initial curing times (see Dry to Recoat schedule). 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 Topcoat	Maximum Recoat Time
35°F (2°C)	24 Hours	7 Days
40°F (4°C)	18 Hours	7 Days
60°F (16°C)	8 Hours	7 Days
80°F (27°C)	4 Hours	7 Days

Dry time at 77°F @ 50% relative humidity applied at recommended film thickness. Expect longer dry times in periods of higher humidity or lower temperatures and with higher film builds. If the maximum recoat window is exceeded the film must be mechanically abraded before recoating.

CLEANUP & SAFETY

Cleanup	Clean up all tools and equipment promptly with Thinner #2. Flush out all spray tips, fluid lines and pressure pots immediately after use.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 48 months Part B: 48 months *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	40° - 100°F (4° - 43°C) 0-100% Relative Humidity
Storage	Store indoors
Shipping Weight (Approximate)	2 Gal Kit - 26 lbs 10 Gal Kit - 127 lbs
Flash Point (Setaflash)	Part A: 96°F Part B: 96°F Mixed: 95°F

WARRANTY

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