

SELECTION & SPECIFICATION DATA

Generic Type	Amine cured epoxy
Description	Ultra high build, airless-applied, solventless coating for use on steel and concrete substrates. Widely used as a splash zone coating on marine installations, tank lining in petroleum services and for protection of buried pipelines. It has extremely good impact and abrasion resistance and is suitable for variety of heavy industrial applications. Carboguard 703 GF (Glass Flake) is specially formulated for higher abrasion resistance while retaining the temperature, chemical and other physical properties of Carboguard 703.
Features	<ul style="list-style-type: none"> • High film build and edge protection • Excellent resistance to corrosion and abrasion • May be used in conjunction with cathodic protection • Application by airless spray equipment (plural component acceptable but not required) • Meets most VOC (Volatile Organic Content) regulations
Color	Grey, Buff
Finish	Eggshell
Primer	Self-priming
Dry Film Thickness	16-125 mils (400-3125 microns) depending on expected service conditions
Solid(s) Content	By Volume: 98% +/- 2%
Theoretical Coverage Rates	38.6 m ² /l at 25 microns (1572 ft ² /gal at 1.0 mils) 2.4 m ² /l at 400 microns (98 ft ² /gal at 16.0 mils) 0.3 m ² /l at 3125 microns (13 ft ² /gal at 125.0 mils) Allow for loss in mixing and application.
VOC Value(s)	As supplied: 28.47 g/l These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 93°C (199°F) Non-Continuous: 121°C (250°F) Discoloration and loss of gloss is observed above 200°F (93°C).
Limitations	Epoxies lose gloss, discolor and eventually chalk in sunlight exposure.
Topcoats	Normally not required Polyurethanes for non- immersion service when required
Wet Temp. Resistance	Immersion temperature resistance depends upon exposure. Consult StonCor ME Technical Service for specific information.

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	<u>Immersion</u> : SSPC-SP10 – 3-5 mils <u>Non-Immersion</u> : SP10 – 2-3 mils

Carboguard 703 GF

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Concrete	<u>Immersion and Non-Immersion:</u>
	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.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Not recommended. Thin only if necessary up to 15% of Thinner 21 and for hot and windy conditions, use Thinner 33 up to 15%.
	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	5:1 Ratio (A to B) + 1 bag Glass Flakes (3.125 kg) / 19-Liter mix
Pot Life	Approx. 30 minutes at 75°F (24°C). Pot life ends when material begins to thicken and starts to heat up. 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	Recommended for application by single or plural component airless spray. This is 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 manufactures such as Binks, DeVilbiss and Graco.
Conventional Spray	Not recommended
Airless Spray	Pump Ratio: 45:1 (min.) GPM Output: 3.0 (min.) Material Hose: ½" I.D. (min) Tip Size: 0.035 - 0.042" Output PSI: 2700-3000 Filter Size: Not recommended
	Teflon packings are recommended and available from the pump manufacturer. Contact StonCor ME Technical Service for plural component equipment recommendations.
Brush & Roller (General)	Not recommended for tank lining applications except when striping welds.
Brush	For touch up and limited areas only
Roller	For touch up and limited areas only

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	52°C (126°F)	43°C (109°F)	90%

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. To reduce out gassing when applying to concrete substrates, do not apply in direct sunlight or when surface temperatures are increasing. Best results are obtained when ambient and surface temperatures are decreasing or constant.

CURING SCHEDULE

Surface Temp.	Dry to Recoat	Final Cure	Maximum Recoat Time
16°C (61°F)	24 Hours	14 Days	14 Days
24°C (75°F)	8 Hours	10 Days	10 Days
32°C (90°F)	6 Hours	7 Days	7 Days

*50% Relative Humidity

Second coat or build-up coat may be applied as soon as the first coat is tacky. These times are based on a 20 mils (500 microns) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times. Condensation on the surface or humidity above 25% during application and curing will result in a surface haze or blush. Any haze or blush must be removed by water washing and abrade with sand paper before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. If the maximum recoat times is exceeded, the surface must be washed with detergent and water, then abraded by sweep blasting prior to the application of additional coats. For force curing, contact StonCor ME Technical Service for specific requirements.

*Note: Final cure temperatures below 60°F (16°C) are not recommended for tank linings.

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	Vapors and/or spray mist may cause explosion. When used as a tank lining or 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. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)	19-Liter Kit: 34 Kg
Storage Temperature & Humidity	Storage Temperature: 40°-110°F (4°-43°C) Relative Humidity: 0-100%
Flash Point (Setaflash)	Part A: 392°F (200°C) Part B: 113°F (45°C) Part C: Not applicable

Carboguard 703 GF

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Storage | Store indoors

Packaging | 18 months at 75°F (24°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.