

SELECTION & SPECIFICATION DATA

Generic Type	Amine Cured Epoxy High Build
Description	Carboguard E-96 is a high solids, low VOC, quick cure, high build epoxy with excellent chemical and abrasion resistance. It is designed for use in industrial and marine. It has extremely good impact and is suitable for variety of heavy industrial applications.
Features	<ul style="list-style-type: none"> • High film build and edge protection • Self priming and primer/finish capabilities • Application by airless spray equipment (plural component acceptable but not required) • Meets most VOC (Volatile Organic Content) regulations
Color	Gray, Buff and other colors, refer to Carboline color chart
Primer	Properly prepared steel or inorganic/organic zinc rich and epoxy primers
Dry Film Thickness	1 coat system: 6-20 mils (150-500 microns) Depending on service requirement.
Solid(s) Content	By Volume: 94% +/- 2%
Theoretical Coverage Rates	256 ft ² /gal @ 6 mils, 6.4 m ² / l @ 150 microns Allow for loss in mixing and application
VOC Values	As supplied: 27 g/l This is a nominal value 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.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminant.
Steel	Immersion: SSPC-SP10 Non-immersion: SSPC-SP6 1.5-3.0 mils (38-75 microns) SSPC-SP2 or SP3 are suitable cleaning methods for mild environments.
Galvanized Steel	Prime with specific Carboline primers as recommended by your StonCor ME Sales Representative. Refer to the specific primer's Product Data Sheet for requirements.
Concrete or CMU	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. Mortar joints should be cured a min of 15 days.
Drywall & Plaster	Joint compound and plaster should be fully cured prior to coating application.

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PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Previously Painted Surfaces	Lightly sand or abrade to roughen surface and degloss the surface. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Cut" adhesion test.
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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 10% of Thinner 21 and for hot and windy conditions, use Thinner 33 up to 10%. 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	3:1 Ratio (A to B)
Pot Life	60 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: 0.025 - 0.035" Output PSI: 2700-3000 Filter Size: 60 mesh 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)	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. 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	Dry to Recoat & Topcoat w/ other finishes	Final Cure General	Final Cure Immersion
10°C (50°F)	12 Hours	24 Hours	3 Days	NR
16°C (61°F)	8 Hours	16 Hours	2 Days	10 Days
24°C (75°F)	4 Hours	8 Hours	24 Hours	5 Days
32°C (90°F)	2 Hours	4 Hours	16 Hours	3 Days

These times are based on a 6 mils (150 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times.

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.

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

Shelf Life	24 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: 31.1 kg
Storage Temperature & Humidity	Storage Temperature: 40° -110°F (4°-43°C) Relative Humidity: 0-100%

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PACKAGING, HANDLING & STORAGE

Flash Point (Setaflash)	Part A: >205°F (96°C)
	Part B: >205°F (96°C)

Storage	Store indoors
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WARRANTY

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