

SELECTION & SPECIFICATION DATA

Generic Type	Cross-linked epoxy phenalkamine
Description	An epoxy that has a variety of attributes including low-temperature cure, fast recoat time, moisture tolerance during application.
Features	<ul style="list-style-type: none"> • Low temperature cure. • Excellent corrosion protection. • Excellent application characteristics. • Fast recoat time. • Moisture tolerance during application. • Extended recoat window for atmospheric exposure (6 months for most part of topcoats).
Color	Red-Brown, Off White, Light Grey
Finish	Satin
Primer	Self-priming.
Dry Film Thickness	90-150 µm per coat, for most application . Follow the instructions given in the Curing Schedule to avoid possible issues about adhesion of the finishes.
Solid(s) Content	by Volume: 63% ± 2%
Theoretical Coverage Rates	7 m ² /l at 90 µm Material losses during mixing and applications will vary and must be taken into consideration when estimating job requirements.
VOC Values	As Supplied : 330 g/l These are nominal values and may vary with color.
Dry Temp. Resistance	Continuous: 80°C (176°F) Non-Continuous: 100°C (212°F)
Limitations	Epoxies lose gloss, discolor and eventually chalk in sunlight exposure.
Topcoats	Acrylics, Alkyds, Epoxies, Polyurethanes, Polysiloxanes.

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.(SSPC-SP 1)
Steel	<p>For atmospheric exposure: Hand or Power tool clean in accordance with ISO 8501-1 ST 2-3 or SSPC-SP 2/3/11 to produce a rust –scale free surface.</p> <p>For maximum performance: ISO 8501-1 SA 2, SSPC-SP6 (or greater) with 40-65µm blast profile (Medium G per ISO 8503-2)</p>

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix.
---------------	---

Carboguard 609

PRODUCT DATA SHEET



MIXING & THINNING

Thinning	For atmospheric service application thin up to 8% by volume with Thinner#76, or 8% by volume per with Thinner#33 for brush and roller. 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	By Volume: Part A: 4 Part B: 1
Pot Life	3 Hours at 24°C and less at higher temperatures. Pot life end when the coating becomes too viscous to use.

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	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 manufacturers such as Binks, De Vilbiss and Graco.
Conventional Spray	Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 30:1 (min.) GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: .017"-.021" Output PSI: 2100-2300 Filter Size: 60 mesh Teflon 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 24°C. Use a short nap synthetic roller cover with phenolic core. Use a medium bristle brush.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	7°C (45°F)	0°C (32°F)	0°C (32°F)	0%
Maximum	32°C (90°F)	50°C (122°F)	35°C (95°F)	85%

Industry standards are for substrate temperatures to be min 3 ° C above the dew point. Special thinning and application techniques may be required above and below normal conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle	Minimum Recoat Time	Maximum Recoat Time
2°C (36°F)	2 Hours	16 Hours	2 Hours	180 Days
10°C (50°F)	1 Hour	10 Hours	1 Hour	180 Days
24°C (75°F)	30 Minutes	3 Hours	45 Minutes	180 Days
32°C (90°F)	15 Minutes	30 Minutes	30 Minutes	180 Days

This times are to used as a guideline. If the touch-tacky time has been exceeded, or if the film is “glossy” you can generally reprime/refresh the first coat of CG 609 with a fresh coat of itself. **If those maximum recoat times have been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of an additional coats.**

The listed time in the chart above, are based on a 90 µm DFT per coat. Higher film thickness, insufficient ventilation or cooler temperatures could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing will not affect performance but may cause discoloration and result in surface haze. Any haze or blush must be removed by water washing before recoating. For application and cure condition below 5°C, dehumidify before, during and after application to prevent ice formation on the surface.

CLEANUP & SAFETY

Cleanup	Use Thinner#2. 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	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. 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 supplied air respirator.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 24 months at 24°C Part B: 24 months at 24°C Actual stated shelf life when kept at recommended storage condition and in origin unopened containers.
Storage Temperature & Humidity	4 - 38 °C 0-85% HR
Flash Point (Setaflash)	Part A: 34 °C Part B: 32 °C
Storage	Store indoors. Keep away from heat sources and from freezing.
Packaging	Part A: 12 liters Part B: 3 liters

Carboguard 609

PRODUCT DATA SHEET



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.