

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy polyamide zinc phosphate.
Description	A two-component, high build, anti-corrosive epoxy primer which is especially suitable for application over blast-cleaned steel. Carboguard 819 has robust application characteristics and good anti-corrosive properties over ferrous substrates properties, make it ideal for wide industrial uses. It can be recoated with most polyurethane and acrylic topcoats. As part of a system it meets the requirements for category C5M in accordance to ISO 12944-2 (shot-blasted steel Sa2.5).
Features	<ul style="list-style-type: none"> • Good corrosion resistance • Meets requirements for category C5M in accordance to ISO 12944-2 • Cured film is tough and abrasion resistant • Widely used within commercial infrastructure • Can be applied over power tool cleaned surfaces • Can be used under certain Carboline fireproofing materials <p>For specific performance data, please contact your Carboline sales representative.</p>
Color	Grey and Red
Finish	Flat
Primer	<ul style="list-style-type: none"> • Self-priming to steel. • May be applied over phosphatized steel.
Dry Film Thickness	70-125 microns per coat
Solid(s) Content	By volume 62%
Theoretical Coverage Rates	<ul style="list-style-type: none"> • 4.9 m²/l at 125 microns • 6.2 m²/l at 100 microns • 8.8 m²/l at 70 microns <p>Allow for loss in mixing and application.</p>
VOC Values	451.6 g/L
Limitations	Do not use over wash primers or synthetic primers single component.

SUBSTRATES & SURFACE PREPARATION

General	Surface must be clean, dry and free of oil, grease, loose mill scale, dirt, dust or other materials which would impair the bond of the product to the substrate.
Phosphatized Steel	Abrade with Scotch-Brite and degrease.
Ferrous Metal	Blast clean to ISO 8501-1 Sa2.5 with a blast profile of 20-40 microns
Non-Ferrous Metals	Surface profile should be a dense angular 40-75 microns and is best achieved through abrasive blasting in accordance with SSPC-SP16 for atmospheric exposure.

Carboguard 819

PRODUCT DATA SHEET



MIXING & THINNING

Thinning	Spray: Up to 10% with Thinner 15 or Thinner 2. Brush & Roller: Up to 10% with Thinner 15 or Thinner 33
	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 = 4.7:1 Ratio (A to B)
Pot Life	4 Hours at 24°C (75°F)
	Pot life ends when coating loses body and begins to sag. 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.

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. For filler additives use a 0.110" I.D. fluid tip.
Airless Spray	Pump Ratio: 30:1 (min.) GPM Output: 2.5 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: 0.017"-0.021" Output PSI: 2100-2500 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.

APPLICATION PROCEDURES

Mixing	Power mix separately, then combine and power mix. Allow mixed product 5 minute sweat in time before thinning if material is under 70 °F (21 °C). No sweat in time needed above 70 °F (21 °C) DO NOT MIX PARTIAL KITS.
---------------	---

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	34°C (93°F)	50°C (122°F)	40°C (104°F)	80%

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 Handle or Recoat
20°C (68°F)	15 Minutes	60 Minutes

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. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. **Maximum recoat/topcoat times are 30 days for epoxies at 75°F (24°C).** If the maximum recoat times have been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats.

CLEANUP & SAFETY

Cleanup	Use thinner 15 or Thinner 33. In the event of a spill, absorb and dispose of in accordance with applicable local regulations.
Safety	Safety Statement – Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal safety precautions. Use adequate ventilation. Keep container closed when not in use.
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	<ul style="list-style-type: none"> • Part A: 36 months at 75°F (24°C) • Part B: 24 months at 75°F (24°C) <p>*When kept at recommended storage conditions and in original unopened containers.</p>
Storage Temperature & Humidity	<ul style="list-style-type: none"> • 5-30°C Store indoors • 0-100% Relative Humidity
Storage	Store indoors
Packaging	20 Litre Kit Part A is 16.5 litres Part B is 3.5 litres

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.