

Selection & Specification Data

GENERIC TYPE Two component, cross-linked epoxy.

GENERAL PROPERTIES: Carboline 801 is self priming, high build, semi-gloss finish available in a wide variety of colors. Can be applied by spray, brush or roller over hand or power tool cleaned steel and is compatible with most existing coatings and tightly adhered rust. The cured film is tough and abrasion resistant and provides an easily cleanable, esthetic surface. Features include:

- Single coat corrosion protection.
- Good weathering resistance.
- Good flexibility and lower stress upon curing than most epoxy coating.
- Excellent tolerance of damp(not wet) substrates.
- Can be spray applied up to 8 mils dry in one coat.
- Has a higher flash point than most epoxy coatings (over 110°F, including recommended Carboline Thinner).
- Meets the most stringent VOC(Volatile Organic Content) regulations.

RECOMMENDED USES: Recommended as a general, plant wide, maintenance coating for tanks, structural steel or miscellaneous equipment in industrial environments that include Chemical Processing, Pulp and Paper, Water and Waste Water Treatment and Power Generation among others. May be used as a single coat, shop applied system for new structural steel and equipment that will receive mild chemical exposures. Two coats of Carboline 801 are recommended for use in more severe environments. Consult Carboline Technical Service Department for other specific uses.

NOT RECOMMENDED FOR: Immersion service, splash and spillage of very strong solvents or concentrated acids.

TYPICAL CHEMICAL RESISTANCE :

<u>Exposure</u>	<u>Splash & Spillage</u>	<u>Fumes</u>
Acids	Good	Very Good
Alkalies	Good	Excellent
Solvents	Very Good	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

TEMPERATURE RESISTANCE: Continuous : 200°F (93°C)
Non-continuous : 250°F (121°C)
(Non-immersion)

SUBSTRATE Apply over suitably primed metal, concrete, or other surface as recommended.

COMPATIBLE COATINGS May be used over most generic types of coating which are tightly adhering and properly prepared. A test patch is recommended for use over existing coatings. May be topcoated to upgrade weathering resistance. Not recommended over chlorinated rubber or latex coating. Consult Carboline Technical Service Department for specific recommendations.

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THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL

	<u>By Volume</u>
Carboline 801	76% ±2%

VOLATILE ORGANIC CONTENT :*

As Supplied 1.74 lbs./gal.(208 g/l) - Color White(S800)
Thinned The following are nominal values utilizing Carboline Thinner #4

<u>% Thinned</u>	<u>Fluid Ounces/Gal.</u>	<u>Pounds/Gallon</u>	<u>Grams/Liter</u>
6%	8	2.08	250
12%	16	2.37	284
25%	32	2.88	345

* Varies with color

RECOMMENDED DRY FILM THICKNESS PER COAT

4~6 mils (100~150µ) for use in mild environments.
6~8 mils (150~200µ) for use over light tight rust.
In more severe environments a second coat of 4-6 mils (100-150µ) is recommended.

THEORETICAL COVERAGE PER MIXED GALLON*

1219 mil sq. ft (30.4 sq. m/l at 25µ)
244 sq. ft at 4 mils (6.0 sq. m/l at 125µ)
Mixing and application losses will vary and must be taken into consideration when estimating job requirements.

STORAGE CONDITIONS Store indoors.
Temperature : 40-95°F (4-35°C)
Humidity : 0-90%

SHELF LIFE Twenty-four months minimum when stored at 75°F (24°C).

COLORS Available in Carboline Color Chart Colors. Metallic aluminum colors are available upon special request. Some colors may require two coats for adequate hiding. Consult your local Carboline representative or Carboline Customer Service for availability.

*See notice under DRYING TIMES.

GLOSS Semi-gloss (Epoxy lose gloss and eventually chalk in sunlight exposure).

Ordering Information

Prices may be obtained from your Carboline sales representative or Carboline Customer service department.

APPROXIMATE SHIPPING WEIGHT :

	<u>2's</u>	<u>10's</u>
Carboline 801	28lbs.(12kg)	135lbs.(61kg)
Carboline Thinner #4	9lbs.(4kg)	45lbs.(20kg)

FLASH POINT : (Pensky-Martens Closed Cup)

Carboline 801 Part A	110°F(43°C)
Carboline 801 Part B	115°F(46°C)
Carboline Thinner #4	110°F(43°C)

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Application Instructions

SURFACE PREPARATION Remove oil or grease from surface to be coated with clean rags soaked in Carboline Thinner #2 or Surface Cleaner #3 (Refer Surface Cleaner #3 instructions) in accordance with SSPC-SP 1.

STEEL For mild environments Power Tool or Hand Tool Clean in accordance with SSPC-SP 3 or SSPC-SP 2, respectively to produce a rust-scale free surface.
For more severe environments, abrasive blast to a Commercial Finish in accordance with SSPC-SP 6 (or NACE #3) to obtain a 1/2-3 mil (40-75µ) blast profile.

Concrete Apply over clean, dry recommended surface. Can be applied directly to dry concrete where an uneven surface can be tolerated. Remove laitance by abrasive blasting or other means. Do not coat concrete treated with hardening solutions unless test patches indicate satisfactory adhesion. Do not apply coating unless concrete has cured at least 28 days at 70°F (21°C) and 50% R.H. or equivalent time.

MIXING Mix separately, then combine and mix in the following

	<u>2Gal. Kit</u>	<u>5Gals. Kit</u>
Carboline 801 Part A	1 gallon	5 gallons
Carboline 801 Part B	1 gallon	5 gallons

DO NOT MIX PARTIAL KITS.

THINNING For spray application, may be thinned up to 12% (16 fl. oz./gal.) by volume with Carboline Thinner #4.
For brush and roller application, may be thinned up to 25% (32 fl. oz./gal.) by volume with Carboline Thinner #4.
Refer to Specification Data for VOC information.
Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

POT LIFE Four hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating loses body and begins to sag. Thinning rates above 12% will shorten the working time to two hours due to reduced film build.

APPLICATION TEMPERATURES :

	<u>Material</u>	<u>Surfaces</u>
Normal	61-85°F (16-29°C)	61-85°F (16-29°C)
Minimum	39°F (4°C)	39°F (4°C)
Maximum	90°F (32°C)	135°F (57°C)

	<u>Ambient</u>	<u>Humidity</u>
Normal	61-85°F (16-29°C)	0-90%
Minimum	39°F (4°C)	0%
Maximum	109°F (43°C)	90%

Do not apply when the surface temperature is less than 5°F (2°C) above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

SPRAY This is a high solids coating and may require slight adjustments in spray techniques. Wet film thicknesses are easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.

Airless

Pump Ratio	:	30:1 (min.)
GPM Output	:	3.0 (min.)
Material Hose	:	3/8" I.D.(min.)
Tip Size	:	0.017~0.021"
Output PSI	:	1900-2100
Filter Size	:	60 mesh

* Teflon packings are recommended and are available from the pump manufacturer.

BRUSH OR ROLLER Use a medium bristle brush, or good quality short nap roller, avoid excessive rebrushing and rerolling. Two coats may be required to obtain desired appearance and recommended DFT. For best results, tie-in within 10 minutes at 75°F (24°C).

DRYING TIMES These times are at 4 mils (100µ) dry film thickness. Higher film thicknesses will lengthen cure times.

Dry to Touch at 75°F (24°C) : 31/2 hours
Dry to Handle at 75°F (24°C) : 61/2 hours

<u>Temperature</u>	<u>Between Coats</u>	<u>Final Cure</u>
50°F (10°C)	36 Hours	3 Days
60°F (16°C)	24 Hours	2 Days
75°F (24°C)	12 Hours	1 Day
90°F (32°C)	6 Hours	1/2 Days

May discolor if exposed to rain, condensation moisture from any source prior to final cure. When this occurs, coating may turn white, particularly noticeable with darker colors.

CLEAN UP Use Carboline Thinner #2.

CAUTION : READ AND FOLLOW ALL CAUTION STATEMENTS IN THIS PRODUCT DATA SHEET AND ON THE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.

