

## Selection Data

**GENERIC TYPE :** Low temperature curing, modified epoxy.

**GENERAL PROPERTIES :** Carboline 893 RCP (SP) is a high solids, high build epoxy primer with excellent corrosion resistance and in-shop characteristics. Can be applied to yield a cured film which is tough and abrasion resistant. Performs extremely well at low temperature down to -5°C and under a wide variety of topcoats and application conditions.

- Low temperature curing primer
- Excellent corrosion protection
- Good flexibility and lower stress upon curing than most epoxy coatings.
- Can be spray applied at up to 5 mils dry film thickness in one coat.
- Excellent adhesion to galvanized steel
- Good compatibility with top coats.

**RECOMMENDED USES :** Recommended as a universal primer where under low temperature condition and over commercially blasted steel, hot dip galvanized steel, or intermediate coat over inorganic zinc primer. Especially designed to give excellent adhesion to galvanized steel, and have good compatibility with most of top coats including alkyds, chlorinated rubber.

**NOT RECOMMENDED FOR :** Splash and spillage of very strong solvents or concentrated acids.

### TYPICAL CHEMICAL RESISTANCE :

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

### TEMPERATURE RESISTANCE : (Non-Immersion)

Continuous : 200°F( 93°C)  
Non-Continuous : 250°F(121°C)

**SUBSTRATES :** Apply over suitably prepared steel, galvanized steel, stainless steel, other surfaces as recommended.

**COMPATIBILITY COATINGS :** Carboline 893 RCP (SP) may be used as an intermediate coat over inorganic zincs. A mist coat is required to minimize bubbling over inorganic zincs. As a primer for catalyzed epoxies, catalyzed urethanes, alkyds, chlorinated rubber.

## Specification Data

### THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL :

	<u>By Volume</u>
Carboline 893 RCP (SP)	60% ± 2%

**VOLATILE ORGANIC CONTENT :**  
**As Supplied :** 3.21 lbs/gal (385 g/l)

### RECOMMENDED DRY FILM THICKNESS PER COAT :

3 mils (75µ) for use in mild environments or as an intermediate coat over inorganic zinc primers.  
5 mils (125µ) for use in more severe environments.

Dry film thicknesses in excess of 10 mils (250µ) per coat are not recommended. Excessive film thickness over inorganic zinc may increase damage during shipping or erection.

### THEORETICAL COVERAGE PER MIXED GALLON\* :

962 sq. ft (24 sq. m/l at 25µ)  
321 sq. ft at 3 mils (8.0 sq. m/l at 75µ)  
192 sq. ft at 5 mils (4.8 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 : 40~110°F(4~43°C)  
Humidity : 0~90%

**SHELF LIFE :** 24 months when stored at 75°F (24°C)

**COLORS :** Metallic Gray is standard. Consult Carboline Customer Service for the availability of other colors.

**GLOSS :** Flat

## Ordering Information

Prices may be obtained from your local Carboline Sales Representative or Carboline Customer Service Department.

### APPROXIMATE SHIPPING WEIGHT :

	<u>2's</u>	<u>10's</u>
Carboline 893 RCP(SP)	27 lbs.(12 kg)	128 lbs.(58 kg)

### FLASH POINT : (Setaflash)

Carboline 893 RCP(SP) Part A	36°F(2°C)
Carboline 893 RCP(SP) Part B	40°F(5°C)

# Carboline® 893 RCP (SP)

**SURFACE PREPARATIONS** : Remove any oil or grease from surface to be coated with clean rags soaked in Carboline thinner #2 or Surface Cleaner #3 (refer to Surface Cleaner #3 instructions) in accordance with SSPC-SP 1. Only solvent cleaning is available for galvanized steel or stainless steel.

**Steel** : Apply over clean, dry steel, abrasive blasted to a Commercial Finish in accordance with SSPC-SP 6 (NACE #3) to obtain a 1-2 mil (25-50µ) blast profile.

**MIXING** : Mix separately, then combine and mix in the following proportions.

	2 Gal. Kit	10 Gals. Kit
Carboline 893 RCP(SP) Part A	1 gallon	5 gallons
Carboline 893 RCP(SP) Part B	1 gallon	5 gallons

**THINNING** : Thin up to 20% by volume with Carboline thinner #2.

**POT LIFE** : Four hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating become too viscous to use.

## APPLICATION TEMPERATURES :

	<u>Material</u>	<u>Surfaces</u>
Normal	60-85°F(15-30°C)	60-85°F(15-30°C)
Minimum	40°F( 5°C)	23°F(-5°C)
Maximum	95°F(32°C)	135°F(57°C)

	<u>Ambient</u>	<u>Humidity</u>
Normal	60-85°F(15-30°C)	0-80%
Minimum	23°F(-5°C)	0%
Maximum	110°F(43°C)	85%

Do not apply when the surface temperature is less than 5°F(3°C) above the dew point.

Special 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	: 2100~2300
Filter Size	: 60 mesh

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

**BRUSH OR ROLLER** : Not recommended for use with a roller. Brush for touch-up only. Use medium bristle brush and avoid rebrushing.

**DRYING TIMES** : These times are at 4 mils (100µ) dry film thickness. Film thickness higher than 4 mils (100µ) will lengthen cure times.

Dry to Touch	: 2 hours at 75°F(24°C)
Dry to Handle	: 5 hours at 75°F(24°C)
Dry to Walk On *	: 5 hours at 75°F(24°C)

\* With appropriate footwear for cleanliness.

\* Consult Carboline Technical Service Department for specific topcoating recommendations. Quicker recoat times may be used with appropriate low temperature curing topcoats.

If allowed to weather, chalking should be removed by water washing and then allowed to dry thoroughly prior to topcoating.

**CLEAN UP** : Use Carboline Thinner #2.

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

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST. WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

