

Carbozinc® 8701

SELECTION & SPECIFICATION DATA

Generic Type

Two-component, zinc-rich epoxy primer

Description

A two-component, high solids, zinc rich epoxy primer formulated for the protection of properly prepared steel substrates. This product can be applied by conventional or airless spray. Recommended for Original Equipment Manufacturers where a high performance, highly corrosion resistant zinc primer is desired. Typical applications include marine, offshore drilling equipment, truck trailer chassis, underbodies and related equipment, industrial and off-road machinery, electrical transformers, industrial tanks, vessels, pumps and processing equipment.

- Excellent application properties
- · Tough abrasion resistant film

Features

- · Excellent adhesion & undercutting resistance
- · Superior corrosion resistance
- · Meets VOC (Volatile Organic Content) regulations
- · Fast drying for quick recoating

Color | Green (0300)

Finish | Flat

2 - 3 mils (51 - 76 microns).

Dry Film Thickness

For more severe environments 8701 may be applied at 4 mils (100 microns) dry film thickness.

Total Zinc Dust in Dry

Film

By Weight: 75%

Solids Content

VOC Values

By Volume 64% +/- 2%

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Zinc content in dry film is 75% by weight

Theoretical Coverage Rate

1027 ft²/gal at 1.0 mils (25.2 m²/l at 25 microns) 513 ft²/gal at 2.0 mils (12.6 m²/l at 50 microns) 342 ft²/gal at 3.0 mils (8.4 m²/l at 75 microns) Allow for loss in mixing and application.

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As Supplied: 2.79 lbs/gal (334 g/l)

Thinner 33: 3.8 oz/gal (3%): 2.92 lbs/gal (350 g/l) Thinner 2: 6.5 oz/gal (5%): 2.99 lbs/gal (359 g/l)

These are nominal values.

Dry Temp. Resistance

Continuous: 400°F (204°C) Non-Continuous: 425°F (218°C)

Topcoats | May be coated with Epoxies or Polyurethanes depending on exposure and need.

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. Use Thinner #2 or Carboline Surface Cleaner #3 in accordance with SSPC-SP1.







SUBSTRATES & SURFACE PREPARATION

Steel

Abrasive blast to a commercial finish in accordance with SSPC-SP6 and obtain a $1\frac{1}{2}$ - 2 mil (38-50 micron) blast profile.

Phosphatized Steel

Apply directly to dry, properly phosphatized substrate. Perform adhesion tests to insure proper, uniform and acceptable adhesion direct to phosphatized metal substrate.

TYPICAL CHEMICAL RESISTANCE

Exposure	Fumes	Splashes & Spills
Acids	Excellent	Very Good
Alkalies	Excellent	Very Good
Salt	Excellent	Excellent
Solvents	Excellent	Very Good
Water	Excellent	Excellent

^{*}Splash & Spillage for Solvents - Resistance may vary dependent on the type of solvent involved.

MIXING & THINNING

Mixing

For plural component application equipment follow the equipment manufacturer's instructions. Power mix each component separately prior to using plural component spray equipment or batch mixing. THIS PRODUCT IS MOISTURE SENSITIVE. AVOID MOISTURE CONTAMINATION. DO NOT MIX PARTIAL KITS.

Pail agitators are recommended. Keep Part A material under mild agitation during plural spray application. Keep batch-mixed material under mild agitation during conventional air or airless spray application.

Thinning

Normally not required for plural heated application. For batch mix applications, it may be thinned up to 6.5 oz/gal (5%) with Thinner #2. For hotter than normal application conditions it may be thinned 3.8 oz/gal with 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 | 4:1 (A to B)

Pot Life

3 Hours at 75°F (24°C) unthinned. Pot life decreases at higher temperatures. Pot life ends when coating becomes too viscous to use. This product is moisture sensitive. Avoid moisture contamination.

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	The following spray equipment has been found suitable and is available from equipment
(General)	manufacturers.

Conventional Spray

Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.

^{*}Acids & Alkalies ratings based on proper finish coat.



Carbozinc® 8701 PRODUCT DATA SHEET

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.

Non-Plural

Pump Ratio: 30:1 (min.) GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.)

Tip Size: .015-.019"

Airless Spray

Output PSI: 2100-2300 Filter Size: 30-60 mesh

*Teflon packings are recommended and available from the pump manufacturer

Heated, Plural Component:

Consult Carboline Technical Service

Brush

Respray or brush. Brushing recommended only for touchup of small areas. Use medium, natural bristle brush applying with full strokes. Avoid excessive rebrushing.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	90°F (32°C)	120°F (49°C)	110°F (43°C)	90%

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

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Topcoat	Dry to Touch
35°F (2°C)	24 Hours	2 Hours	3 Hours
50°F (10°C)	18 Hours	90 Minutes	1 Hour
75°F (24°C)	6 Hours	30 Minutes	30 Minutes
90°F (32°C)	3 Hours	15 Minutes	15 Minutes
130°F (54°C)	30 Minutes	5 Minutes	10 Minutes

^{*}Dry to Topcoat: these times are based on a 2.0-3.0 mils (50-75 microns) dry film thickness allowing solvent release and initial curing prior to topcoating. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. **Note:** Product may be force cured.

Can be topcoated wet-on-wet with Carbothane 8812, 8815, 8832, and 8845. Maximum recoat time is unlimited. Must have a clean, dry surface free of chalk, zinc salts, etc. per typical good painting practices.

CLEANUP & SAFETY

Cleanup

Use Thinner #2 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 SDS 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.

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PRODUCT DATA SHEET



CLEANUP & SAFETY

Ventilation

When used 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

Part A: 12 months at 75°F (24°C)

Part B: Min. 12 months at 75°F (24°C)

Shelf Life

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

Storage Temperature &

40° - 95°F (4-35°C)

Humidity

0-90% Relative Humidity

Storage | Store Indoors.

1 Gallon Kit - 25 lbs. (kg)

3.75Gallon Kit - 82 lbs. (kg)

15 Gallon Kit - 335 lbs. (kg)

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Shipping Weight (Approximate)

150 Gallon Kit - 1,226 lbs. (kg) Thinner 2: 5 Gallon - 40lbs. (kg)

Thinner 33: 5 Gallon - 40lbs. (kg)

Thinner 2: 50 Gallon Drum - 405 lbs. (kg)

Thinner 33: 50 Gallon Drum - 405 lbs. (kg)

Part A: 64°F (18°C)

Flash Point (Setaflash)

Part B: 69°F (20°C)

Thinner 2: 24°F (-4.4)

Thinner 33: 89°F (32°C)

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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.