

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.
Features	<ul style="list-style-type: none"> • Excellent application properties • Tough abrasion resistant film • Excellent adhesion & undercutting resistance • Superior corrosion resistance • Meets VOC (Volatile Organic Content) regulations • Fast drying for quick recoating
Color	Green (0300)
Finish	Flat
Dry Film Thickness	51 - 76 microns (2 - 3 mils) per coat For more severe environments 8701 may be applied at 4 mils (100 microns) dry film thickness.
Solids Content	By Volume 64% +/- 2% Zinc content in dry film is 75% by weight
Theoretical Coverage Rate	25.2 m ² /l at 25 microns (1027 ft ² /gal at 1.0 mils) 12.6 m ² /l at 50 microns (513 ft ² /gal at 2.0 mils) 8.4 m ² /l at 75 microns (342 ft ² /gal at 3.0 mils) Allow for loss in mixing and application.
VOC Values	As Supplied : 2.79 lbs/gal (334 g/l) Thinner 2 : 6.5 oz/gal (5%): 2.99 lbs/gal (359 g/l) Thinner 33 : 3.8 oz/gal (3%): 2.92 lbs/gal (350 g/l) These are nominal values.
Dry Temp. Resistance	Continuous: 204°C (400°F) Non-Continuous: 218°C (425°F)
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.
Steel	Abrasive blast to a commercial finish in accordance with SSPC-SP6 and obtain a 1½ - 2 mil (38-50 micron) blast profile.

Carbozinc 8701

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

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

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

Airless Spray | **Non-Plural**
Pump Ratio: 30:1 (min.)
GPM Output: 3.0 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: .015-.019"
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	10°C (50°F)	2°C (35°F)	2°C (35°F)	0%
Maximum	32°C (90°F)	49°C (120°F)	43°C (110°F)	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
2°C (35°F)	24 Hours	2 Hours	3 Hours
10°C (50°F)	18 Hours	90 Minutes	1 Hour
24°C (75°F)	6 Hours	30 Minutes	30 Minutes
32°C (90°F)	3 Hours	15 Minutes	15 Minutes
54°C (130°F)	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, 8820, 8832 and 8836. 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 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 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

Shelf Life	Part A: 12 months at 75°F (24°C) Part B: Min. 12 months at 75°F (24°C) *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	1 Gallon Kit - 25 lbs. (kg) 3.75Gallon Kit - 82 lbs. (kg) 15 Gallon Kit - 335 lbs. (kg) 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)

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PACKAGING, HANDLING & STORAGE

Storage Temperature & Humidity | 40° - 95°F (4-35°C)
0-90% Relative Humidity

Flash Point (Setaflash) | Part A: 64°F (18°C)
Part B: 69°F (20°C)
Thinner 2: 24°F (-4.4)
Thinner 33: 89°F (32°C)

Storage | Store Indoors.

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.

*Acids & Alkalies ratings based on proper finish coat.

WARRANTY

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