

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.
Features	<ul style="list-style-type: none"> • Excellent application properties. • Tough abrasion resistant film. • Excellent adhesion.
Color	Green
Finish	Flat
Dry Film Thickness	50 - 75 microns
Solid(s) Content	By Volume: 63% ± 2%
Total Zinc Content in Dry Film	By weight: 77%
Theoretical Coverage Rates	25m ² /l at 25µm. Allow for loss in mixing and application.
VOC Value(s)	As Supplied: 340 g/l These are nominal values. Thinner#2 at 5%: 370 g/l Thinner#33 at 3% : 360 g/l
Dry Temp. Resistance	Continuous: 204°C (399°F) Non-Continuous: 218°C (424°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, in accordance with Standard SSPC-SP1.
Steel	Abrasive blast to a commercial finish according to SSPC-SP10 or ISO 8501-1 Sa 2 1/2 and obtain a 35 -50 micron blast profile.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. THIS PRODUCT IS MOISTURE SENSITIVE. AVOID MOISTURE CONTAMINATION. DO NOT MIX PARTIAL KITS Keep batch-mixed material under mild agitation during conventional air or airless spray application.
---------------	--

Carbozinc 851

PRODUCT DATA SHEET



MIXING & THINNING

Thinning	For batch mix applications, it may be thinned up to 5% by volume with Thinner #2. For hotter than normal application conditions it may be thinned up to 3% by volume 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	By volume: Part A: 4 Part B: 1
Pot Life	3 Hours at 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.

General	The following spray equipment has been found suitable and is available from equipment manufacturers.
Conventional Spray	Agitated pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap.
Airless Spray	Pump Ratio: 30:1 (min.) GPM Output: 3.0 (11.5 liters/min) 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.
Brush & Roller (General)	Brush *: recommended only for touch up of small areas and stripe-coat. * only brush is use recommended.
Brush	Use medium, natural bristle brush applying with full strokes. Avoid excessive rebrushing.
Roller	Not Recommended.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	5°C (41°F)	5°C (41°F)	0%
Maximum	32°C (90°F)	49°C (120°F)	43°C (109°F)	85%

Do not apply when the surface temperature is less than 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.
Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle	Dry to Recoat
5°C (41°F)	3 Hours	24 Hours	2 Hours
10°C (50°F)	1 Hour	18 Hours	90 Minutes
24°C (75°F)	30 Minutes	6 Hours	30 Minutes
32°C (90°F)	15 Minutes	3 Hours	15 Minutes

These times are based on a 50 microns dry film thickness. 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. Consult Carboline Technical Service for specific information.

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 #2 Thinner. 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.
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.
Caution	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months at 24°C (75°F) When kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	4-35°C (39-95°F) 0-90% HR
Flash Point (Setaflash)	part A: 23 °C (73°F) part B: 23 °C (73°F)
Packaging	Part A: 8 liters Part B: 2 liters

Carbozinc 851

PRODUCT DATA SHEET



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.