

SELECTION & SPECIFICATION DATA

Generic Type	Potassium Silicate, Inorganic Zinc
Description	Carbozinc 18 WB is a fast drying, high zinc content, coating for steel substrates. It has outstanding performance in demanding corrosive environments. It self heals to continue protection when damaged. It provides cathodic sacrificial protection and thus prevents corrosion of the underlying steel, like galvanizing. It contains 90% zinc dust by weight in the dried film. This waterborne product has no VOC or flash point. Use in industrial, marine, and process environments.
Features	<ul style="list-style-type: none"> • Outstanding corrosion protection • Zero VOC • Outstanding undercutting resistance • High zinc content • Permanent protection
Color	Grey
Finish	Flat
Wet Film Thickness	4.5 - 7.5 mils
Dry Film Thickness	3 - 5 mils (76 - 127 microns) .
Total Zinc Dust in Dry Film	By Weight: 88%
Solids Content	By Volume 68% +/- 2% Measured in accordance with ASTM D 2697
Theoretical Coverage Rate	1091 ft ² /gal at 1.0 mils (26.8 m ² /l at 25 microns) 364 ft ² /gal at 3.0 mils (8.9 m ² /l at 75 microns) 218 ft ² /gal at 5.0 mils (5.4 m ² /l at 125 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 0 lbs/gal (0 g/l)
Maximum Service Temperature	750°F in continuous service (dry)
Topcoats	Epoxies, urethanes and a variety of other products as recommended by your Carboline sales representative.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be dry and thoroughly cleaned to remove oil, dirt, dust, grease, mill scale, and any other contaminants that can reduce adhesion.
Steel	Solvent clean per SSPC-SP1. Minimum prep is Commercial Blast SSPC-SP6. Prep to Near White Blast SSPC-SP10 for better performance. Blast surfaces with sharp angular abrasive to achieve a surface profile of 1.5-2 mils. .

SUBSTRATES & SURFACE PREPARATION

Special Instruction	Do not allow to freeze. Do not apply if air, surface, and material temperatures are below 40°F or above 100°F or if temperature is less than 5°F above the dew point. Do not apply if the relative humidity is above 85%. Do not apply film thickness above recommended levels to avoid mudcracking. Apply a mist coat of the topcoat before applying a full coat of the topcoat to minimize bubbling.
----------------------------	--

MIXING & THINNING

Mixing	Slowly add (sift) zinc dust component to part A liquid resin component while continuously power mixing the liquid. Do not add the liquid portion to the zinc dust component. After mixing, pour through a 40 mesh screen.
Thinning	Thin a mixed 4 gallon kit with 8 to 32 fluid ounces of water, as required for conventional spray or brush application.
Ratio	<u>0.81 Gal.</u> Carbozinc 18 WB Part A: 0.56 gal. Special Zinc Filler: 14.6 lbs. <u>4.0 Gal.</u> Carbozinc 18 WB Part A: 2.78 gal. Special Zinc Filler: 73 lbs.
Pot Life	4 hours at 75°F

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)	Conventional spray is the recommended application. Airless spray, brushing & rolling are not recommended. Use a nylon or polyester brush for small areas that must be brushed.
Conventional Spray	(Continuous agitation of the product is required.) Keep pressure pot at level of applicator to avoid blocking of the fluid line. Blow back coating in fluid line during shutdowns and continue agitation in the pressure pot. Gun/Set Up AccuSpray 125Z- 1976 Delrin Fluid Gun Nozzle, Needle 072 Atomization Pressure 55-80 psi Fluid Pressure 15-30 psi Fluid Line 1/4" ID

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	40°F (4°C)	40°F (4°C)	40°F (4°C)	0%
Maximum	100°F (38°C)	100°F (38°C)	100°F (38°C)	85%

This product simply requires the substrate temperature to be 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
55°F (13°C)	2 Hours	3 Hours	4 Hours
77°F (25°C)	15 Minutes	1 Hour	2 Hours
100°F (38°C)	15 Minutes	30 Minutes	30 Minutes

These times are based on a 3.0 mil (75 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times.

CLEANUP & SAFETY

Cleanup	Clean up spill and equipment immediately with warm soapy water. Flush equipment with mineral spirits after cleaning.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation and wear gloves or use protective cream on face and hands if hypersensitive. Keep container closed when not in use.

PACKAGING, HANDLING & STORAGE

Shelf Life	Carbozinc 18 WB Part A: 24 months Special Zinc Filler: 24 months *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	40-110°F (4-43°C) 0-90% RH
Storage	Store Indoors. Keep from freezing.
Shipping Weight (Approximate)	0.81 Gal Kit - 22 lbs 4.0 Gal Kit - 104 lbs
Flash Point (Setaflash)	None

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.