

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. It is comparable to federal specification DOD-P24648 and meets Class B requirements for Slip Coefficient and Creep Resistance, 0.69. 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
Topcoats	Can be topcoated with a variety of products including epoxies and urethanes.
Recommended Thickness	3-5 mils dry; 4.5 – 7.5 mils wet
Solids Content	By Weight: 80% ± 2% Zinc Dust Content (by weight): 90% ± 2%
Theoretical Coverage Rate	1091 ft ² /gal @ 1 dry mil Allow for loss in mixing and application.
VOC Values	As supplied: 0 lbs/gal (0 g/l)
Maximum Service Temp	750°F in continuous service (dry)

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. .
Special Information:	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.

Application Equipment

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 Guidelines:

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

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.

Ratio	<u>0.81-Gal</u>	<u>4.0-Gal</u>
Carboweld 18 WB Part A	0.56 gal	2.78 gal
Special Zinc Filler	14.6 lbs	73 lbs

Thinning Thin a mixed 4 gallon kit with 8 to 32 fluid ounces of water, as required for conventional spray or brush application.

Pot Life 4 hours at 75°F

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 MSDS 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.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	60-85°F (16-30°C)	50-95°F (10-35°C)	50-95°F (10-35°C)	40-80%
Minimum	40°F (4°F)	40°F (4°F)	40°F (4°F)	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. & 50% RH	Dry to Touch	Dry to Handle	Dry to Recoat
55°F (13°C)	2 hours	3 hours	4 hours
77°F (25°C)	15-30 min	1 hour	2 hours
100°F (38°C)	15 min	30 min	30 min

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.

Packaging, Handling & Storage

Shipping Weight (Approximate)	<u>0.81-Gal Kit</u> 22 lbs	<u>4.0-Gal Kit</u> 104 lbs
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Flash Point (Setaflash) None

Storage (General) Store Indoors. **Keep from Freezing.**

Storage Temperature & Humidity 40-110°F (4-43°C)
0-90% RH

Shelf Life Carboweld 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.**



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