

Selection & Specification Data

Generic Type	Potassium Silicate, Inorganic Zinc
Description	Carboweld 9 WB is a fast drying, high zinc content, 2-package pre-construction primer for steel substrates. It performs well as a shop/yard primer for corrosion protection during fabrication phase. It provides cathodic sacrificial protection and thus prevents corrosion of the underlying steel, like galvanizing. It contains 81% zinc dust by weight in the dried film. This waterborne product has no VOC or flash point. It can be used as a shop primer when weldability and corrosion protection are necessary. Use it in industrial, marine & process environments.
Features	<ul style="list-style-type: none"> ▪ High zinc content ▪ Zero VOC, water based formula ▪ Cathodic protection ▪ Excellent undercutting resistance ▪ Weldable pre-construction primer
Color	Grey
Finish	Flat
Topcoats	Can be topcoated with epoxies or others as recommended.
Dry Film Thickness	0.75-1.25 mils
Solids Content	By Weight: 67% ± 2% Zinc dust content (by weight): 81%± 2%
Theoretical Coverage Rate	994 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.
Iron & Steel	Solvent clean per SSPC-SP1. Prep to Near White Blast SSPC-SP10 minimum. Shot Blasting is acceptable if a suitable surface anchor pattern is obtained; usually the inclusion of 15-20% of a sharp angular abrasive is recommended. Remove weld spatter and round sharp edges, grinding to a minimum 1/4" radius. Prime bare steel the same day it is cleaned or before flash rusting occurs.

Special Information:

Do not allow to freeze. Do not apply if air, material, or surface and material temperatures are below 40°F or above 110°F. Do not apply film thicknesses above recommended levels to avoid mudcracking. Zinc must be thoroughly cured before topcoating. 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 method. Airless spray, brushing and rolling are not recommended.

Automated Spray Data:
Nozzle Pressure: 60 psi
Tip Size: .043-.072"
Spray Angle: 40-80°
Filter: Check to ensure filters are clean

Mixing & Thinning

Mixing Add zinc dust component to 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 50 mesh screen.

Ratio		1-Gal	5-Gal
	Carboweld 9 WB Part A	0.83 gal	4.15 gal
	Special Zinc Filler	10 lbs	50 lbs

Thinning Thin with water up to 8 fluid ounces per gallon, maximum.

Pot Life 6 hours @ 75°F

Cleanup & Safety

Clean Up Clean up spills & 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	110°F (43°C)	110°F (43°C)	110°F (43°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	Surface Dry	Dry to Topcoat
41°F (5°C)	30 min	4 days
50°F (10°C)	10 min	36 hours
75°F (24°C)	2 min	18 hours
95°F (35°C)	1 min	12 hour

These times are based on a 1.0 mil (25 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)	1-Gal Kit 20 lbs	5-Gal Kit 95 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 9 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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