



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 • Certified for potable water use under ANSI/NSF • Standard 61 by Underwriters Laboratories (see Limitations)
Color	Gray
Finish	Flat
Dry Film Thickness	0.75 - 1.25 mils (19 - 32 microns) .
Total Zinc Dust in Dry Film	By Weight: 79%
Solids Content	By Volume 62% +/- 2% Measured in accordance with ASTM D 2697
Theoretical Coverage Rate	1326 ft ² /gal at 0.8 mils (32.5 m ² /l at 19 microns) 994 ft ² /gal at 1.0 mils (24.4 m ² /l at 25 microns) 796 ft ² /gal at 1.2 mils (19.5 m ² /l at 31 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 0 lbs./gal (0 g/l)
Limitations	Carboweld 9 WB may be used as a pre-construction primer for steel in limited immersion applications such as sea water service. For potable water use, all "visible" zinc must be removed (abrasive sweep blasting) prior to the application of a certified potable water system. Consult Carboline Technical Service for specific needs.(See Surface Preparation - Steel)
Maximum Service Temperature	750 F in continuous service (dry)
Topcoats	Epoxies or others 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.
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SUBSTRATES & SURFACE PREPARATION

Steel | Abrasive blast surface preparation shall provide a standard of "White Metal Finish" in accordance with SSPC-SP10. Abrasive used shall provide a surface profile of a 1 to 1-1/2 mil (25-38 microns) with a jagged profile.
Automated blasting shall use a mixture of steel shot and grit sufficient to avoid a "peened" profile while providing the desired profile and appearance. Consult with abrasive blast media supplier as to best mixture ratio to provide these results.

Special Instruction | 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.

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.

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

Ratio

1 Gal
Carboweld 9 WB Part A: 0.83 gal
Special Zinc Filler: 10 lbs

5 Gal
Carboweld 9 WB Part A: 4.15 gal
Special Zinc Filler: 50 lbs

Pot Life | 6 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 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.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	40°F (4°C)	40°F (4°C)	40°F (4°C)	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.	Dry to Topcoat	Dry to Touch
41°F (5°C)	4 Days	30 Minutes
50°F (10°C)	36 Hours	10 Minutes
75°F (24°C)	18 Hours	2 Minutes
95°F (35°C)	12 Hours	1 Minute

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.

CLEANUP & SAFETY

Cleanup	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 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	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.
Storage Temperature & Humidity	40-110°F (4-43°C) 0-90% RH
Storage	Store Indoors. KEEP FROM FREEZING.
Shipping Weight (Approximate)	1 Gal Kit - 20 lbs 5 Gal Kit - 95 lbs
Flash Point (Setaflash)	None

APPROVALS

Underwriters Laboratories, Inc	ANSI/NSF Standard 61
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WARRANTY

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