Carboweld® 14 WB

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Potassium Silicate, Inorganic Zinc
Description	Carboweld 14 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 88% 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	• High zinc content • Zero VOC, water based formula • Cathodic protection • Excellent undercutting resistance • Weldable pre-construction primer
Color	Gray
Finish	Flat
Dry Film Thickness	0.75 - 1.25 mils (19 - 32 microns) per coat
Total Zinc Dust in Dry Film	By Weight: 86%
Solids Content	By Volume 63% +/- 2% Measured in accordance with ASTM D 2697
Theoretical Coverage Rate	1337 ft²/gal at 0.8 mils (32.8 m²/l at 19 microns) 1002 ft²/gal at 1.0 mils (24.6 m²/l at 25 microns) 802 ft²/gal at 1.2 mils (19.7 m²/l at 31 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 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.
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 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	**0.96-Gal** Carboweld 14 WB Part A: 0.714 gal Special Zinc Filler: 14.6 lbs **4.8-Gal** Carboweld 14 WB Part A: 3.57 gal Special Zinc Filler: 73 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 Handle	Dry to Topcoat	Dry to Touch
41°F (5°C)	60 Minutes	4 Hours	40 Minutes
50°F (10°C)	30 Minutes	2 Hours	20 Minutes
75°F (24°C)	12 Minutes	90 Minutes	12 Minutes
95°F (35°C)	30 Seconds	1 Hour	30 Seconds
110°F (43°C)	10 Seconds	45 Minutes	10 Seconds

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.

CLEANUP & SAFETY

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 14 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)	0.96-Gal Kit - 23 lbs 4.8-Gal Kit - 112 lbs
Flash Point (Setaflash)	None

WARRANTY

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