product data

carboline®

Carboweld® 14 WB

(formerly: F&H Indurazinc HRZ-14 Pre-Construction Primer)

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 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: 76% ± 2%
Zinc dust content (by weight): 88%± 2%

Theoretical Coverage Rate 1003 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.

Carboweld® 14 WB

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

	0.96-Gal	4.8-Gal
Carboweld 14 WB Part A	0.714 gal	3.57 gal
Special Zinc Filler	14.6 lbs	73 lbs

Thinning

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

Pot Life

6 hours @ 75°F

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 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 Handle	Dry to Topcoat
41°F (5°C)	40 min	60 min	4 hours
50°F (10°C)	20 min	30 min	2 hours
75°F (24°C)	12 min	12 min	1.5 hours
95°F (35°C)	30 sec	30 sec	1 hour
110°F (43°C)	10 sec	10 sec	45 min

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)
0.96-Gal Kit 23 lbs
4.8-Gal Kit 112 lbs

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 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.**

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