ZINC CLAD® 5
ORGANIC ZINC-RICH PRIMER

Product Description
ZINC CLAD 5 is a one-package, organic, zinc-rich coating containing 90% by weight of zinc dust pigment in the dried film.

- Single protective coat in mild corrosive environments
- 90% zinc content in dry film
- Provides cathodic/sacrificial protection
- Exhibits "self-healing" properties when the film is damaged

Product Characteristics

<table>
<thead>
<tr>
<th>Finish:</th>
<th>Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Gray-green</td>
</tr>
<tr>
<td>Volume Solids:</td>
<td>41% ± 2%</td>
</tr>
<tr>
<td>Weight Solids:</td>
<td>81% ± 2%</td>
</tr>
<tr>
<td>VOC (calculated):</td>
<td>&lt;500 g/L; 4.17 lb/gal</td>
</tr>
</tbody>
</table>

Zinc Content in Dry Film: 90% by weight

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>188</td>
<td>200</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>3.0</td>
<td>75</td>
</tr>
<tr>
<td>Coverage sq ft/gal (m²/L)</td>
<td>165</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft: 656 16.1

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 10.0 mils wet (250 microns):
- To touch: 4 hours
- To recoat: 30 hours
- To cure: 7 days

Drying time is temperature, humidity, and film thickness dependent.

Recommended Uses
For use over properly prepared blasted steel exposed to:

- Fresh water
- Salt water
- Brackish water
- Chemical fumes
- Topcoating recommended for maximum protection
- Excellent for field touch-up of damaged galvanized or zinc rich primers

Performance Characteristics

- A tough, hard film which serves as a single protective coating in mild corrosive environments.
- Provides cathodic protection to the steel.
- Insoluble zinc salts formed in the film make it more resistant to the passage of moisture.
- Simulates the protection of steel provided by galvanizing.
- Easy field use for touch-up work.
- Can be used untopcoated for immersion service.
- Provides performance comparable to products formulated to federal specifications: DOD-P-21035A
- Dry heat resistance: 300°F (149°C)

Shelf Life: 24 months, unopened
Store indoors at 40°F (4.5°C) to 100°F (38°C)

Flash Point: 115°F (46°C) PMCC
Reducer: Not recommended
Clean Up: Xylene, R2K4

continued on back
Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

- **Iron & Steel**
  - Atmospheric: SSPC-SP6/NACE 3, 2 mil (50 micron) profile
  - Immersion: SSPC-SP10/NACE 2, 2 mil (50 micron) profile
  - Galvanizing: SSPC-SP7

- **Weather Zinc-Rich Primer**: Clean, dry, sound

### Surface Preparation Standards

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>Swedish Std.</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 2</td>
<td>Sa 2.5</td>
<td>SP 6</td>
<td>1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>SP 6</td>
<td>1</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 1</td>
<td>Sa 2</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 2</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>SS 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>SS 3</td>
<td>SP 3</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>SS 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>SS 3</td>
<td>SP 3</td>
<td>-</td>
</tr>
</tbody>
</table>

### Tinting

Do not tint.

### Application Conditions

- **Temperature**: 35°F (1.6°C) minimum, 95°F (35°C) maximum (air, surface, and material)
- **Relative humidity**: At least 5°F (2.8°C) above dew point 85% maximum

Refer to product Application Bulletin for detailed application information.

### Ordering Information

- **Packaging**: 1 gallon (3.78L) containers
- **Weight**: 21.3 ± 0.2 lb/gal ; 2.55 Kg/L

### Safety Precautions

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

### Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. **NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
**Surface Preparations**

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance.

**Iron & Steel (atmospheric service)**

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

**Iron & Steel (immersion service)**

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

**Galvanized Steel**

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

**Weathered Zinc-Rich Primer:**

Remove zinc salts by either high pressure water washing and scrubbing with stiff bristle brush or sweep blast followed by water flush. Allow to dry.

**Note:** If blast cleaning with steel media is used, an appropriate amount of steel grit blast media may be incorporated into the work mix to render a dense, angular 1.5-2.0 mil (38-50 micron) surface profile. This method may result in improved adhesion and performance.

**Application Conditions**

Temperature: 35°F (1.6°C) minimum, 95°F (35°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

**Application Equipment**

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

- **Reducer** Not recommended
- **Clean Up** Xylene, R2K4
- **Airless Spray** (Use Teflon packings and continuous agitation)
  - Pressure: 2000 psi
  - Hose: 3/8" ID
  - Tip: 0.015"
  - Filter: None
- **Conventional Spray** (continuous agitation required)
  - Gun: Binks 95
  - Fluid Nozzle: 68
  - Air Nozzle: 68P
  - Atomization Pressure: 50 psi
  - Fluid Pressure: 10 - 12 psi

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

- **Brush** Small areas only; natural bristle

If specific application equipment is not listed above, equivalent equipment may be substituted.
APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation before use.

Continuous agitation required during application.

Pour through a 30 to 60 mesh screen before use.

Apply paint at the recommended film thickness and spreading rate as indicated below:

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NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 10.0 mils wet (250 microns):

| Temperature | To touch: | To recoat: | To cure: |
|----------------------------------|
| @ 55°F/13°C | 4 hours | 30 hours | 7 days |
| @ 77°F/25°C | 2-3 hours | 24 hours | 7 days |
| @ 100°F/38°C | 30 minutes | 1 hour | 3 days |

50% RH

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Performance Tips

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and performance.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Application above recommended film thickness may result in mud cracking.

Refer to Product Information sheet for additional performance characteristics and properties.

Clean up Instructions

Clean spills and spatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer’s safety recommendations when using any solvent.

Disclaimer

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

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