DESCRIPTION AND USES
Rust-O-Zinc Organic Zinc Rich Primer is a three-component, polyamide converted epoxy zinc rich coating designed to provide cathodic protection to abrasive blasted steel through the sacrificial action of pure metallic zinc. It provides maximum corrosion protection from severe industrial or marine exposures. Rust-O-Zinc contains up to 83% zinc in the dried film.

MPI #20 Certified*

FEATURES
- High zinc loading – up to 83% in the dried film
- High heat resistance – up to 400°F (204°C) continuous
- Protects against undercutting corrosion
- Excellent adhesion
- Excellent touch-up primer by brush for small areas
- May be applied with standard airless or conventional spray equipment
- Rapid cure. Dry to recoat in 30 minutes at 75°F (24°C) and 50% relative humidity
- Low temperature cure down to 35°F (2°C) on frost free surface
- VOC compliant for current AIM regulations

PRODUCTS
Organic Zinc Rich Primer is offered in both a kit and as individual components.

0.80 Gallon Kit
299760: includes Part A, Part B, and Zinc Dust

4.0 Gallon Kit
299785: includes Part A, Part B, and Zinc Dust

Components (0.80- Gals.)
303977 - Part A: 1.4 quarts in a short filled gallon.
303978 - Part B: 1.6 pints in a short filled quart.
303979 - Zinc Dust: 14.6 lbs. in a gallon container.

Components (4.0 Gals.)
303991 - Part A: 1.77 gallons in short filled 5 gallon pail.
303992 - Part B: 1 full gallon.
303993 - Zinc Dust: 73 lbs. in 5 gallon pail.

RECOMMENDED TOPCOATS
Topcoat with 3300 System, 9400 System or 9700 System requires an intermediate coat of 9300 System Primer or ROC Prime.

When topcoating with 9100 System or 9800 System, an intermediate coat of 9300 System or ROC Prime is recommended.

C9578 Coal Tar Epoxy may be used as a finish coat.

PRODUCT APPLICATION
SURFACE PREPARATION
ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Krud Kutter® Original Cleaner & Degreaser, commercial detergent or other suitable cleaner in accordance with SSPC-SP-1. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application.

Abrasive blast clean in accordance to SSPC-SP-6 Commercial Grade, with a 1-3 mil surface profile. For areas limited to touch-up, prepare in accordance to SSPC-SP-2 Hand Tool or SSPC-SP-3 Power Tool Cleaning using a tool appropriate to create a surface profile.

MIXING
Power mix Part A completely. Then slowly sift in the zinc filler under agitation. Power mix Part B separately and add slowly to the mixture. Pour mixture through a 30 mesh screen. Tip: Sifting zinc through a window screen will aid in the mixing process by breaking up or catching dry zinc lumps.

THINNING
BRUSH: Normally not required. Use 5-10% of Rust-Oleum 160 Thinner if desired (approximately 1½ pint per gallon). Brush and roller applications are suitable only for touch-up of small areas.

AIR-ATOMIZED SPRAY: Use 10-20% of Rust-Oleum 160 Thinner or as needed (approximately 1½ pints per gallon). Check with equipment supplier to ensure compatibility of airless pump with zinc pigmented coatings.

APPLICATION
For best performance, apply only when the air and surface temperatures are between 60-100°F (16-38°C) and the surface temperature is at least 5°F (3°C) above the dew point. Rust-O-Zinc may be applied as low as 35°F (2°C) on a frost free surface.

EQUIPMENT RECOMMENDATIONS
The following spray equipment has been found suitable and is available from equipment manufacturer. Keep material under mild agitation during application.

CONVENTIONAL SPRAY: Use an agitated pressure pot equipped with dual regulators, ¾” I.D. minimum material hose, a 0.070” I.D. fluid tip and appropriate air cap. Siphon spraying generally not suitable for zinc pigmented materials.

* Refer to the MPI website for the most current listing of MPI certified products.
TECHNICAL DATA
RUST-O-ZINC ORGANIC ZINC RICH PRIMER

PRODUCT APPLICATION (cont.)

AIRLESS SPRAY: Use a pump with a 30:1 ratio minimum with a pail agitator. The GPM (gallons per minute) output should be 3.0. The material hose should measure ¾” I.D. with a tip size of 0.017-0.023”. The output pressure should range 2,000-2,200 psi using a 60 mesh filter. Teflon packings are recommended and available from the pump manufacturer.

BRUSH: For small areas and touch-up only. Preferred method for large areas is spray application.

CLEAN-UP

Use Rust-Oleum 160 Thinner or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

VENTILATION

When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PERFORMANCE CHARACTERISTICS

IMPACT
METHOD: ASTM D 2794 Direct impact over ⅛” steel
SYSTEM: Rust-O-Zinc/Polyurethane
RESULT: 100 inch-pounds

ADHESION
METHOD: ASTM D 4541
SYSTEM: One coat Rust-O-Zinc
RESULT: 840 psi Elcometer

FLEXIBILITY
METHOD: ASTM D 522
SYSTEM: Rust-O-Zinc/Polyurethane
RESULT: >5%

SLIP CO-EFFICIENT
METHOD: ASTM A-325
RESULT: Meets requirements for Class B rating
## TECHNICAL DATA

### RUST-O-ZINC ORGANIC ZINC RICH PRIMER

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>Organic Zinc Rich Primer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resin Type</strong></td>
<td>Two component polyamide converted epoxy zinc rich coating</td>
</tr>
<tr>
<td><strong>Pigment Type</strong></td>
<td>Aluminum Silicate, Metallic Zinc</td>
</tr>
<tr>
<td><strong>Solvents</strong></td>
<td>Benzyl Alcohol, Isopropanol, Methyl Ethyl Ketone, Toluene</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td><strong>Per Gallon</strong> Base – 9.6 lbs.  &lt;br&gt; <strong>Per Liter</strong> Base – 1.15 kg</td>
</tr>
<tr>
<td><strong>Solids</strong></td>
<td><strong>By Weight</strong> 64-68% Base, Activator and Zinc Filler Combined  &lt;br&gt; <strong>By Volume</strong> 62% Determined by ASTM D 2697</td>
</tr>
<tr>
<td><strong>% Zinc in Dry Film</strong></td>
<td>83%</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds</strong></td>
<td>326 g/l (2.72 lbs/gal.) as supplied</td>
</tr>
<tr>
<td><strong>Mixing Ratio</strong></td>
<td><img src="MixingRatioTable.png" alt="Mixing Ratio Table" /></td>
</tr>
<tr>
<td><strong>Recommended Dry Film Thickness (DFT) Per Coat</strong></td>
<td>3.0-5.0 mils (75-125µ) Do not exceed 10 mils (250µ)</td>
</tr>
<tr>
<td><strong>Wet Film to Achieve DFT</strong> (unthinned material)</td>
<td>4.0-7.0 mils (100-175µ)</td>
</tr>
<tr>
<td><strong>Practical Coverage at Recommended DFT</strong> (assumes 15% material loss)</td>
<td>1060 sq.ft. @ 1 mil (25µ) DFT (26.0 m²/l)  &lt;br&gt; 350 sq.ft. @ 3 mils (75µ) DFT (8.6 m²/l)  &lt;br&gt; 210 sq.ft. @ 5 mils (125µ) DFT (5.2 m²/l)</td>
</tr>
<tr>
<td><strong>Pot Life at 75°F (24°C) and 50% Relative Humidity</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td><strong>Dry Times at Recommended Film Thickness</strong>. Insufficient ventilation or low humidity (&lt;50%) will increase cure times.</td>
<td><img src="DryTimesTable.png" alt="Dry Times Table" /></td>
</tr>
<tr>
<td><strong>Dry Heat Resistance</strong></td>
<td>Continuous 400°F (204°C)  &lt;br&gt; Intermittent 425°F (218°C)</td>
</tr>
<tr>
<td><strong>Shelf Life</strong></td>
<td>Part A: 36 months at 75°F (24°C)  &lt;br&gt; Part B: 24 months at 75°F (24°C)  &lt;br&gt; Zinc Filler: 24 months at 75°F (24°C)</td>
</tr>
<tr>
<td><strong>Safety Information</strong></td>
<td>For additional information, see SDS</td>
</tr>
</tbody>
</table>

* Activated material  
Calculated values are shown and may vary slightly from the actual manufactured material

---

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.