# RUST-OLEUM SIERRA

# **S71 WATER-BASED EPOXY PRIMER**

## DESCRIPTION

The S71 Water-Based Epoxy Primer is formulated for spray application. It is a zero VOC, zero HAP, very low odor, two component, water-based epoxy primer.

This water based epoxy primer is designed for adhesion and corrosion resistance, and for general maintenance use in moderate industrial environments for the corrosion protection of equipment and other steel surfaces. This coating is not suitable for continuous water immersion service. Since this coating is very low odor during application, it is ideal for use in warehouses, schools, healthcare facilities, food service areas, office buildings, hotels or in any area where odors are an issue.

This product is intended for application by spray. Use S70 Water-based Epoxy primer for application by brush or roller.

Sierra S71 complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized.

## **APPEARANCE**

Flat gray finish

| PRODUCTS |          |             |  |  |
|----------|----------|-------------|--|--|
| 1-Gallon | 5-Gallon | Description |  |  |
| 208113   | 208114*  | Gray        |  |  |
| 208112   | 208559*  | Activator   |  |  |

<sup>\*</sup> Made-To-Order only. Contact Rust-Oleum Customer Service for details.

## **COMPANION PRODUCTS**

#### RECOMMENDED TOPCOAT

S60 Epoxy Maintenance Coating

## **COMPATIBLE TOPCOAT**

S37 MetalMax<sup>®</sup> S39 Beyond™

## PRODUCT APPLICATION

## **SURFACE PREPARATION**

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Industrial Pure Strength 3599 Cleaner/Degreaser<sup>®</sup>, commercial detergent or other suitable cleaner. Rinse thoroughly with fresh water and allow to fully dry.

## PRODUCT APPLICATION

STEEL: Scrape and wire brush or power tool clean to remove loose rust, scale, and deteriorated coatings. Abrasive blast to a minimum Commercial Grade (SSPC-SP-6, NACE 3) for more severe exposures. Two coats of primer must be used on abrasive blasted surfaces.

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding to create a surface profile. The S70 Epoxy Primer is compatible with most coatings, but a test patch is suggested.

#### MIXING

Premix the base component to re-disperse settled pigment before adding the activator. Add in the activator and thoroughly mix for 3-5 minutes.

#### **APPLICATION**

Apply only when air and surface temperatures are between 50-100°F (10-38°C) and surface temperature is at least 5°F above dew point. Ensure fresh air entry during application and drying.

#### **EQUIPMENT RECOMMENDATIONS**

AIR-ATOMIZED SPRAY:

| Method      | Fluid Tip   | Fluid Delivery | Atomizing<br>Pressure |
|-------------|-------------|----------------|-----------------------|
| Pressure    | 0.055-0.070 | 12-16 oz./min. | 40-60 psi             |
| Siphon      | 0.055-0.070 | _              | _                     |
| HVLP (var.) | 0.043-0.070 | 8-10 oz./min.  | 10 psi at tip         |

#### **THINNING**

AIR ATOMIZED SPRAY: Thin as required up to 5% with fresh water.

## **CLEAN-UP**

Clean up with soap and water and dispose of all waste material in a proper manner and in accordance with local waste regulations. Consult with local environmental regulations for appropriate method of disposal and/or recycling of paint and empty container.

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## **TECHNICAL DATA**

# **S71 WATER-BASED EPOXY PRIMER**

## PERFORMANCE CHARACTERISTICS

### **PENCIL HARDNESS**

METHOD: ASTM D3363

RESULT: 3H

### **CONICAL FLEXIBILITY**

METHOD: ASTM D522 RESULT: 180°, ½"

#### **CYCLIC PROHESION**

Rating 1-10 10=best

METHOD: ASTM D5894, 1 cycle, 336 hours RESULT: 10 per ASTM D714 for blistering RESULT: 10 per ASTM D1654 for corrosion RESULT: 10 per ASTM D610 for rusting

## **IMPACT RESISTANCE (direct)**

METHOD: ASTM D2794 RESULT: 50 in. lbs.

#### INTERCOAT ADHESION

METHOD: ASTM D3359 RESULT: Excellent

### **CORROSION RESISTANCE**

METHOD: ASTM B117, Salt Spray, CRS B1000

RESULT: 4 mils 1800 hours

#### **HUMIDITY RESISTANCE**

METHOD: ASTM D4585

RESULT: CRS B1000 4 mils, 1300 hours

For chemical and corrosion resistance, see the

Rust-Oleum Industrial Brands Catalog (Form #275585).

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## PHYSICAL PROPERTIES

| Pagin Tyro  |            | Enovy   |  |
|---|------------|---|--|
| Resin Type  |            | Ероху   |  |
| Pigment Type  |            | Titanium Dioxide  |  |
| Solvents  |            | Water   |  |
| Weight*   | Per Gallon | 11.4 lbs.   |  |
|   | Per Liter  | 1.4 kg  |  |
| Solids*   | By Weight  | 62%   |  |
|   | By Volume  | 47%   |  |
| Volatile Organic Compounds*                                       |            | 0.0 g/l   |  |
| Recommended Dry Film<br>Thickness (DFT) Per Coat                  |            | 2.0-3.0 mils<br>(50-75μ)  |  |
| Wet Film to Achieve DFT   |            | 4.5-7.0 mils<br>(112.5-175μ)  |  |
| Theoretical Coverage at<br>1 mil DFT (25µ)                        |            | 755 sq. ft./gal.<br>(18.5 m²/l)   |  |
| Practical Coverage at Recommended DFT (assumes 15% material loss) |            | 215-320 sq. ft./gal.<br>(5.3-7.9 m²/l)  |  |
| Mixing Ratio  |            | 1:1 Part 1 to Part 2 by Volume  |  |
| Induction Period  |            | None  |  |
| Pot Life @ 70°-80°F   |            | 2 hours   |  |
| Dry Heat Resistance   |            | 250°F (121°C), color may shift above 150°F (66°C)   |  |
| Dry Times at 70-80°F<br>(21-27°C) and 50%<br>Relative Humidity    | Tack-free  | 30 minutes  |  |
|   | Recoat     | 1-2 hours   |  |
| Shelf Life  |            | 3 years for Part 2, 2 years for Part 1  |  |
| Storage Information   |            | PROTECT FROM FREEZING. IF PRODUCT SHOULD FREEZE, ALLOW THE MATERIAL TO WARM UP AND REMAIN AT NORMAL ROOM TEMPERATURE FOR 48 HOURS PRIOR TO USE. MIX BY HAND STIRRING. |  |
| Safety Information  |            | For additional information, see MSDS  |  |
|   |            | 1   |  |

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.



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<sup>\*</sup>Activated material.