



SIERRA PERFORMANCE™

S71 WATER-BASED EPOXY PRIMER

DESCRIPTION AND USES

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.

PRODUCTS

NOTE: Both Gray Base and Activator are full gallon cans and when combined make two gallons of activated material.

1-Gallon	5-Gallon	DESCRIPTION (Flat Gray Finish)
208113	208114*	Gray Base
208112	208559*	Activator

*Made-To-Order only. Contact Rust-Oleum Customer Service for details.

COMPANION PRODUCTS

RECOMMENDED TOPCOAT

S60 Epoxy Maintenance Coating

COMPATIBLE TOPCOAT

S37 MetalMax®
S39 Beyond™

PRODUCT APPLICATION

SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Krud Kutter® Cleaner Degreaser, commercial detergent or other suitable cleaner. Rinse thoroughly with fresh water and allow to fully dry.

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION (cont.)

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 S71 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	Atomized Pressure
Pressure	0.055-0.070	12-16 oz./min.	40-60 psi
Siphon	0.055-0.070	--	--
HVLP	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.

DRY & RECOAT

Dry and recoat times are based on 70°F (21°C) and 50% relative humidity. Dries to tack-free in 30 minutes and can be recoated in 1-2 hours. If the curing time exceeds 72 hours, the surface must be scarified by sanding or other method prior to application of an additional coat or other finish coat.

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.



SIERRA PERFORMANCE™ 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).

EPOXY	TECHNICAL DATA	SP-21
	SIERRA PERFORMANCE™ S71 WATER-BASED EPOXY PRIMER	

PHYSICAL PROPERTIES

		S71 WATER-BASED EPOXY PRIMER
Resin Type		Water-based Epoxy
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 Thickness (DFT) Per Coat		2.0-3.0 mils (50-75μ)
Wet Film to Achieve DFT		4.5-7.0 mils (112.5-175μ)
Theoretical Coverage at 1 mil DFT (25μ)		755 sq. ft./gal. (18.5 m ² /l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		215-320 sq. ft./gal. (5.3-7.9 m ² /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 (21-27°C) and 50% Relative Humidity	Tack-free	30 minutes
	Recoat	1-2 hours (After 72 hours, surface must be scarified)
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 SDS

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

*Activated material.

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