ACRYLIC

TECHNICAL DATA



3100 SYSTEM SPEEDY-DRY DTM ACRYLIC ENAMEL PRIMER

DESCRIPTION AND USES

A low-VOC, water-based, fast-dry, acrylic primer designed for mild to moderate industrial conditions.

PRODUCTS

1-Gallon	5-Gallon	Description	
3169402	3169300*	Red Primer	
3181402	3181300	Gray Primer	

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

COMPANION PRODUCTS

RECOMMENDED TOPCOATS

Designed for use with Rust-Oleum 3100 System Speedy-Dry DTM Acrylic Enamels.

PRODUCT APPLICATION

SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Pure Strength[®] Cleaner/Degreaser item #3599402, commercial detergent or other suitable cleaner. Mold and mildew must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application.

STEEL: Hand tool (SSPC-SP-2) or power tool (SSPC-SP-3) clean to remove all loose rust, mill scale, and deteriorated previous coatings. Abrasive blasting to a minimum Commercial Grade (SSPC-SP-6, NACE 3) with a 1-2 mil (25-50 μ) surface profile is recommended for optimal performance. Abrasive blast cleaned steel requires two coats of primer.

NOTE: Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause adverse effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH-approved) and proper containment and cleanup. For additional information, contact the U.S.EPA/Lead Information Hotline at 1-800-424-LEAD.

APPLICATION

Mix thoroughly. Apply only when air and surface temperatures are between 50-100°F (10-38°C), the relative humidity is not greater than 85%, and surface is at least 5°F (3°C) above dew point. Abrasive blast clean steel requires two coats of primer. Dry times may be effected by extremely high or low relative humidity.

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PRODUCT APPLICATION (cont.)

EQUIPMENT RECOMMENDATIONS

BRUSH: Use a good quality synthetic brush. (Touch-up only) AIR-ATOMIZED SPRAY:

Method	Fluid Tip	Fluid Delivery	Atom. Pressure		
Pressure	0.055-0.070	10-16 oz./min.	25-60 psi		
Siphon	0.055-0.070	—	25-60 psi		
HVLP (var.)	0.043-0.070	8-10 oz./min.	10 psi (at tip)		
AIRLESS SPRAY:					
Fluid Pressure		Fluid Tip	Filter Mesh		

1,800-3,000 psi

THINNING

BRUSH: Normally not required. When necessary, thin with fresh water. (Touch-up only)

0.013-0.017

100

AIR ATOMIZED SPRAY: Water up to 1 pint per gallon.

AIRLESS SPRAY: Water up to ½ pint per gallon.

CLEAN UP

BRUSH: Use soap and water immediately after use.

SPRAY: **Immediately** flush spray lines with water, followed by Rust-Oleum[®] Thinner #160402 or Pure Strength[®] Cleaner/ Degreaser.

PERFOMANCE CHARACTERISTICS

PENCIL HARDNESS

METHOD: ASTM 03363 RESULT: F

CONICAL FLEXIBILITY

METHOD: ASTM D522 RESULT: >33%

CYCLIC PROHESION

Rating 1-10, 10=best METHOD: ASTM D5894, 2 cycles, 672 hours RESULT: 10 per ASTM D714 for blistering

IMPACT RESISTANCE (direct/reverse)

METHOD: ASTM D2794 RESULT: >160 / >160

TABER ABRASION

METHOD: ASTM D4060, CS17 wheel, 1,000 gram load RESULT: 52 mg loss

For chemical and corrosion resistance see page 4 of the Rust-Oleum Industrial Brands Catalog Form # 206275.

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PHYSICAL PROPERTIES				
		ACRYLIC PRIMERS		
Resin Type		Acrylic dispersion		
Pigment Type		Zinc phosphate, calcium carbonate, red iron oxide		
Solvents		Water, propylene glycol		
Weight	Per Gallon	9.8-10.4 lbs.		
	Per Liter	1.2 kg		
Solids	By Weight	51.0-52.5%		
Solius	By Volume	40.0-41.5%		
Volatile Organic Compounds		<250 g/l (2.08 lbs./gal.)		
Recommended Dry Film Thickness (DFT) Per Coat		1.5-2.5 mils (37.5-62.5µ)		
Wet Film to Achieve DFT (unthinned material)		4.0-6.5 mils (100-162.5µ)		
Theoretical Coverage at 1 mil DFT (25μ)		640-665 sq. ft./gal. (15.7-16.4 m²/l)		
Practical Coverage at Recommended DFT (assumes 15% material loss)		220-380 sq. ft./gal. (5.4-9.3 m²/l)		
Dry Times at 70-80°F (21-27°C) and 50% rel. hum.	Tack-free	40-60 minutes		
	Handle	1.0-1.5 hours		
	Recoat	1.0-1.5 hours		
Dry Heat Resistance		200°F (93°C)		
Shelf Life		5 years		
Specification and Performance Alternatives		Can be used in USDA-regulated facilities based on FSIS Directive11,000.4 (Rev.4), November 24,1995. Agriculture Canada accepted.		
Safety Information	Flash Point	>212°F (100°C)		
	Contains	Lead-free		
	Warning!	PROTECT FROM FREEZING. MAY CAUSE EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.		

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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