

RUST-OLEUM®**3700 SYSTEM
DTM ACRYLIC ENAMEL PRIMER****DESCRIPTION AND USES**

A low-VOC, water-based acrylic primer designed for indoor or outdoor applications in conditions of high relative humidity and low temperatures. This breakthrough water-based formulation outperforms other industrial acrylics on the market and can be applied at temperatures as low as 35°F (2°C) and up to 100°F (38°C) in up to 95% relative humidity.

PRODUCTS

1-Gallon	5-Gallon	Description
3769402	3769300	Red Primer
3781402	3781300	Gray Primer

COMPANION PRODUCTS**RECOMMENDED TOPCOATS**

Designed for use with Rust-Oleum Industrial DTM Acrylic Enamels where additional protection is needed or for prolonged performance.

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 (25-50µ) 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/LeadInformation Hotline at 1-800-424-LEAD.

APPLICATION

Mix thoroughly. Apply only when air and surface temperatures are between 35-100°F (2-38°C), the relative humidity is not greater than 95%, and surface is at least 5°F (3°C) above dew point. Abrasive blast clean steel requires two coats of primer.

The dry times published on page 3 are under conditions of 70-80°F (21-27°C) and a relative humidity of 50%. At lower temperatures, the dry times will be increased and the full development of the coating's physical properties will take longer. Improved air flow will aid the curing process when temperatures are below 50°F or the relative humidity is greater than 80%.



TECHNICAL DATA

3700 SYSTEM DTM ACRYLIC ENAMEL PRIMER

PRODUCT APPLICATION (cont.)

EQUIPMENT RECOMMENDATIONS

BRUSH/ROLLER: Use a good quality synthetic brush or short nap roller cover (¼-½ inch).

AIR-ATOMIZED SPRAY:

Method	Fluid Tip	Fluid Delivery	Atom. Pressure
Pressure	0.055-.070	10-16 oz./min.	25-60 psi
Siphon	0.055-.070	—	25-60 psi
HVLP (var.)	0.043-.070	8-10 oz./min.	10 psi (at tip)

AIRLESS SPRAY:

Fluid Pressure	Fluid Tip	Filter Mesh
1,800-3,000 psi	0.013-0.017	100

THINNING

BRUSH/ROLLER: Normally not required. When necessary, thin with fresh water.

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

AIRLESS SPRAY: Water up to ½ pint per gallon.

CLEAN UP

BRUSH/ROLLER: 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.

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS

METHOD: ASTM D3363

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 wheels, 1,000 g. load, 1,000 cycles

RESULT: 52 mg. loss

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

PHYSICAL PROPERTIES

		ACRYLIC PRIMERS
Resin Type		Acrylic dispersion
Pigment Type		Zinc phosphate, calcium carbonate, red iron oxide
Solvents		Water, propylene glycol
Weight	Per Gallon	10 lbs.
	Per Liter	1.2 kg.
Solids	By Weight	52%
	By Volume	41%
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)		4-7 mils (100-175µ)
Theoretical Coverage at 1 mil DFT (25µ)		660 sq. ft./gal. (16.2 m²/l.)
Practical Coverage at Recommended DFT (assumes 15% material loss)		225-375 sq. ft./gal. (5.5-9.2 m²/l.)
Dry Times at 70-80°F (21-27°C) and 50% rel. hum.	Tack-free	1-2 hours
	Handle	2-4 hours
	Recoat	1-3 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 Directive 11,000.4 (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. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.

*Activated material.

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

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