RUST-OLEUM® HIGH PERFORMANCE INDUSTRIAL COATINGS

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.

The 3700 System complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized.

PRODUCTS

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

COMPANION PRODUCTS

RECOMMENDED TOPCOATS
3700 System DTM Acrylic Enamel

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. 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.

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 are based on 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%.

PRODUCT APPLICATION (cont.)

EQUIPMENT RECOMMENDATIONS

(Comparable equipment also suitable)
BRUSH: Use a good quality synthetic bristle brush.
ROLLER: Use a good quality lamb's wool or synthetic fiber

AIR–ATOMIZED SPRAY

Method	Fluid Tip	Fluid Delivery	Atomized Pressure
Pressure	0.055-0.070	12-16 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
2,000-3,000 psi	0.013-0.017	100

THINNING

BRUSH/ROLLER: Normally not required. Use fresh water if necessary

AIR ATOMIZED SPRAY: Fresh water, use up to 12% as needed.

AIRLESS SPRAY: Normally not required. Use fresh water 5-10% if needed.

CLEAN-UP

Soap and water

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS
METHOD: ASTM D3363
RESULT: B

CONICAL FLEXIBILITY
METHOD: ASTM D522
RESULT: >33%

IMPACT RESISTANCE (direct)
METHOD: ASTM D2794
RESULT: >100 in. lbs.

ACCELERATED WEATHERING (% gloss retention)
METHOD: ASTM D4587, QUV Type A bulb, 450 hours
RESULT: 87% retention (color–black)

Form: GDH-1016
Rev.: 070122

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PHYSICAL PROPERTIES

		3700 SYSTEM DTM ACRYLIC ENAMEL PRIMER
Resin Type		Acrylic Dispersion
Pigment Type		Zinc Phosphate, Calcium Carbonate, 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)		4.0-7.0 mils (100-175µ)
Theoretical Coverage at 1 mil DFT (25µ)		660 sq. ft./gal. (16.2 m^2/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		225-375 sq. ft./gal. (5.5-9.2 m^2/l)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	**Tack-free**	1-2 hours
	Handle	2-4 hours
	Recoat	1-3 hours
Dry Heat Resistance		200°F (93°C)
Shelf Life		5 years
Safety Information		For additional information, see SDS

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