



**ROCACRYLIC DIRECT TO METAL
ACRYLIC ENAMEL 3800**

DESCRIPTION AND USES

ROCAcrylic Direct-to-Metal Acrylic Enamel 3800 is a high-performance, fast drying, water-based coating for interior or exterior use. This product provides excellent corrosion resistance and adhesion, UV and impact resistance, suitable for painting multiple surfaces anywhere an ultra-smooth, durable finish is desired, and corrosion protection is required.

ROCAcrylic Direct-to-Metal Acrylic Enamel 3800 complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized.

MPI #161, #163, #164 certified. (Refer to the MPI website for the most current listing of MPI certified products.)

PRODUCT FEATURES AND BENEFITS

- Fast Drying, Water Based Formula
- Excellent Corrosion Protection
- Ultra-Smooth Finished Appearance
- UV Resistant for Color and Gloss Retention
- Dries to the Touch in as Little as 15 Minutes
- Exhibits Dry Fall Characteristics (See Product Application Section) *
- Can be Applied in Temperatures as Low as 40°F
- Two Year Rust-Proof Guarantee*

PRODUCTS

FINISHES - GLOSS

1-Gallon	5-Gallon	DESCRIPTION
314389	316531	Gloss White
314388	316533	Navy Gray
314387	316534	Black
314410	316535	Safety Red
314409	316536	Safety Yellow
314407	316537	Safety Green
314209	316538	Safety Blue
315510	316544	Safety Orange
315506	316540	Silver Gray
315508	316542	Dunes Tan
315509	316543	Forest Green

FINISHES - SATIN

1-Gallon	5-Gallon	DESCRIPTION
350412	----	Black

FINISHES - FLAT

1-Gallon	5-Gallon	DESCRIPTION
340657	340665	Flat White
340656	340664	Flat Black

PRODUCTS (cont.)

TINT BASES - GLOSS

1-Gallon	5-Gallon	DESCRIPTION
314594	316518	Light Tint Base
314593	316519	Deep Tint Base
314592	316520	Masstone Tint Base

TINT BASES - SEMI GLOSS

1-Gallon	5-Gallon	DESCRIPTION
324167	324170	Light Tint Base
324168	324171	Deep Tint Base
324169	324172	Masstone Tint Base

TINT BASES - SATIN

1-Gallon	5-Gallon	DESCRIPTION
340652	340660	Light Tint Base
340649	340658	Deep Tint Base
340651	340659	Masstone Tint Base

TINT BASE MAXIMUM COLORANT

1-Gallon	5-Gallon	DESCRIPTION
4 oz.	20 oz.	Light Tint Base
8 oz.	40 oz.	Deep Tint Base
12 oz.	60 oz.	Masstone Tint Base

TINT GUIDELINES:

Semigloss Masstone base: Max total 8 oz. loading of 888 E, or 808 AXX, B, E, T, L

Gloss Deep base: Max 6 oz. loading of 808 B

Satin Deep base: Max 6 oz. loading of 808 B

Gloss Light base: Max total 3 oz. loading of 808 B, T

The ROCAcrylic Direct-to-Metal Acrylic Enamel 3800 Tint Bases can be applied direct-to-metal (DTM), however optimal corrosion protection is achieved when the finish coat is used in conjunction with either ROCPriime® Water Based Hybrid 1K Epoxy Primer or Noxyde® Elastomeric Acrylic Coating.

Priming is recommended when Tint Bases exceed 2 oz. of colorant per gallon.

COMPATIBLE PRIMERS

- ROCPriime® Water-Based Hybrid 1K Epoxy Primer
- Universal Acrylic Primer
- Noxyde® Elastomeric Acrylic Coating



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RUST PROOF GUARANTEE*

*Submitting the Two-Year Rust-Proof Guarantee form located on the **ROC**Acrylic Direct-to-Metal Acrylic Enamel 3800 web page completely filled out, signed and with proof of purchase attached, no later than 30 days after project completion for projects using up to 50 gallons is required to qualify for the rust-proof guarantee. For projects larger than 50 gallons, please contact Rust-Oleum Technical Service Department at: Rust-Oleum Technical Service Department, 11 Hawthorn Pkwy, Vernon Hills, IL 60061, or email to: technicalservice@rustoleum.com

PRODUCT APPLICATION

SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt, and chemical contaminants by washing the surface with Krud Kutter® PRO Cleaner Degreaser. Mold and mildew must be cleaned with Krud Kutter PRO One Step Cleaner & Disinfectant. 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 loose rust, mill scale, and deteriorated previous coatings. Abrasive blasting to a minimum Commercial Grade (SSPC-SP-6, NACE 3) with a 1-2 mils (25-50µ) surface profile is recommended for optimal performance. Abrasive blast cleaned steel requires two coats of primer.

GALVANIZED STEEL: New galvanized steel should be cleaned with Krud Kutter PRO Cleaner Degreaser to remove all post galvanizing treatments such oil, grease, or wax. Old or existing galvanized steel should be thoroughly washed to remove all surface contaminants.

CONCRETE AND MASONRY: Hand or power tool clean to remove all loose or unsound concrete, masonry, or previous coating. Very dense, non-porous concrete should be acid etched or abrasive blasted to remove the laitance layer and create a surface profile. Allow new concrete to cure for 30 days before coating. Not for horizontal 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 **ROC**Acrylic Direct-to-Metal Acrylic Enamel 3800 is compatible with most coatings, but a test patch is suggested.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-Approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

PRODUCT APPLICATION (cont.)

APPLICATION

Apply only when the air, surface, and material temperatures are between 40-100°F (4-38°C) and the surface temperature is at least 5°F (3°C) above the dew point. Air temperature must remain above 40°F during curing process. The relative humidity should not be greater than 85%.

The dry times published on page 4 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%.

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	1-16 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
1,600-2,400 psi	0.013-0.017	100

***Dry Fall Caution:** Protect surrounding surfaces from over spray. Over spray can be wet or dry depending on height of work, weather, environmental conditions, and application equipment. Lower temperature and high humidity can affect dry fall abilities. Test apply before each application. Spray from 14-20 feet away into a container. Material should readily wipe away. Dry over spray may be removed by wiping or washing. Always clean dry over spray from hot surfaces before fusing occurs as surface temperatures can be higher than the air temperature.

THINNING

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

AIR ATOMIZED SPRAY: Up to 1 pint per gallon.

AIRLESS SPRAY: Up to ½ pint per gallon.

CLEAN-UP

Soap and water.



ROCACRYLIC DIRECT TO METAL ACRYLIC ENAMEL 3800

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS

METHOD: ASTM D3363 (1 week cure)

RESULT: 2B

CONICAL FLEXIBILITY

METHOD: ASTM D522

RESULT: >33%

SALT SPRAY (250 hours)

METHOD: ASTM B117 (Rust)

RESULT: 8

METHOD: ASTM D1654 (Scribe Creep)

RESULT: Rating 3

METHOD: ASTM D714 (Blisters)

RESULT: Rating 9

IMPACT RESISTANCE (Direct/Reverse)

METHOD: ASTM D2794

RESULT: <25, <75

60° GLOSS

METHOD: ASTM D2243

RESULT: High Gloss: 85+

Semi-Gloss: 35-55

Satin: 20-35

ACCELERATED WEATHERING (% Gloss Retention)

METHOD: ASTM D4587, QUV Type A bulb

RESULT: 88% @ 474 hours

85% @ 833 hours

ADHESION

METHOD: ASTM D4541

RESULT: 5A airless spray, 5B Roller applied

SALT FOG (435 hours, Roller Applied)

METHOD: ASTM B117 (Rust)

RESULT: 8

METHOD: ASTM B117 (Scribe Creep)

RESULT: Rating 6

METHOD: ASTM B117 (Blisters)

RESULT: Rating 6

ACRYLIC	TECHNICAL DATA	RO-202
		ROCACRYLIC DIRECT TO METAL ACRYLIC ENAMEL 3800

PHYSICAL PROPERTIES

		ROCACRYLIC DTM ACRYLIC ENAMEL
Resin Type		Acrylic
Pigment Type		Varies with color
Solvents		Water, Glycol Ether
Weight	Per Gallon	8.5-10.9 lbs.
	Per Liter	1.02-1.31kg
Solids	By Weight	34.9-50.6%
	By Volume	32.6-39.6%
Volatile Organic Compounds		<250 g/l (2.08 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		2.0-3.0 mils (50-75μ)
Wet Film to Achieve DFT		5.0-8.0 mils (125-200μ)
Theoretical Coverage at 1 mil DFT (25μ)		522-635 sq. ft./gal. (12.8-15.6 m ² /l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		150-270 sq. ft./gal. (3.7-6.6 m ² /l)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Touch	15 minutes
	Handle	45 minutes
	Recoat	2 hours
	Full Cure	7 days
Dry Heat Resistance		200°F (93°C)
Shelf Life		3 years
Safety Information		For additional information, see SDS

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.