

**RUST-OLEUM®**
**HIGH PERFORMANCE**

# **ROCALKYD DIRECT TO METAL ALKYD ENAMEL 7400**

## **DESCRIPTION AND USES**

**ROCA**lkyd Direct-To-Metal Alkyd Enamel 7400 is Rust-Oleum's original rust preventive coatings for interior or exterior use. This product provides chemical and abrasion resistance for metal surfaces anywhere a smooth, hard, durable finish is desired, and corrosion protective performance is required. Available in flat, semi-gloss, and high gloss finishes. Not for use on galvanized steel.

If desired, the **ROCA**lkyd Direct-To-Metal Alkyd Enamel 7400 can be applied direct-to-metal (DTM), however optimal corrosion protection is achieved when the finish coat is used in conjunction with one of the recommended primers. See Two-Year Rust Proof Guarantee Form on this product's web page.

The **ROCA**lkyd Direct-To-Metal Alkyd Enamel 7400 complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized.

MPI #9, #48, #81, #96 Certified. Refer to the MPI website for the most current listing of MPI certified products.

## **PRODUCT FEATURES AND BENEFITS**

- Easy to Apply, High Hide Formula
- Hard, Durable, Chemical and Abrasion Resistant
- Ultra-Smooth Finish That Resists Chipping, Fading and Weathering
- Excellent Adhesion Over Minimally Prepared Surfaces
- Dries Tack Free in 2 to 4 Hours
- Can be Applied in Temperatures as Low as 32°F
- Two-Year Rust-Proof Guarantee\*

## **PRODUCTS**

### **HIGH GLOSS & GLOSS FINISHES**

1-Gallon	5-Gallon	DESCRIPTION
634402	634300	High Gloss Black
865402	-----	Dunes Tan
904402	-----	Machine Tool Gray
906402	-----	Silver Gray
925402	925300	Safety Blue
933402	-----	Safety Green
944402	944300	Safety Yellow
956402	-----	Safety Orange
964402	-----	Safety Red
975402	975300	Navy Gray
977402	-----	Chestnut Brown
1282402	-----	Forest Green
2766402	2766300	High Gloss White

## **PRODUCTS (cont.)**

### **SEMI-GLOSS FINISHES**

#### **1-Gallon DESCRIPTION**

7290402 Semi-Gloss White

### **FLAT FINISHES**

#### **1-Gallon DESCRIPTION**

412402 Flat Black

2764402 Flat White

## **COMPANION PRODUCTS**

358063 **ROCP**ime WB Hybrid 1K Epoxy Gray Primer

302140 Universal Alkyd White Primer

330142 Universal Alkyd Gray Primer

330143 Universal Alkyd Red Primer

239503 **ROCA**lkyd Alkyd Accelerator  
(refer to Application section on this TDS for more information)

333402 Professional Solutions Acetone Thinner

633402 Professional Solutions Mineral Spirits Thinner

## **RUST PROOF GUARANTEE\***

\*Submitting the Two-Year Rust-Proof Guarantee form located on the **ROCA**lkyd Direct-To-Metal Alkyd Enamel 7400 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](mailto:technicalservice@rustoleum.com)

## **PRODUCT APPLICATION**

### **SURFACE PREPARATION**

**ALL SURFACES:** (SSPC-SP-1) 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 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 mils (25-50µ) surface profile is recommended for optimal performance. Abrasive blast cleaned steel requires two coats of primer. See the primer Technical Data Sheet for more information.

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**ROCALKYD DIRECT TO METAL  
ALKYD ENAMEL 7400****PRODUCT APPLICATION (cont.)****SURFACE PREPARATION (cont.)**

**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 **ROCA**kyd Direct-To-Metal Alkyd Enamel 7400 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](http://www.epa.gov/lead).

**APPLICATION**

Apply only when the air and surface temperatures are between 32-100°F (0-38°C) and the surface temperature is at least 5°F (3°C) above the dew point. Abrasive blast clean steel requires two coats of primer.

**OPTIONAL:** For accelerated dry time and increased film hardness, use **ROCA**kyd Alkyd Accelerator up to 4 oz. per gallon. Add the **ROCA**kyd Alkyd Accelerator just prior to application of the coating. Mix well. Exceeding the recommended amount will not further enhance benefits. Apply the coating in the normal and recommended manner. Paint that is mixed with the **ROCA**kyd Alkyd Accelerator must be applied in 1-2 hours. Please refer to **ROCA**kyd Alkyd Accelerator TDS for more information.

**EQUIPMENT RECOMMENDATIONS**

(Comparable equipment also suitable)

**BRUSH:** Use a good quality natural or 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	16 oz./min.	25-60 psi
Siphon	0.055-0.070	--	25-60 psi
HVLP (var.)	0.043-0.070	8-14 oz./min.	60-90 psi*

\*10 psi max. at tip

**AIRLESS SPRAY**

SHEEN	Fluid Pressure	Fluid Tip	Filter Mesh
High Gloss	1,600-2,400 psi	0.013-0.017	100
All Others	1,600-2,400 psi	0.013-0.019	60

**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. Wet over spray can adhere to unwanted surfaces. 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.

**PRODUCT APPLICATION (cont.)****THINNING**

**BRUSH/ROLLER:** Normally not required.

**AIR ATOMIZED SPRAY:** Professional Solutions Acetone Thinner: Use up to 15% by volume.

**AIRLESS SPRAY:** Professional Solutions Acetone Thinner: Normally not required. If needed use up to 5% by volume.

**CLEAN UP**

Professional Solutions Mineral Spirits Thinner.

**PERFORMANCE CHARACTERISTICS****PENCIL HARDNESS**

METHOD: ASTM D3363

RESULT: 5B

**GLOSS AT 60°**

METHOD: ASTM D523

RESULT: High Gloss Finishes 85-100 degrees  
Semi-Gloss Finishes 40-65 degrees

**CYCLIC PROHESION**

**Rating 1-10. 10=best**

METHOD: ASTM D5894 3 cycles, 1008 hours

RESULT: 10 ASTM D714 for blistering

RESULT: 9 ASTM D610 for rusting

**IMPACT RESISTANCE (direct)**

METHOD: ASTM D-2794

RESULT: >160

**ACCELERATED WEATHERING (% gloss retention)**

METHOD: ASTM D4587, QUV Type A bulb, 450 hours


RESULT: 84% Gloss Retention (color-black)

**TABER ABRASION**

METHOD: ASTM D4060 CS17 wheels 500g load/1000 cycles

RESULT: 61.6 mg loss

For chemical and corrosion resistance, see the Rust-Oleum Industrial Brands Catalog

<b>ALKYD</b>	<b>TECHNICAL DATA</b>	<b>RO-203</b>
	<b>ROCALKYD DIRECT TO METAL</b> <b>ALKYD ENAMEL 7400</b>	

## PHYSICAL PROPERTIES

		HIGH GLOSS & GLOSS	SEMI-GLOSS	FLAT
Resin Type		Modified Alkyd	Modified Alkyd	Modified Alkyd
Pigment Type		Varies with color	Varies with color	412402 Carbon Black 2764402 Titanium Dioxide
Solvents		Aliphatic Hydrocarbons	Aliphatic Hydrocarbons	Aliphatic Hydrocarbons
Weight	Per Gallon	7.6-8.9 lbs.	9.5-10.2 lbs.	11.2-11.4 lbs.
	Per Liter	0.9-1.1 kg	1.1-1.2 kg	1.3-1.4 kg
Solids	By Weight	51-59%	61-65%	70-71%
	By Volume	42-43%	43-45%	47-48%
Volatile Organic Compounds		<450 g/l (3.75 lbs./gal.)	<450 g/l (3.75 lbs./gal.)	<450 g/l (3.75 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		1.5-2.5 mils (37.5-62.5µ)	1.5-2.5 mils (37.5-62.5µ)	1.5-2.5 mils (37.5-62.5µ)
Wet Film to Achieve DFT (unthinned material)		3.5-6.0 mils (87.5-150µ)	3.5-6.0 mils (87.5-150µ)	3.0-5.5 mils (75-137.5µ)
Theoretical Coverage at 1 mil DFT (25µ)		675-690 sq. ft./gal. (16.6-17.0 m²/l)	690-720 sq. ft./gal. (17.0-17.8 m²/l)	755-770 sq. ft./gal. (18.5-18.9 m²/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		230-390 sq. ft./gal. (5.7-9.6 m²/l)	235-410 sq. ft./gal. (5.8-10.1 m²/l)	255-435 sq. ft./gal. (6.3-10.7 m²/l)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Tack-free	2-4 hours	2-4 hours	2-4 hours
	Handle	5-9 hours	5-9 hours	5-9 hours
	Recoat	24 hours	24 hours	24 hours
Dry Heat Resistance		212°F (100°C)	212°F (100°C)	212°F (100°C)
Shelf Life		5 years	5 years	5 years
Safety Information		For additional information, see SDS		

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

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