RUST-OLEUM® HIGH PERFORMANCE®

8400 SYSTEM
FOOD AND BEVERAGE ALKYD ENAMEL

DESCRIPTION AND USES

8400 System Food and Beverage Alkyd Enamels are designed for use in food processing plants and other areas where mold and mildew are a concern. This modified alkyd coating contains additives to prevent mold and mildew growth in the dried paint film. May be applied to surfaces at temperatures as low as 18°F (-8°C). Not for use on galvanized steel.

8469 Red Rusted Metal Primer is a rust-inhibitive primer designed on sound rusted steel, and clean or abrasive blast clean steel surfaces.

8492 White Clean Metal Primer is a rust-inhibitive primer designed for use on clean steel surfaces or as an intermediate primer.

PRODUCTS

1-Gallon	5-Gallon	Description
8469402	—	Red Rusted Metal Primer
8492402	—	White Clean Metal Primer
8494402	—	High Gloss Dairy White
266690	—	Safety Yellow

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 removed with a chlorinated cleaner, bleach solution or Zinsser Perma-Wash™. 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.

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. WARNING! If you scrape, sand or remove old paint from any surface, you may release lead paint 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. Carefully clean up with a wet mop or HEPA vacuum. For additional information contact the U.S.EPA/Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

PRODUCT APPLICATION (cont.)

APPLICATION

Apply only when air and surface temperatures are between 18-100°F (-8-38°C). Surfaces must be frost-free and at least 5°F above dew point.

EQUIPMENT RECOMMENDATIONS

(Comparable Equipment Also Suitable)

BRUSH: Use good quality natural or synthetic bristle brush.
ROLLER: Use good quality natural or synthetic cover. Use a short nap roller for smooth surfaces, and a medium nap roller for rough surfaces.

AIR-ATOMIZED SPRAY:

Method	Fluid Tip	Fluid Delivery	Atomizing 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 the tip	

AIRLESS SPRAY:

Fluid Pressure	Fluid Tip	Filter Mesh
1,600–2,400 psi	0.013-0.017	100

THINNING

BRUSH/ROLLER: Normally not required. Do not thin if VOC limit is 420 g/l. If VOC limit is 450 g/l coating may be thinned up to 6% with 633402 Thinner as needed.

AIR ATOMIZED SPRAY: If VOC limit is 420 g/l use 10-15% 333402 Thinner as needed. If VOC limit is 450 g/l coating may be thinned up to 6% with 641402 Thinner as needed.

AIRLESS SPRAY: If VOC limit is 420 g/l use 5-10% 333402 as needed. If VOC limit is 450 g/l coating may be thinned up to 6% with 641402 Thinner as needed.

CLEAN UP

633402 or 641402 Thinners.

PERFORMANCE CHARACTERISTICS

System Tested

Primer: N/A

Topcoat: 8400 System Food and Beverage Alkyd Enamel

PENCIL HARDNESS

METHOD: ASTM D3363

RESULT: 5B

CONICAL FLEXIBILITY

METHOD: ASTM D522

RESULT: >33%

CYCLIC PROHESION

Rating 1-10, 10=best

METHOD: ASTM D5894, 3 cycles, 1008 hours

RESULT: 10 per ASTM D714 for blistering

RESULT: 9 per ASTM D610 for rusting

IMPACT RESISTANCE (direct)

METHOD: ASTM D2794

RESULT: >160 in.–lbs.

TABER ABRASION

METHOD: ASTM D4060, CS-17 wheels, 1000 gram load, 1000 cycles

RESULT: 62 mg loss

GLOSS (60°)

METHOD: ASTM D4587

RESULT: 93% (color–white)

For chemical and corrosion resistance, see the Rust-Oleum Industrial Brands Catalog (Form #206275).

RUST-OLEUM HIGH PERFORMANCE

TECHNICAL DATA

8400 SYSTEM FOOD AND BEVERAGE ALKYD ENAMEL

PHYSICAL PROPERTIES

		8469402 RED PRIMER	8492402 WHITE PRIMER	8494402 HIGH GLOSS DAIRY WHITE ENAMEL
Resin Type		Modified alkyd	Modified alkyd	Modified alkyd
Pigment Type		Iron oxide, zinc phospho oxide, talc, and calcium carbonate	Titanium dioxide, zinc phospho oxide, talc, calcium carbonate	Titanium dioxide
Solvents		Aliphatic hydrocarbons	Aliphatic hydrocarbons	Aliphatic hydrocarbons
Weight	**Per Gallon**	10.5 lbs.	11.3 lbs.	8.8 lbs.
	Per Liter	1.2 kg	1.3 kg	1.0 kg
Solids	**By Weight**	67%	70%	56%
	By Volume	45%	46%	39%
Volatile Organic Compounds		<420 g/l (3.5 lbs./gal.)	<420 g/l (3.5 lbs./gal.)	<450 g/l (3.7 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		1-2 mils (25-50µ)	1-2 mils (25-50µ)	1-2 mils (25-50µ)
Wet Film to Achieve DFT (unthinned material		2.5-4.5 mils (62.5-112.5µ)	2.0-4.5 mils (50-112.5µ)	2.5-4.5 mils (62.5-112.5µ)
Theoretical Coverage at 1 mil DFT (25µ)		720 sq. ft./gal. (17.7 m^2/l)	740 sq. ft./gal. (18.2 m^2/l)	625 sq. ft./gal. (15.3 m^2/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		310-615 sq. ft./gal. (7.6-15.3 m^2/l)	315-630 sq. ft./gal. (7.7-15.5 m^2/l)	265-530 sq. ft./gal. (6.5-13.0 m^2/l)
Dry Times at 70-80°F (21-27°C) and 50% rel. hum.	**Tack-free**	2-4 hours	2-4 hours	2-4 hours
	Handle	4-6 hours	4-6 hours	4-6 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	**Contains**	No lead has been deliberately added		
	Warning!	**FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY AFFECT BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. 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

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