DESCRIPTION AND USES

Low-VOC, fast-dry, water-based acrylic rust-inhibitive primers. Designed for application to properly prepared steel surfaces in mild to moderate industrial environments. Ideal for use on equipment, machinery, and other areas when a minimal downtime is required.

NOTE: Effective July 16, 2001, the formulation was changed to improve corrosion resistance. Intermixing of new material with material manufactured prior to July 16th will result with significant viscosity increase. Intermixing of old and new material is not recommended.

PRODUCTS

1-Gallon 5-Gallon Description
3169402  3169300 Red Primer
3181402  3181300 Gray Primer

COMPANION PRODUCTS

COMPATIBLE FINISHES

1-Gallon 5-Gallon Description
3115402  3115300 Alumi-Non®
3125402  3125300 Safety Blue
3133402  3133300 Safety Green
3144402  3144300 Safety Yellow
3165402  3165300 Red
3171402  3171300 Dunes Tan
3179402  3179300 Black
3186402  3186300 Navy Gray
3192402  3192300 White
3147402  3147300 New Caterpillar 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 or other suitable cleaner. Mold and mildew areas 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 (25-50 µ) surface profile is recommended for optimal performance. Abrasive blast clean 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/Lead Information Hotline at 1-800-424-LEAD.

APPLICATION

Mix thoroughly. Apply only when air and surface temperatures are between 50°- 100° F (10°- 38° C), the relative humidity is no greater than 85%, and surface is at least 5° F (3° C) above dew point. Abrasive blast clean steel requires two coats of primer. Dry times may be effected by extremely high or low relative humidity.

EQUIPMENT RECOMMENDATIONS

(Comparable equipment also suitable.)

BRUSH: Use good quality synthetic bristle brush.

ROLLER: Use a good quality lamb’s wool or synthetic fiber (3/8–1/2” nap).

AIR-ATOMIZED SPRAY:

Method Fluid Tip Fluid Delivery Atomizing Pressure
Pressure 0.055-. 070 12–16 oz/min 40–60 psi
Siphon 0.055-. 070 — 40–60 psi
HVLP (various) 0.043–. 070 8–10 oz/min 10 psi (at Tip)
(Air cap for highest pressure)

AIRLESS SPRAY:

Pump Ratio Fluid Pressure Fluid Tip Filter Mesh
30:1 2,800–3,000 psi 0.013–0.017 100
RUST-OLEUM INDUSTRIAL SPEEDY-DRY ACRYLIC ENAMEL PRIMER

TECHNICAL DATA

PRODUCT APPLICATION (CONTINUED)

THINNING
BRUSH/ROLLER: Normally not required; when necessary, thin with water.
AIR ATOMIZED SPRAY: Water – up to 1 pint per gallon.
AIRLESS SPRAY: Water – up to 1/2 pint per gallon.

CLEAN-UP
SPRAY: IMMEDIATELY flush spray lines with water, followed by Rust-Oleum Thinner or Pure Strength® Cleaner/Degreaser.
BRUSH/ROLLER: Soap and water immediately after use.

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS
METHOD: ASTM D3363
RESULT: 3H

CONICAL FLEXIBILITY
METHOD: ASTM D-522
RESULT: 33%

CYCLIC PROHESION Rating 1-10 10=best
METHOD: ASTM D5894, 2 Cycles, 672 hours
RESULT: 10 per ASTM D714 for blistering
RESULT: 9 per ASTM D1654 for corrosion

IMPACT RESISTANCE – Direct /Reverse
METHOD: ASTM D-2794
RESULT: >160/<160

TABER ABRASION
METHOD: ASTM D-4060, 500 g load, 1000 cycles
RESULT: 72.3 mg loss

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

PHYSICAL PROPERTIES

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

Resin Type:
Water-based Acrylic Polymer

Pigment Type:
Calcium Barium Phosphosilicate, Calcium Carbonate, Titanium Dioxide, Red Iron Oxide

Solvents:
Water

Weight:
Per gallon: 10.0 lbs. Per liter: 1.2 Kg

Solids:
By weight: 52.0% By volume: 41.0%

Volatile Organic Compounds:
< 250 g/L (2.08 lbs./gal.) activated

Recommended Dry Film Thickness Per Coat:
1.5–2.5 mils (37.5–62.5 µ)

Wet Film to Achieve DFT:
4.0–6.0 mils (100–150 µ)

Theoretical Coverage at 1 mil DFT (25 µ):
655 sq. ft/gal. (16.1 m/L)

Practical Coverage at Recommended DFT (assumes 15% material loss):
225–370 sq. ft/gal. (5.5–9.1 m/L)

Dry Times at 70º– 80º F (21º–27º C) and 50% Relative Humidity:
Tack-free: 1–1 1/2 hours
Handle: 2–4 hours
Recoat: 1–1 1/2 hours

Shelf Life:
5 years (protect from freezing)

Force Cure:
20 min. at 60º F (allow to cool before applying finish coat)

Safety Information:
Flash Point: N/A
Lead-free formulation

Warning: HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.

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