SPI COATINGS
PROVEN PERFORMANCE • REAL WORLD SOLUTIONS

RUST GRIP®
Product Test Listings

(Rev 3 - 02/01/2023)

ISO 12944 TESTING:

- **ISO 12944-6 and ISO 12944-9** Passed all test procedures and requirements without defects–independently certified as surface tolerant MCU without the use of a primer

ASTM (Am Society for Testing and Materials) TESTING:

- **B 117** **15,000 Hour Salt Spray (Fog)**
  - Salt Spray Fog Testing
  - RUST GRIP® over Steel
  - RUST GRIP® over Galvanized (5,000 Hours)
- **D-257-99** **D-C Resistance of Insulating Materials**
  - Surface Resistivity = 5.237E+15
  - Volume Resistivity = 5.263E+15
- **D 522** **Mandrel Bend**
  - Method A - Conical Mandrel - 7.25% Elongation
  - Method B - Cylindrical Bend - No Cracking Over ½ Inch Rod
- **D 610** **Percentage of Surface Rusted = Rating 9**
- **D 714** **No Blistering = Rating 10 (Perfect)**
- **D 1654** **No Loss of Adhesion = Rating 10**
- **DG 20-88** **Chemical Resistance = Excellent**
- **D 2369** **Volatile Content of Coatings**
  - 380 g/L and 3.17 lb/gal
- **D 3359** **Adhesion and Penetration**
  - Penetration through 18 layers of Lead Based Paint
  - Rated 5A = Excellent
- **D 4060** **Tabor Abrasion Resistance**
  - 1000 Cycles with a CS 17 Wheel, 1000 Gram Load
  - 18 milligram loss per 1000 Cycles Rated Excellent
- **D 4541** **Standard Method for Pull-0ff Strength**
  - Pull-Off Strength = 2248 psi
- **D 5894** **Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal**
  - 10,000 Hours of Exposure
  - No Signs of Blistering or UV Degrading
  - ASTM D 610 Rating: 9-P, 10, and 10 (Perfect)
- **D 6904** **Resistance to Wind-Driven Rain for Exterior Coatings Applied to Masonry = No Penetration**
- **D 7088** **Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry = No Penetration**
- **E 108-00** **Spread of Flame Tests on Pitched Roofs**
  - Class “A” Non-combustible
- **E 903-96** **Spectral Reflectance**
  - Average of 3 Tests
    44.6% Solar Reflectance
    55.5% Solar Absorption
- **E 1795** **Encapsulation of Leaded Paint in Buildings**
  - Direct Impact Resistance (ASTM D 2794)
  - Adhesion (ASTM D 3359, D 4541)
  - Dry Abrasion Resistance (ASTM D 4060)
  - Water Vapor Transmission (ASTM D 1653)
  - Flexibility – Mandrel Bend (ASTM D 522)
  - Distilled Water Resistance – Immersion 24 hours
  - .010” Tinplated Steel (ASTM D 1308, D 3359)

ASTM TESTING CONTINUED

- **E 1795** **Encapsulation of Leaded Paint in Buildings**
  - ¼” Steel or Aluminum (ASTM D 1308, D 4541)
  - Chemical Resistance – 24 Hours- 12 Reagents
  - Spot Test on Glass (ASTM D 1308)
  - Surface Burning Characteristics (E 84)
  - Volatile Organic Content (VOC)
  - (ASTM D 2369, D 4017, D 3960, D 1475)
  - Weathering (1000 hours)
  - Aging (interior and exterior)
  - Scrub Resistance (ASTM D 2486)
  - Black Plastic – No Break thru after 12 cycles)
  - Mildew Resistance (ASTM D 3273, 3274)
  - Paint / Repair Ability (ASTM D 3359)
  - Tensile Properties (6780psi after 3 weeks)
  - Visco-Elastic Properties (ASTM D 2370
- **F 963** **Compliance with Maximum Soluble Limits**
  - Antimony, arsenic, barium, cadmium, chromium
  - Lead, mercury, and selenium
- **G 20** **Chemical Resistance of Pipeline Coatings**
  - 5 % Ammonia, 5 % Urea and Diesel Fuel
  - 180 Days – No Failure.
- **G 85** **Prohesion (Louisiana DOT)**
  - 1500 Hour Salt Fog
  - Rated 9 (out of a possible 10 rating)

TESTING FOR ABS (AMERICAN BUREAU OF SHIPPING), IMO (INTERNATIONAL MARITIME ORGANIZATION) AND U.S. COAST GUARD APPROVAL.

- **IMO A 653** **Flame Spread and Heat Release**
  - IMO Res. A 653 (16) = Passed
- **MSC 41** **Smoke and Toxicity**
  - MSC Res. 41 (64) = Passed

Rame-Hart Static Contact Angle (Young’s Equation):

Static contact angle of Rust Grip® is lower than water demonstrating that Rust Grip® has exceptional wettability, adhesiveness, and high solid surface free energy for greater penetration into the substrate.

China Center for Technical Testing: National Measurement M0729

- **GB/T 1771-91** **Resistance to Salt Fog (2000 hours)**
- **GB/T 1866-88** **Manual Aging (2000 hours)**
- **GB/T 10834-88** **Resistance to Salt Water (1000 hours)**
- **GB/T 5219-85** **Adhesion (pulling apart method)**

Window Recycling Test for Encapsulation of Lead Based Paint:

Testing Was Done for Encapsulating Existing Lead Based Paint on Windows for HUD

- Window coated with RUST GRIP® - Cycled 29,700 Times
- Coated surface showed no wear, friction burn, or lead-based paint exposure

Maximum Temperature Exposure Test:

Thermal Analysis Testing was Performed on RUST GRIP® to Determine Maximum Temperature Exposure During Application and Operation

Maximum temperature is 600 degrees F (315 degrees C) – Based on Cyclic and Not Constant Heat

Complete Test Results Are Available Upon Request

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