



THE BEST CORROSION CONTROL PERFORMANCE, GUARANTEED!

Painting Specification for **TERMARUST[®] TR2010RI Flash Rust Inhibitor**

1. SCOPE

- 1.1 This specification covers Termarust[®] TR2010 RI High Ratio Co-Polymerized Calcium Sulfonate based flash rust inhibitor. Termarust[®] TR2010RI Flash Rust Inhibitor contains no lead or chromate pigments and derives its corrosion resistance from the High Ratio Co-Polymerized Calcium Sulfonate compound's strong affinity for steel and chemical passivation properties. The TR2010RI's purpose is to temporarily hold the blast on freshly cleaned steel.
- 1.2 Termarust[®] TR2010RI Flash Rust Inhibitor is suitable for use on blasted, hand or power tool cleaned steel to hold the surface from flash rusting when immediate coating is not possible and moisture is present. The Termarust[®] TR2010RI Flash Rust Inhibitor applies a .25 mil. D.F.T. coating on the surface and will dry in 10 to 15 minutes depending on temperature. Sandblast beside the inhibitor within 15 minutes of application without damage to the film or adhesion of blast media, is possible. In field applications Termarust[®] TR2010RI Flash Rust Inhibitor flash rust inhibitor maintains surfaces rust-free for up to 60 days or longer. Areas where excessive pitting exists should receive additional Termarust[®] TR2010RI Flash Rust Inhibitor to ensure all surfaces are treated. Termarust[®] TR2010RI Flash Rust Inhibitor, should not be allowed to pool. Areas of pooling should be brushed out.

2. DESCRIPTION

- 2.1 Termarust[®] TR2010RI, High Ratio Co-Polymerized calcium sulfonate based flash rust inhibitor contains approximately 7.5% by volume of film-forming solids (pigment and binder). The theoretical spreading rate for a .25 mils DFT is 964 square feet/US gallon at 100% transfer efficiency. Actual spreading rates will depend on application technique and physical conditions on site.

3. REFERENCE STANDARDS

- 3.1 The standards referenced in this specification are listed in SECTION 3.4, 3.5 and 3.6 and form a part of this specification.

314 AYITO ROAD SE, VIENNA, VA 22180-5983, FAX 703-938-1252
9100 EDISON, ANJOU (MONTREAL), QUEBEC H1J 1T3, FAX 514-354-2799

TOLL FREE 1-888-279-5497

info@termarust.com / www.termarust.com



THE BEST CORROSION CONTROL PERFORMANCE, GUARANTEED!

- 3.2 The latest issue, revision, or amendment of the referenced standards in effect on the date of invitation to bid shall govern unless otherwise specified.
- 3.3 If there is a conflict between the requirements of the cited reference standards and this specification, the requirements of this specification shall prevail.
- 3.4 Steel Structures Painting Council Specifications:
 - SSPC-PA Guide 3 A Guide to Safety in Paint Application
 - SSPC-SP7 Brush Off Blast Cleaning
 - SSPC-SP6 Commercial Blasting
 - SSPC-SP3 Power Tool Cleaning
 - SSPC-SP2 Hand Tool Cleaning
 - SSPC-SP1 Solvent Cleaning
- 3.5 American Society for Testing and Material (ASTM) Standards Test Methods for Properties:
 - B117 Salt Spray (Fog) Testing
 - D582 Consistency of Paints Using the Stormer Viscometer
 - D1210 Fineness of Dispersion of Pigment-Vehicle Systems
 - D1475 Density of Paint, Varnish, Lacquer and Related Products
 - D2196 Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield) Viscometer.
 - D2396 Volatile Content of Coatings
 - D2801 Leveling Characteristics of Paint by Draw-Down Method

4. PROPERTIES

- 4.1 TERMARUST ® TR2010RI Flash Rust Inhibitor meets the requirements of Section 3.5, and SECTIONS 4.2 through 4.7
- 4.2 ODOR: Shall be normal for the materials permitted (ASTM D-1296)
- 4.3 COLOR: Light Tan.

314 AYITO ROAD SE, VIENNA, VA 22180-5983, FAX 703-938-1252
9100 EDISON, ANJOU (MONTREAL), QUEBEC H1J 1T3, FAX 514-354-2799

TOLL FREE 1-888-279-5497

info@termarust.com / www.termarust.com



THE BEST CORROSION CONTROL PERFORMANCE, GUARANTEED!

- 4.4 **COMPATIBILITY:** There shall be no evidence of incompatibility of any of the ingredients of the inhibitor when two (2) volumes of inhibitor are mixed with one (1) volume of mineral spirits (Federal Standards No. 141, Method 4203):
- 4.5 **PIGMENT SETTLEMENT:** The inhibitor shall show perfect suspension when tested as specified in ASTM D869.
- 4.6 **WORKING PROPERTIES:** The inhibitor shall be easily spray applied when tested in accordance with Federal Standard No.: 141, Method 4331. The inhibitor shall show no streaking, running or sagging after drying.
- 4.7 **CONDITION IN CONTAINER:** The inhibitor shall show no thickening, curdling, gelling, or hard caking when tested as specified in Federal Standard No. 141, Method 3011 after storage for six (6) months from date of delivery in tightly covered containers at a temperature of 50-110° F.

5. LABELING

- 5.1 **MARKING OF CONTAINER:** Each container shall be marked with the following information:
 - Name:
 - Color:
 - Lot Number:
 - Date of Manufacture:
 - Quantity of Paint in Container:
 - Manufacture's Name and Address:

6. SURFACE PREPARATION

- 6.1 **PRE-SURFACE PREPARATION** - Before the actual removal of old paint and/or rust commences, all organic material such as bird nests, bird droppings, insect nests and all other non-metallic obstructions or pollutants attached to the steel structures are to be removed.
- 6.2 **SSPC-SP1 SOLVENT CLEANING** - The entire steel structure to be painted shall be inspected to determine the degree of chemical contamination. All oil and grease shall be manually removed from the steel with proper solvent cleaning as per SSPC-SP1.

314 AYITO ROAD SE, VIENNA, VA 22180-5983, FAX 703-938-1252
9100 EDISON, ANJOU (MONTREAL), QUEBEC H1J 1T3, FAX 514-354-2799

TOLL FREE 1-888-279-5497

info@termarust.com / www.termarust.com



THE BEST CORROSION CONTROL PERFORMANCE, GUARANTEED!

Areas that appear contaminated with road salts should be cleaned with high pressure water washing before being sandblasted.

- 6.3 **SSPC-SP6 COMMERCIAL BLASTING** - The thick, porous and highly salt contaminated rust scale present must be removed by sandblasting to an SSPC-SP6 specification. This will also remove all old, highly adherent coating to yield a smooth, clean surface. No rust scale shall be allowed to remain on the steel surface. This rust scale is highly contaminated with chloride and Iron Salts, and if allowed to remain, will result in accelerated, catastrophic coating failure. The blasting shall be performed in such a manner as to not contaminate freshly coated sections. Freshly prepared steel shall be inhibited as quickly as practical. If inhibited steel flash rusts, there is contamination present the steel should be checked for Chloride, Nitrates and Sulfate Ions and if present removed using a soluble salt remover like Chlor-rid or Termaclean 7010 and the steel must be reblasted in accordance with SSPC-SP7 Brush Off Blast Cleaning. In cases where inhibited steel may be exposed to direct contact with aqueous solutions of highway salts, the steel must be pressure washed before coating. The final SSPC-SP6 prepared steel must be inspected by a representative of the coating supplier or municipal authority before painting begins.
- 6.4 **CHEMICAL ANALYSIS OF BLASTED STEEL** - The Chloride, Nitrates and Sulfate Ion content of the prepared steel must be analyzed before the SSPC-SP6 is approved, and before painting begins. A Chlor-Test or CSN analysis kit can be purchased from CHLOR*RID International, www.chlor-rid.com 1-800-442-3217 (USA) or 1-888-279-5497 (CDN). The allowable upper limit for all surface preparation other than that covered by SSPC-SP12-NV2 standard on Chloride Ion is 5 micrograms/sq. cm., Nitrate Ion 7 micrograms/sq. cm. and Sulfate Ion 10 micrograms/sq. cm. Testing shall be done in areas where salt contamination has most likely occurred. Directions for analysis are contained in the kit.

7. FLASH RUST INHIBITOR APPLICATION

- 7.1 **THINNING:** No thinning is required.
- 7.2 **SPRAY EQUIPMENT:** The Flash Rust Inhibitor may be applied by airless, air assisted airless, electrostatic, HVLP, LVLP, or conventional air atomized spray equipment. Also brush, roller, paint mitts, or hand pump (garden type spray applicator).

314 AYITO ROAD SE, VIENNA, VA 22180-5983, FAX 703-938-1252
9100 EDISON, ANJOU (MONTREAL), QUEBEC H1J 1T3, FAX 514-354-2799

TOLL FREE 1-888-279-5497

info@termarust.com / www.termarust.com



THE BEST CORROSION CONTROL PERFORMANCE, GUARANTEED!

- 7.3 **FILM THICKNESS:** Termarust® TR2010RI Flash Rust Inhibitor shall be applied so as to the wet substrate thoroughly. There shall be no areas of steel that receive less than a good wet coat. Extreme care shall be taken to thoroughly coat all flange edges, sharp angles, rivets, bolt heads, nuts, threads and flange bottoms. Wet film thickness shall be confirmed by the contractor at regular and frequent intervals and is key to proper fulfillment of this specification. Excess coating should be brushed out or blown away and no pooling should be allowed. Any areas that show rust overnight or after rain are contaminated and should be cleaned and recoated. They should not rust again.
- 7.4 **APPLICATION TEMPERATURE;** The coating should not be applied at temperatures below 2+C with a steel temperature not less than 2+C. There must be a 2° degree C spread between temperature and dew point. To apply the coating the relative humidity should be no greater than 99% and the steel should be free of surface moisture.(note: Termarust TR2010RI Flash Rust Inhibitor may be applied below freezing (-18°C).This is not recommended unless steps are taken to control ice crystals before application ie. spot heating. The cold temperatures will also slow the coating's cure.)
- 7.6 **INSPECTION -** Film thickness .025 mils (dry) shall be confirmed if after a rain no rust appears on the structure.

314 AYITO ROAD SE, VIENNA, VA 22180-5983, FAX 703-938-1252
9100 EDISON, ANJOU (MONTREAL), QUEBEC H1J 1T3, FAX 514-354-2799

TOLL FREE 1-888-279-5497

info@termarust.com / www.termarust.com