

FORMULA



# RUST INHIBITING DIRECT TO METAL PRIMER

WHITE



**Non-Harmful**  
Low VOCs\*  
Zero HAPs  
Low Odor



**Prevents Rust**  
Enhances Adhesion  
For Prepared Metal Substrates



**Eco-Friendly**  
100% Acrylic  
Water Based  
Coating



**Sentinel System of Coatings**  
Formulated as a Step 1 Coating  
Component for Abatement &  
Restoration



**PRODUCT DESCRIPTION**

Sentinel DTM is a water-based, rust-inhibiting, corrosion-resistant, direct-to-metal (DTM) coating for use on ferrous and non-ferrous metal. DTM is formulated with an advanced resin system that is effective to reduce rust because it is both humidity and water-resistant.

DTM can be used as a primer for surfaces exposed to general industrial and atmospheric conditions, and has utility as a finish coat with stain blocking properties in top coat applications.

DTM has excellent resistance to solvent and water solutions (e.g., a range of detergents), as well as a broad range of mild alkali and acids. DTM does not contain the flammable solvents found in alkyd and other rust inhibiting paints. DTM is a single-component product for light to medium duty service.

DTM accepts water-based topcoats including Sentinel Lead Encapsulant and Sentinel BPE Asbestos Encapsulant.

**LIMITED WARRANTY**

Sentinel Products Inc. warrants this product to perform satisfactorily when used in accordance with the label directions. Sentinel Products Inc. will replace the product or refund the purchase price in the event this product is proven defective, which shall be the exclusive remedy under the warranty. Liability for consequential damages is specifically excluded. No other warranties expressed or implied are given.

**HEALTH & ENVIRONMENT**

Titanium dioxide is considered hazardous as an airborne dust. During the use of DTM these materials are bound within the product and do not present a significant risk of exposure. When this product has dried and cured, sanding or similar actions could create dust and subsequent exposure is possible. This product is lead free and mercury free. Safety Data Sheets are available upon request, or at [www.senpro.com](http://www.senpro.com). When spraying, use suitable respiratory protection and provide adequate ventilation. Disposal of most latex paints is allowable in landfills if the material is in solid form. Always check local regulations before disposing of any product.

**PRECAUTIONS**

Do not re-coat with coatings using aromatic or other strong solvents. Do not intermix with solvent base primers or finishes. This product is not a rust converter. DTM is not designed for immersion service.

**LEAD PAINT STATEMENT**

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)

**STORAGE & APPLICATION ENVIRONMENT**

THIS PRODUCT MUST NOT BE ALLOWED TO FREEZE. Store in a dry place at temperatures between 40°F (4.5°C) and 90°F (32°C). Surface and air temperature must be 50°F or above during application and drying time. Do not use DTM when rain is imminent or when the dew point is above 60 percent.



**DANGER**  
Contains: Titanium dioxide, Calcium carbonate, Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt, Crystalline silica

**HAZARD STATEMENTS:** Causes serious eye irritation. May cause cancer (inhalation of dust). May cause damage to lungs through prolonged and repeated exposure to dust.  
**PRECAUTIONARY STATEMENTS:** Do not breathe dust. Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear eye protection, protective clothing, protective gloves, face protection. Use personal protective equipment as required. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice. Get medical advice/attention if you feel unwell. Store locked up. Dispose of contents/container to licensed waste handling facility. **ADDITIONAL FIRST AID:** **IF INHALED:** Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen. **IF ON SKIN (or clothing):** Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention. **IF SWALLOWED:** Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention. **HANDLING AND STORAGE:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep container closed when not in use. Store in dry, well-ventilated area. Keep container tightly closed in original container protected from sunlight. Keep from freezing.

**FOR PROFESSIONAL USE ONLY REFER TO SDS FOR MORE INFORMATION KEEP OUT OF REACH OF CHILDREN**

For special instructions or additional information contact Sentinel at: 800-373-0633 or visit us at [www.senpro.com](http://www.senpro.com)

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**DIRECTIONS FOR USE**

**SURFACE PREPARATION**

Without proper surface preparation, a coating will not adhere properly to the substrate and the system will fail. Surfaces should be clean and dry. Remove all oil, grease, dirt, mold, mildew, loose or scaling paint, rust, mil scale and other foreign matter. Perform a test application whenever possible.

Follow the Joint Surface Preparation Standards (JSPS) now maintained and updated by AMPP. These standards are widely accepted and used by contractors and organizations for metal preparation. These standards were originally promulgated by NACE International and the Society for Protective Coatings (SSPC). NACE and SSPC have merged to form the Association for Materials Protection and Performance (AMPP).

Minimum for DTM is SSPC-SP-2: Hand Tool Cleaning. This preparation level involves non-power handheld tools. Hand tool cleaning is intended to remove all loose (as opposed to adherent) mill scale, rust, paint, and other contaminants that may be detrimental to a coating application. According to SSPC, "adherent" contaminants are those that can't be removed by lifting them off with a dull putty knife. SSPC-SP-3 Power Tool Cleaning is preferred when it can be performed and may be required for certain encapsulation products, and other long-warranty finishes. Ideal preparation level is NACE No. 3/SSPC-SP-6: Commercial Blast Cleaning No. 3/SP-6, but project circumstances may preclude abrasive media blasting.

**STEEL, IRON, FERROUS METAL:** Follow Surface Preparation above. After preparation, prime with 2 coats DTM. Pay careful attention to flash rusting of ferrous metal rendered bare by preparation. Generally apply 2 DTM coats to all surfaces. Attempts to save product by spot priming extensively adds often unneeded complexity, and increases probability of missed (unprimed) areas causing rust to return. Even pinholes that run down to the ferrous metal can cause bleeding up to the surface. Instruct applicators: the 1st coat catches the rust; the 2nd coat caps it.

When, after preparation, the surface is still comprised largely of solid rust, consider switching to an alkyd phenolic red oxide metal primer.

Pre-coat/"Stripe" coat crevices, welds, and sharp angles to prevent early failure in these areas.

**GALVANIZED METAL, ALUMINUM:** Surface oil should be wiped off with mineral spirits and a clean rag. Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Galvanized should have weathered and aged 6-8 months.

**PREVIOUSLY PAINTED SURFACES:** Prepare ruptured or scratched surfaces as for unfinished metal. Spot prime bare ferrous metal as conditions dictate/and as described above. Degloss if necessary. Apply a test area, allowing DTM to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. Conduct a tape adhesion test to account for possible intercoat delamination.

**THINNING & TINTING**

Contact Sentinel for more information.

**APPLICATION METHODS**

Separation in paints and coatings is normal. Ensure the product is mixed thoroughly, to an uniform color and texture with a drill and mixing paddle.

Apply uniformly.  
Brush: Nylon or polyester synthetic bristle  
Roller: Synthetic fiber 1/4"-1/2"

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance. For best results on rusty surfaces, always apply first coat by brush.

Airless Spray Settings:  
Reducer: Water (no more than 8oz/gallon)  
Pressure: 2000-3000 P.S.I.  
Tips: .015 to .019 reversible tips

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

**COVERAGE**

Recommended Spread Rate per coat: **Wet mils:** 3.4-5.1 **Dry mils:** 2-3

Coverage: 150-230 sq. ft. per gallon dependent on the thickness and porosity of the substrate material.

When spraying an overage/loss of 10% is to be expected. When spraying complex steel structures, such as "spaghetti steel" cross-braces, perkins, l-beams, etc., this rate can rise to 50-70% depending on the skill of the applicator. Corrugation (deck panels, wall panels) should be factored in as if the surface wrinkles can be drawn taught. Consult Sentinel when estimating these projects.

**DRY TIME at 70°F 50% R.H.**

To Touch: 1 hour  
Recoat with DTM: 6 hours  
Recoat with other water-based coatings: 24 hours  
Full Cure: 24 hours

**CLEAN UP**

Clean painting tools with warm soapy water while product is still wet. Any spills or splatters should be cleaned up immediately with a wet, soapy cloth. Dried coating may be removed using Sentinel 206 Peroxy Strip Paint and Coatings Stripper or other commercially available paint strippers.

**WARNING!** This product can expose you to chemicals including Titanium Dioxide, which are known to the state of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



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