



CORROPRIME®

TECHNICAL DATA

CORROSION RESISTANT PRIMER

THE PRODUCT AND ITS USES

CorroPrime® is a paint-like polyurethane resin coating heavily loaded with leafing aluminum flakes. When applied by brush, roller or spray, it automatically cures by a polymer reaction to form a tough, corrosion resistant film when applied to almost any substrate. CorroPrime® works like penetrating oil and soaks into problem surfaces such as galvanized metal, aluminum and rusty steel, forming a monolithic film at very low thicknesses. This product can also be used for priming or coating wood, concrete and polyurethane foam. It offers at least twice the yield of standard primers due to its high resin and aluminum content. CorroPrime is now fortified with Madison's newly-developed AP-50 Adhesion Promoter™, which enhances performance, particularly on surfaces prepared with FerroGrip™ Surface Conditioner / Adhesion Promoter, which contains the same additive.

CorroPrime® can be easily topcoated or used on its own (2 coats in that case). It will cure at subfreezing temperatures down to -10°C(15°F). The finished surface has a pleasing silvery look. The product is ideal for medium-duty aboveground substrates, indoors or out, where it will provide years of continuous service. Its single component, easy-to-use format makes it an ideal choice for a fabricator or hands-on maintenance professionals seeking a combination of ease of use with industrial-strength performance results.

ALTERNATIVE PRODUCT CHOICE: For heavy duty and immersion service, we recommend switching to Madison's AlumiZinc® "S", which provides higher film builds and contains additional corrosion inhibitors.

| PROPERTY | TEST DESCRIPTION | RESULTS |
|-----------------------------|-------------------------------|---|
| Application Temperatures | N/A | -10°C(15°F) to 50°C(120°F) |
| Initial Setting Time | @20°C/70°F | Within 2 hours |
| Curing Time Before Handling | @20°C/70°F | Within 4-6 hours |
| Ultimate Cure | @20°C/70°F | 7 days |
| Recoat Time ¹ | @20°C/70°F | Up to 48 hours |
| Solids Content | ASTM D-1259 | 55% |
| Volatile Organic Compounds | ASTM D2369 | 360 grams/litre |
| Theoretical Coverage | N/A | 23m ² /litre/25 microns (960 ft ² /US gallon/mil) |
| Adhesion | ASTM D-4541 (SSPC-SP5) | Greater than 500 p.s.i. |
| Hardness | ASTM D-2240 (Shore D) | 70-80 |
| Flexibility | ASTM D-522 | 180°@.003" over 1/4" mandrel |
| Impact Resistance | ASTM D-2794 | Greater than 160 in. lbs |
| Abrasion Resistance | ASTM D-4060 (Taber CS-17 1kg) | Good; slight darkening over time |
| Ultraviolet Resistance | ASTM G-154 | Good; slight darkening over time |
| Colors | | Silver Metallic Only |

1. However, recoat window varies depending on ambient and substrate temperatures and coating thickness.

NOTE: All statements, technical information and recommendations contained herein are typical of results obtained under laboratory conditions and are not intended to be used as contract specifications. For specification guidelines please contact Madison Chemical. The information contained herein is believed to be accurate as of the date of publication. Madison reserves the right to change product specifications without notice.

APPLICATION INSTRUCTIONS

CONTACT MADISON FOR DETAILED [APPLICATION INSTRUCTION BULLETIN](#) (also available online).

A. SURFACE PREPARATION

- 1) Ensure that the surface is clean, dry and uncontaminated. Proceed only if the substrate temperature is at least 3°C(5°F) above the dew point temperature (check weather channel or on-line for current dew point temperature), during surface preparation and coating application. Use caution if relative humidity is greater than 85%.
- 2) **Metal:** - On bare metal, file or grind any burrs, weld spatter, welds, sharp edges or other surface roughness that may protrude through the subsequently-applied coating. Remove rust and scale by manual or power wire brush then apply Madison FerroGrip™ Surface Conditioner / Adhesion Promoter as detailed in the FerroGrip™ Application Instruction Bulletin. In the case of previously painted surfaces, remove loose paint and prepare substrate as above. Abrade entire surface with coarse sandpaper or equal to achieve a surface profile (also called "anchor pattern").
- 3) **Wood:** - Remove loose paint and ensure that surface is clean and dry prior to proceeding. Do not coat green or damp wood.
- 4) **Concrete:** - Concrete must be fully cured. The use of FerroGrip™ will eliminate the need to sandblast or acid etch the concrete. After removing "spent" FerroGrip™ by power wash or floor scrubber, allow surface to dry at which point substrate is ready to be coated. Depending on porosity, concrete may need to be filled. Where bug-eyes exist, Madison PrepCrete™ should be used to fill same before proceeding. To fill smaller holes, use a thin mixture of PreCrete™ or GemThane® MG 220™ Epoxy Sealer/Coating.

NOTE: FOR IMMERSION CONDITIONS, CONSULT YOUR MADISON CHEMICAL REPRESENTATIVE.

B. APPLICATION OF COATING

- 1) Open container. CAUTION; aluminized products tend to build pressure in the can so remove lid carefully. Stir contents gently but thoroughly.
- 2) Unless using entire container at one time, pour off what you need into a clean, dry container and reseal the balance ensuring the rim is clean, otherwise inhibitors will evaporate and product will set in the can. Moisture (including ambient humidity) will also cause product to set, so keep partially-filled container sealed at all times.
- 3) CorroPrime® may be applied using a roller, brush or a single component airless spray equipment. Apply 3-4 wet mils (2-3 dry mils) per coat. Consumption will vary depending on the porosity of the surface. For thinning use **only** Madison VR-1 spray-grade Reducer™ or VR-2 brush-grade Reducer™.
- 4) If CorroPrime® is not being topcoated, simply recoat with itself. The second coat must be completed within 48 hours. Otherwise, lightly sand the initial coat to ensure good intercoat adhesion.

C. CLEAN-UP AND STORAGE

- 1) This material will react with humidity and moisture. Keep containers tightly sealed and store upside down. For clean-up, use Madison Reducers. Other solvents may react with product.
- 2) Store between 10°C(50°F) and 27°C(80°F). DO NOT FREEZE. Use product within 6 months of receiving.

HEALTH AND SAFETY

Coatings that contain aluminum might build up pressure over time. To avoid any sudden burst of gas, open the container carefully, thus allowing the gas to escape slowly. Avoid dropping or subjecting the material to strong force. Product is intended for industrial or professional use only. It contains no monomeric isocyanates but does contain flammable industrial solvents and will cause respiratory distress in some people. Flammable; avoid open sparks and flames. Indoors, wear a cartridge mask and provide ample ventilation. If swallowed, DO NOT induce vomiting as this will cause additional throat irritation; contact physician. If splashed on skin, remove immediately with Madison® VR-2 Reducer™ or with rubbing alcohol and then wash with soap and water. If splashed in eyes, wash liberally with clean water and contact physician; temporary irritation of eyes may last several days. Product contains no proven carcinogens or mutagens. However, prudence dictates that applicators use rubber gloves, safety goggles and protective clothing. Resins are inert when cured. MSDS available upon request. Review [Application Instruction Bulletin](#) for further safety information.

LIMITED TWO YEAR WARRANTY

Madison will replace any product which, in service for which it is suitable, fails to meet specifications within two years of sale and which is proven to be defective when applied according to instructions by a Madison Approved Applicator or Certified OEM Applicator. Madison accepts no responsibility or liability for any other loss, claim, damage, injury or expense, direct or consequential, in contract or negligence. This product replacement warranty is in lieu of any other right, warranty, guarantee or condition, statutory or otherwise, expressed or implied, whether as to fitness for a particular purpose or as to merchantable quality or otherwise.

Version 7, October 2008

F:\data\literature\library\Madison\30tds.inf\CorroPrime tds ver 07 2008 10 07



Madison Chemical Industries Inc.
The World Leader For Infrastructural Coatings®
490 McGeachie Drive, Milton, Ontario, Canada, L9T 3Y5
Phone: (905) 878-8863 Fax: (905) 878-1449
E-mail: sales@madisonchemical.com www.madisonchemical.com