



CORROCOTE® II PW ULTRA

TECHNICAL DATA

ULTRA LONG DESIGN LINING FOR POTABLE WATER APPLICATIONS

THE PRODUCT AND ITS USES

CorroCote II PW ULTRA is the ultimate potable water coating which combines familiar handling characteristics with performance attributes that ensure decades of reliable service. In addition to all the other properties normally associated with Madison's potable water coatings, CorroCote II PW ULTRA offers physical properties that set the "Gold Standard" of the industry in terms of adhesion (including long term immersion adhesion), perm rating, water absorption, impact resistance and resistance to cathodic disbondment. When applied, it achieves its adhesion quickly, enabling the applicator to coat, inspect and ship the structure in one continuous operation. The familiar toughness associated with the CorroCote name makes it ideal for both immersion applications such as tank linings and atmospheric service such as walls and floors in the food and pharmaceutical industries.

This instant-setting product is applied with familiar plural component spray equipment and sets in about 5 minutes. The formulation contains Madison NanoShield, a form of ceramic nanospheres that enhance the already high abrasion resistance of this product. It also contains MicroSpear, Madison's exclusive permanent anti-microbial additive guaranteed to last for the life of the coating system.

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-040C(-40°F) to 65°C (150°F)
Initial Setting Time	@20°C/70°F	5 to 8 minutes
Curing Time Before Handling	@20°C/70°F	15 minutes
Substantial and Ultimate Cure	@20°C/70°F	Substantial Cure, 24 hours: Ultimate Cure, 7 days
Recoat Time*	@20°C/70°F	Within 1 hour
Solids Content	ASTM D-1259	100%
Volatile Organic Compounds (VOC's)	ASTM D-2369	0 grams/litre
Theoretical Coverage	N/A	1604 ft ² /US gal/mil; 1016 m ² /litre/micron
Adhesion to Steel	ASTM D-4541 (SSPC-10)	4 hour: - 1,800 ± 200 p.s.i.; 24 hour: - => 3,000 p.s.i.
Hardness	ASTM D-2240 Shore D	75 +/- 5
Flexibility	ASTM D-522	180° over 3" mandrel
Abrasion Resistance	ASTM D-4060 (CS-17 Taber tester)	30 to 35
Resistance to Cathodic Disbondment	CSA Z225 (65°C, 48 hours, 20mils)	< 5 mm average results
Chemical Resistance	ASTM D-543	Excellent; See Chemical Resistance Chart
Dielectric Strength	ASTM D-149	Greater than 200 volts per mil
Surface Resistivity	ASTM D-257	1 x 10 ¹⁴ ohms per cm ²
Impact Resistance	ASTM D-2794 (20 mils)	Excellent; 140 in. lbs ± 15 in. lbs.
Accelerated Weathering	ASTM G-154 (25 hours)	No cracking; some chalking & darkening
Permeability	ASTM E-96	0.02 metric perms
Water Absorption	ASTM D-570	< 1.5 %
Wet Adhesion (ability to retain original adhesion during long term immersion)	ASTM D-870	Pass (no blistering, softening or embrittlement ; Retains 85 % of dry adhesion (± 5%)
Colors		Consult Madison Representative

*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 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 surface is clean, dry and uncontaminated. Proceed only if the substrate temperature is more than 3°C(5°F) above the dew point temperature during surface preparation and coating application.
- 2) Abrasive blast clean with angular media (sand, slag or steel grit G40 or coarser). DO NOT USE steel shot or other non-angular media.
For **steel** surfaces, blast to a Near White Blast (SSPC-SP10; NACE 2; SA 2.5):
 - minimum 3.0 mil (75 microns) profile for immersion;
 - minimum 2.5 mil (65 microns) profile for buried / embedded service;
 - for atmospheric service, the expense of blasting can be avoided by applying Madison FerroGrip Surface Conditioner / Adhesion Promoter immediately prior to application of coating; blasting is an optional alternative.

B. APPLICATION OF COATING

- 1) Agitate individual components in their original containers thoroughly before use to disperse pigments and assure homogeneity. Do not thin. Do not mix 'A' and 'B' together.
- 2) Spray apply CorroCote II PW ULTRA using a plural component, 1:1 mix ratio, heated airless spray unit.
- 3) Unlimited film thickness can be obtained in one continuous coating operation, using one of several techniques. Contact Madison for detailed instructions.
- 4) A second coat may be applied over the first, so long as it is applied within the recoat window. Otherwise, it will be necessary to roughen the surface to ensure good intercoat adhesion. Let coating reach substantial cure before putting into service.

C. CLEAN-UP AND STORAGE

- 1) This material will react with humidity and moisture. Keep containers tightly sealed at all times. For clean-up, use only Madison VR-1 or VR-2 Viscosity Reducer, as any other reducer or solvent, whether from Madison or a third party, will ruin the 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

CorroCote II PW ULTRA is intended for industrial or professional use only. It contains no monomeric isocyanates but may nevertheless cause respiratory distress in some people. Provide ample ventilation in confined areas. Wear a NIOSH-approved cartridge-type face mask or a fresh air respirator in spray area. If swallowed, DO NOT induce vomiting as this will cause additional throat irritation; contact physician for instructions. Protect skin by wearing rubber gloves, safety goggles and protective clothing. If splashed on skin, remove immediately with Madison Reducer (VR-1, VR-2 or VR-4) as product is very solvent resistant once it starts to polymerize (cure). If splashed in eyes, wash liberally with clean water and contact physician; temporary irritation of eyes may last several days. See MSDS for more information. The finished product is totally inert and harmless. Review [Application Instruction Bulletin](#) for additional 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.

Note: The following are Trademarks and/or Registered Trademarks of Madison Chemical Industries Inc.:
Madison Chemical, CorroCote, NanoShield, MicroSpear, FerroGrip and VR Reducers.

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