



CORROCOTE PLUS

TECHNICAL DATA

HIGH PERFORMANCE POLYURETHANE COATING/LINING SYSTEM

THE PRODUCT AND ITS USES

CorroCote Plus is a high performance polyurethane protective coating with unique handling and performance characteristics. It is a two component, 1:1 format product that can be applied in one coat, without a primer, to an unlimited film build. CorroCote Plus comes with a choice of setting times ranging from 1 minute to 30 minutes and a choice of high-build or low viscosity versions. It cures to a structural (rigid yet flexible) polymer film.

CorroCote Plus is highly resistant to corrosion, abrasion, immersion, water-borne chemicals, and cathodic disbondment. It contains absolutely no solvent, tar, styrenes or isocyanate monomers, is non-flammable and is totally inert when cured. Specific applications include above and below ground storage tanks, oil/water separators, wastewater structures, and concrete applications.

CorroCote Plus (CM) is a modified version of CorroCote Plus that contains ceramic nano-spheres and offers excellent abrasion resistance. It is ideal for highly abrasive or high flow applications.

CorroCote Plus (AM) this modified version of CorroCote Plus contains an EPA registered Anti-Microbial agent which helps prevent microbiological attack of the coating and substrate being protected and thus offers extended service life in sewer environments.

APPROVALS AND LISTINGS

Underwriters Laboratories: UL 1746 (part I, II and IV), UL 2215 (Internal lining of oil/water separators)

Steel Tank Institute: STI-P3, ACT 100, ACT 100-U

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-20°C(0°F) to 65°C(150°F)
Initial Setting Time	@ 20°C/70°F	Three choices from 1 to 30 minutes
Curing Time Before Handling	@ 20°C/70°F	Three times initial set time
Ultimate Cure	@ 20°C/70°F	7 days
Recoat Time*	@ 20°C/70°F	Within 45 minutes
Solids Content	ASTM D-1259	99 +/- 1%
Volatile Organic Compounds (VOCs)	ASTM D-2369	13 grams/litre (0.11 lbs/US gal)
Theoretical coverage	N/A	1016m ² /litre/micron (1604 ft ² /US gal/mil)
Adhesion to steel	ASTM D-4541 (SSPC 10)	Greater than 2000 p.s.i.
Adhesion to concrete	ASTM D-4541	Greater than cohesive strength of concrete
Hardness	ASTM D-2240 Shore D	70 +/- 5
Flexibility	ASTM D-522 (20 mils)	180° over a 1" mandrel
Abrasion Resistance	ASTM D-4060 (CS-17 wheels, 1 kgs weights, 1000 revolutions)	75 mg loss (standard version) 50 mg loss (CM version)
Resistance to Cathodic Disbondment	CSA Z-245 (65°C, 48 hours, 20 mils)	Excellent; 12 mm average radius
Colors		Contact a Madison Representative

*However, recoat window varies depending on the spray equipment temperature setting, the ambient conditions, product temperature/thickness, and the temperature of the substrate being coated.

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.

APPLICATION INSTRUCTIONS

CONTACT MADISON FOR DETAILED APPLICATION INSTRUCTIONS.

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 an angular media (sand, slag, steel grit; G40 or coarser). **DO NOT USE** steel shot or 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;
 - minimum 2.0 mil (50 microns) profile for atmospheric service.For **concrete** surfaces, abrasive blast to remove any laitance. A primer or rendering material may be required to fill in any visible holes or cracks in the concrete surface.
- 3) See Madison Application Instructions for details.

B. APPLICATION OF COATING

- 1) Roll or agitate individual components thoroughly before use to disperse pigments and assure homogeneity. Do not thin. Do not mix "A" and "B" together.
- 2) Spray apply 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. Typical applied thickness is minimum 20 mils (500 microns) as per SSPC PA2. Contact Madison for detailed instructions.
- 4) A second coat may be applied over the first, if it is applied within the recoat window. Otherwise it will be necessary to roughen the surface to ensure good intercoat adhesion.
- 5) Allow coating to cure completely before putting into service.
- 6) See Madison Application Instructions for details.

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 VR-1 Viscosity Reducer, M.E.K. or a 50:50 blend of M.E.K. and Xylol. 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

CorroCote Plus is intended for industrial use only. It contains no monomeric isocyanates but may nevertheless cause respiratory distress in some people. Provide ample ventilation. Wear a fresh air respirator when using in confined areas or when spraying. Wear rubber gloves, safety goggles and protective clothing. If swallowed, **DO NOT** induce vomiting as this will cause additional throat irritation; contact physician. If splashed on skin, remove immediately 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. Contains trace amounts of ingredients which may cause skin cancer following prolonged direct skin contact. Therefore commonly used skin protection is recommended. See MSDS for more information. The finished product is completely inert.

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.

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.

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