



CORROCOTE II CLASSIC

TECHNICAL DATA

POLYURETHANE PROTECTIVE COATING/LINING SYSTEM

THE PRODUCT AND ITS USES

CorroCote II Classic is a remarkably tough, two component, 100% solids polyurethane coating that has been protecting steel and concrete structures from corrosion since 1975. This one-coat, primerless system offers excellent long-term resistance to corrosive environments soil stress and cathodic disbondment. CorroCote II Classic sets within minutes, at any ambient temperature, to form an enamel-like sheet of plastic that bonds tenaciously to the substrate. A slow set version is also available for those who prefer to use a brush, roller or single component spray gun. CorroCote II Classic contains a "wetting agent" for maximum adhesion, Hydrophobic Aromatic Polymers (H.A.P.) for superior resistance to water penetration and other performance-enhancing additives.

Two out of every three cathodically protected underground steel fuel storage tanks in North America are coated with CorroCote II Classic. This system also offers effective corrosion protection for structural steel, oil/water separators, wastewater tanks, digesters, power transmission poles, cellular towers and virtually any structure subject to corrosion.

APPROVALS AND LISTINGS

Underwriters Laboratories: UL 1746 (part I), Steel Tank Institute: STI-P3

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-40°C(-40°F) to 65°C(150°F)
Initial Setting Time	@ 20°C/70°F	5 min (Fast Set) 60-90 min (Slow Set)
Curing Time Before Handling	@ 20°C/70°F	10-20 min (Fast Set) 2-3 hours (Slow Set)
Ultimate Cure	@ 20°C/70°F	2-5 days
Recoat Time*	@ 20°C/70°F	within 45 min (Fast Set) 6-8 hours (Slow Set)
Solids Content	ASTM D-1259	99 ± 1% (Fast Set) 80% (Slow Set)
Volatile Organic Compounds (VOCs)	ASTM D-2369	less than 10 grams/litre
Theoretical coverage	N/A	39m ² /litre @25microns (1590 ft ² /gallon/mil) Fast Set 30m ² /litre @25 microns (1280 mil ft ² /gallon/mil) Slow Set
Adhesion to steel	ASTM D-4541 (SSPC-SP10)	Greater than 1500 p.s.i.
Hardness	ASTM D-2240 Shore D	70
Flexibility	ASTM D-522	180° over 1" mandrel
Abrasion Resistance	ASTM D-4060 (Taber CS-17)	80 mg loss @ 1 kg per 1000 cycles
Resistance to Cathodic Disbondment	CSA Z-245 (65°C, 48 hours, 20 mils)	Excellent, 10 mm radius
Chemical Resistance	ASTM D-543	See Chemical Resistance Chart
Dielectric strength	ASTM D-149	Greater than 200 volts/mil
Surface Resisitivity	ASTM D-257	1x10 ¹⁴ ohms/cm ²
Impact Resistance	ASTM D-2794	40in. lbs.
Ultraviolet Resistance	ASTM G-154	Will chalk and darken
Colors	N/A	Black, Brown

*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.

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) **Fast Set Version** - unlimited film thickness can be obtained in one continuous coating operation, using one of several techniques. Typical minimum applied thickness for steel surfaces is 20 mils (500 microns).
Slow Set Version - the coating components can be mixed together and applied using a brush, roller or single component spray equipment. Less than 10 mils is recommended per coat. The mixture has a Pot Life of 30-45 minutes. Contact Madison for detailed instructions.
- 4) A second coat may be applied over the first, if it is applied within the recoat window. Otherwise, roughening of the surface will be necessary to ensure good intercoat adhesion.
- 5) Allow coating to cure completely before putting structure into service.

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 II Classic 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. See MSDS for more information. The finished product is completely inert and harmless.

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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