



CORROCOTE 'S'

TECHNICAL DATA

SINGLE COMPONENT HEAVY DUTY COATING/LINING

THE PRODUCT AND ITS USES

CorroCote 'S' is a single-component-plus-catalyst plastic coating and lining (polyurethane based) for storage tanks of all types. It is also suitable wherever high performance and ease of use are equally important, e.g. sewage treatment, paper mills, factory floors, oil water separators and chemical plant maintenance. The finished product is enamel-like in appearance and offers superior resistance to corrosion, chemicals, abrasion and cathodic disbondment.

A novice applicator can easily apply CorroCote 'S' in two coats of 6 to 7 dry mils, while a trained applicator using appropriate equipment can build 13 to 15 dry mils in a single coat. Properly applied, CorroCote 'S' will provide a pinhole-free, monolithic barrier which completely protects the parent structure. Cold weather cure means that CorroCote 'S' is at home winter or summer, in the shop or on the job site.

CorroCote 'S' (CM) is a ceramic modified version of CorroCote 'S' that offers excellent abrasion resistance and is ideal for highly abrasive or high flow applications.

CorroCote 'S' (AM) is a modified version of CorroCote 'S' that contains an EPA registered Anti-Microbial agent. Although the standard formulation is not susceptible to bacterial attack, CorroCote 'S' (AM) provides for extended service life in sewer environments.

TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-15°C(10°F) to 65°C(150°F)
Viscosity	Brookfield Viscometer	1500 cps
Pot Life		20 minutes to 2 hrs - depends on catalyst
Initial Setting Time		30 to 120 minutes - depends on catalyst
Recoat Time*		12 to 24 hours - depends on catalyst
Solids Content	ASTM D-1259	72%
Volatile Organic Compounds (VOCs)	ASTM D-2369	282 grams/litre
Theoretical coverage	N/A	625 m ² /litre/micron (1150 ft ² /US gal/mil)
Adhesion	ASTM D-4541 (SSPC 5)	Greater than 1200 p.s.i.
Hardness	ASTM D-2240 Shore D	60 +/- 5
Flexibility	ASTM D-522	180° over 1" mandrel
Abrasion Resistance	ASTM D-4060 (CS-17 wheels, 1 kgs weights, 1000 revolutions)	60 mg loss (standard version) 20 mg loss (CM version)
Permeability	ASTM E-96 (@ 15 mils)	1.4 x 10 ⁻³ perm inches
Resistance to Cathodic Disbondment	CSA Z-245 (65°C, 48 hours, 20 mils)	Excellent; less than 10 mm
Chemical Resistance	ASTM D-543	Excellent; see Chemical Resistance Chart
Dielectric strength	ASTM D-149	Greater than 200 volts per mil
Impact Resistance	ASTM G-14 (20 mils)	Greater than 40 in. lb.
Temperature Resistance	ASTM D-870, ASTM D-2485	-40°C(-40°F) to 65°C(150°F) Wet -40°C(-40°F) to 90°C(195°F) Dry
Colours		Black, Gray, Off-white

*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 sand or grit (G40 or coarser). DO NOT USE steel shot or non-angular media. For **steel** surfaces in atmospheric service, blast to a Commercial Blast (SSPC-SP6; NACE 3; SA 2). Acid etching or chemical cleaning methods may be appropriate for certain substrates. For **top coating** over primer or base coat, apply within recoat window of the primer or base coat. Otherwise, it may be necessary to roughen the base coat using sandpaper.
- 3) See Madison Application Instructions for details.

B. APPLICATION OF COATING

- 1) Before application, add approximately 5% of Madison C-4 Catalyst (20 minute pot life), C-7 Catalyst (40 to 60 minute pot life) or C-10 Catalyst (2 to 4 hour pot life) and stir into Corrocote "S" resin for 3 to 5 minutes. Faster catalysts permit higher film builds. If thinning is desired, use only Madison VR-1 Viscosity Reducer.
- 2) Application method will vary depending on field or plant parameters, as well as catalyst chosen. Corrocote "S" can be applied by brush, roller or single component spray equipment. (See your Madison representative for detailed instructions).
- 3) For optimum intercoat adhesion, recoat when previous layer is tacky to the touch. Recoating must occur within recoat window. If recoat time is exceeded, sand previous coat until gloss has disappeared over entire coated area, then apply second coat.
- 4) Test coating to make sure it is pinhole free. Depending on nature of substrate and applicator familiarity with product, this will be in the 12 to 15 mil range.
- 5) 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 and store upside down. Avoid dropping or subjecting the material to strong force. For clean-up, use Madison VR-3 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 "S" might build up gas 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. CorroCote "S" 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. 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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