



CORROPIPE II TX-15

TECHNICAL DATA

GENERAL PURPOSE PIPELINE COATING

THE PRODUCT AND ITS USES

CorroPipe II TX-15 has been used for the protection of the interior and exterior of steel, ductile iron and concrete pipe since 1981. CorroPipe II TX-15 is a pure polyurethane, combined with several performance enhancers, including Madison H.A.P., a hydrophobic aromatic polymer especially effective in aqueous immersion. This 100% solids product is solvent-free, tar-free, and non-flammable.

This fast set, 1:1 ratio, two component product cures at virtually any ambient temperature to form a "structural" polyurethane film, hard yet resilient, which adheres tenaciously to any substrate. Several setting times are available from 30 seconds to 45 minutes.

Two additional performance enhancers are available as options. These are:

CM version; this ceramic-modified version provides unsurpassed impact and abrasion resistance (ideal for directional drills, rocky backfill areas and pipe that will be exposed to shipping and handling abuse).

AM version; this modification contains an EPA-registered Anti-Microbial agent which helps prevent microbiological attack of the coating and the substrate being protected.

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	3 choices (from 1 minute to 30 minutes)
Curing Time Before Handling	@ all temperatures	Double initial setting time
Curing Time Before Immersion	@ 20°C/70°F	48 hours
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	Less than 0.08 lbs. per US gallon
Theoretical coverage	N/A	1016m ² /litre/micron (1604ft ² /US gallon/mil)
Adhesion to steel	ASTM D-4541 (SSPC 5)	Greater than 2000 p.s.i.
Hardness	ASTM D-2240 Shore D	70+/-5
Flexibility	ASTM D-522	180° over 1" mandrel
Abrasion Resistance	ASTM D-4060 (CS-17 wheels, 1 kgs weights, 1000 revolutions)	80 mg loss (standard version) 20 mg loss (CM version)
Elongation	ASTM D-412	Non-elastomeric
Permeability	ASTM E-96 (15 mils)	4.3 x 10 ⁻⁴ perm inch
Resistance to Cathodic Disbondment	CSA Z-245 (65°C, 48 hours, 20 mils)	Excellent; less than 12 mm radius
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
Water Absorption	ASTM D-471	Less than 3%
Impact Resistance	ASTM G-14 (20 mils)	Very Good; greater than 50 in. lbs.
Ultraviolet Resistance	ASTM G-154	Will chalk and darken
Temperature Resistance	ASTM D-870, ASTM D-2485	-40°C(-40° F) to 60°C(140°F) Wet -40°C(-40° F) to 90°C(195°F) Dry
Colors		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 sand or 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 **ductile iron** surfaces, abrasive blast to achieve a surface anchor profile of 2.5 mils or greater. Remove all rust and loose oxides.
For **concrete** surfaces, abrasive blast to remove any laticence.
- 3) See Madison Application Instructions for details.

B. APPLICATION OF COATING

- 1) Roll or power agitate individual components thoroughly with an electric or air driven mixer to ensure homogeneity. Do not thin. Do not mix "A" and "B" together.
- 2) Spray apply coating using a plural component, 1:1 mix ratio, heated airless spray unit.
- 3) Unlimited film build can be obtained in a single coat, multi-pass application. For single pass lining application, spin the pipe.
- 4) A second coat may be applied over the first, as long as it is applied within the recoat window. Otherwise, it may be necessary to roughen the surface to ensure good intercoat adhesion.

C. CLEAN-UP AND STORAGE

- 1) Product 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 CorroPipe II TX-15.
- 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

CorroPipe II TX-15 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 that may cause skin cancer after prolonged direct skin contact. Therefore, commonly used skin protection is recommended. See MSDS for more information. The finished product is totally 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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