

# Madison Chemical Industries Inc. (



## **CORROPIPE II PW**

#### **TECHNICAL DATA**

### LINING FOR POTABLE WATER PIPELINES

## THE PRODUCT AND ITS USES

CorroPipe II PW is a two component, quick setting, 100% solids polyurethane developed to protect potable water pipes from internal corrosion and abrasion. CorroPipe II PW cures to form a tough, durable non-toxic polyurethane solid that is holiday-free and resistant to chemicals, corrosion and abrasion. CorroPipe II PW will not impart any taste to the contents of the pipe, even at elevated temperatures.

CorroPipe II PW can be sprayed to any desired thickness in a single coat application at any ambient temperature to enable fast and trouble-free application. Using CorroPipe II PW cuts cost by improving productivity and increasing throughput.

CorroPipe II PW (AM) is a modified version of CorroPipe II PW that contains an EPA registered Anti-Microbial agent.

## APPROVALS AND LISTINGS

NSF International: NSF/ANSI Standard 61 for potable water applications. Rated D.HOT 60°C (140°F) US Food & Drug Administration 21 CFR177.1680 for dry food contact



## 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 minutes
Curing Time Before Handling	@ 20°C/70°F	8 minutes
Curing Time Before Immersion	@ 20°C/70°F	48 hours
Recoat Time*	@ 20°C/70°F	Within 45 minutes
Solids Content	ASTM D-1259	100%
Volatile Organic Compounds (VOCs)	ASTM D-2369	0%
Theoretical coverage	N/A	1016 m²/litre/micron (1604 ft²/US gallon/mil)
Adhesion to steel	ASTM D-4541 (SSPC-SP10)	Greater than 2000 p.s.i.
Adhesion to concrete	ASTM D-4541	Greater than strength of concrete
Hardness	ASTM D-2240 Shore D	75 +/- 5
Flexibility	ASTM D-522	180° over 3" mandrel
Abrasion Resistance	ASTM D-4060 (CS-17 wheels, 1 kg weights, 1000 revolutions)	52 mg loss
Resistance to Cathodic Disbondment	CSA Z-245 (65°C, 48 hours, 20 mils)	8 mm average radius
Chemical Resistance	ASTM D-543	Excellent; see Chemical Resistance Chart
Impact Resistance	ASTM D-2794	Very Good; greater than 50 in. lbs.
Colors		Off White, Medium Gray

<sup>\*</sup>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.
- Abrasive blast clean with angular media (sand, slag or steel grit G40 or coarser). DO NOT USE steel shot or nonangular 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 latiance.

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.
- Spray apply coating using a two component, 1:1 mix ratio, heated airless spray unit.
- 3) Unlimited film thickness can be obtained in a single coat, multi-pass application using one of several techniques.
- 4) A second coat may be applied over the first, as long as it is within the recoat time. Otherwise, it will be necessary to roughen the surface to ensure good intercoat adhesion.
- 5) Let coating reach full cure before putting into service. Then follow pipe decontamination procedure to remove any dirt and debris.

#### C. CLEAN-UP AND STORAGE

- 1) CorroPipe II PW will react with humidity and moisture. Keep containers tightly sealed; store upside down. For cleanup, 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 PW.
- 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 PW 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 no known or suspected carcinogens or mutagens. See MSDS for more information. The finished product is totally inert and non-toxic.

#### 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.

Revised December 2007.v02

