



## CORROPIPE II ALIPHATIC

### TECHNICAL DATA

### AIRCRAFT GRADE COATING FOR ABOVE GROUND PIPELINES

#### THE PRODUCT AND ITS USES

CorroPipe II Aliphatic is a two component, solvent-free (100% conversion to solids) aliphatic polyurethane coating. Being aliphatic, this product offers unsurpassed color and gloss retention. It cures to a hard, yet rubbery, plastic layer with outstanding impact and abrasion resistance. Tear strength and tensile strength are high. CorroPipe II Aliphatic is the only aliphatic polyurethane coating on the market which is both VOC-free and instant setting.

Handling characteristics are: your choice of setting times from 10 to 45 minutes; cold weather cure; unlimited build; a one-coat, self-priming product; non-flammable; improves productivity by increasing throughput.

CorroPipe II Aliphatic will be your best coating choice where you want to protect an aboveground pipeline or similar outdoor structure for many years while achieving high rates of output during the coating process.

#### TECHNICAL INFORMATION

PROPERTY	TEST DESCRIPTION	RESULTS
Application Temperatures	N/A	-10°C(10°F) to 65°C(150°F)
Initial Setting Time	@ 20°C/70°F	10 to 45 minutes
Curing Time Before Handling	@ 20°C/70°F	20 to 60 minutes
Ultimate Cure	@ 20°C/70°F	7 to 10 days
Recoat Time*	@ 20°C/70°F	3 times initial set time
Solids Content	ASTM D-1259	98% +/-2%
Volatile Organic Compounds (VOCs)	ASTM D-2369	0 grams/litre
Theoretical Coverage	N/A	975 m <sup>2</sup> /litre/microns (1604ft <sup>2</sup> /US gallon/mil)
Adhesion to Steel	ASTM D-4541 (SSPC-SP5)	Greater than 700 p.s.i.
Adhesion to Concrete	ASTM D-4541	Greater than cohesive strength of concrete
Hardness	ASTM D-2240 Shore D	40 to 50
Flexibility	ASTM D-522 (15 mils)	180° over knife edge
Elongation	ASTM D-412	Greater than 50%
Abrasion Resistance	ASTM D-4060 (Taber CS-17 )	40 mg loss @ 1 kg per 1000 cycles
Permeability	ASTM E-96B (15 mils)	0.002 perm inches
Chemical Resistance	ASTM D-543	See Chemical Resistance Chart
Water Absorption	ASTM D-471	Less than 3% (no absorption below surface)
Impact Resistance	ASTM D-2794 (20 mils)	100 in. lbs.
Ultraviolet Resistance	ASTM G-154	Excellent
Temperature Resistance	ASTM D-870, ASTM D-2485	-40°C(-40°F) to 90°C(195°F)
Colors		Over 20 colors available

\*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 agitate individual components thoroughly before use to disperse pigments and assure homogeneity. Do not thin. Do not mix "A" and "B" resins together.
- 2) Spray apply coating using a two component, 1:1 mix ratio, heated airless spray unit.
- 3) Unlimited film thickness can be achieved in a single coat, multi-pass application, using one of several techniques. Minimum recommended thickness is 5 mils (125 microns).
- 4) A second coat may be applied over the first, if it is within the recoat window. Otherwise roughening of surface will be necessary to ensure good intercoat adhesion.
- 5) Coating develops strength quickly. Depending on setting time chosen, coating will withstand foot traffic, tool impact, handling and strapping down within 15 to 45 minutes.

### 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-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

CorroPipe II Aliphatic 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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Phone: 905-878-8863 Fax: 905-878-1449 490 McGeachie Drive, Milton, Ontario Canada L9T 3Y5  
e-mail: sales@madisonchemical.com Web: www.madisonchemical.com  
World Leader for Infrastructural Coatings™