



## ACRYLATHANE

### TECHNICAL DATA

### ALIPHATIC POLYURETHANE COATING SYSTEM

#### THE PRODUCT AND ITS USES

AcrylaThane is a high performance aliphatic polyurethane coating that offers excellent adhesion and impact resistance. It is extremely tough, durable and withstands the rigors of normal shipping and handling much better than conventional coating systems. AcrylaThane is cross-linked with acrylic resins to offer years of excellent color fastness and gloss retention with little or no maintenance. AcrylaThane's superior corrosion and chemical resistance makes it suitable for use in harsh environments involving salt water, dilute acids and alkalis.

AcrylaThane is primarily designed for the atmospheric corrosion protection of shop fabricated storage tanks, machinery and equipment. It is also ideal for architectural finishing of concrete, wood or steel structures.

AcrylaThane is designed to be applied in one coat, direct-to-metal with no primer and cures "hard-enough-to-ship" in under 6 hours. AcrylaThane's fast application and rapid cure dramatically improves productivity; conventional coating systems simply cannot compete. AcrylaThane's advanced thixotropy formulation allows the material to be applied over 15 wet mils thick with no running or sagging, clinging extremely well to corners and edges. AcrylaThane's advanced formulation, long pot life and single component equipment application positions it as one of the easiest high performance systems to apply.

AcrylaThane 55 is 53% - 58% solids and meets minimum VOC requirements in many areas. AcrylaThane 85 is 70% - 75% solids and meets the minimum VOC requirements in all states.

#### TECHNICAL INFORMATION

| PROPERTY                          | TEST DESCRIPTION      | RESULTS   |
|-----------------------------------|-----------------------|---|
| Application Temperatures          | N/A                   | 0°C(32°F) to 50°C(120°F)  |
| Viscosity                         | Brookfield Viscometer | Paint-Like  |
| Pot Life                          | @ 20°C/70°F           | 3-4 hours (55 version)<br>1-2 hours (85 version)  |
| Initial Setting Time              | @ 20°C/70°F           | 45-90 minutes (55 version)<br>60-120 minutes (85 version)   |
| Curing Time Before Handling       | @ 20°C/70°F           | 3-4 hours (55 version)<br>4-6 hours (85 version)  |
| Recoat Time*                      | @ 20°C/70°F           | Up to 24 hours  |
| Solids Content                    | ASTM D-1259           | 53 to 58% (55 version) depending on color<br>70 to 75% (85 version) depending on color  |
| Volatile Organic Compounds (VOCs) | ASTM D-2369           | Less than 420 grams/litre (55 version)<br>Less than 340 grams/litre (85 version)  |
| Theoretical Coverage              | N/A                   | 550 m <sup>2</sup> /litre/micron (882 ft <sup>2</sup> /US gallon/mil) (55 - white)<br>720 m <sup>2</sup> /litre/micron (1155 ft <sup>2</sup> /US gallon/mil) (85 - white) |
| Adhesion to Steel                 | ASTM D-4541 (SSPC 10) | Greater than 800 p.s.i.   |
| Impact Resistance                 | ASTM D-2794 (20 mils) | Greater than 80 in.lbs  |
| Ultraviolet Resistance            | ASTM G-154            | Excellent   |
| 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 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) Stir the individual components first. Mix pre-measured 'A' component into 'B' component (1:4 ratio by volume). Stir for 5 minutes to assure homogeneity. Pot life is temperature dependent. Add Madison's Accelerator 100 during the winter months for cold cure application.
- 2) Apply using a brush, roller or conventional single component airless spray equipment (for best results use airless spray).
- 3) For atmospheric service, the typical application for metal is one coat applied direct to metal (no primer) to a dry film thickness of 5-8 mils (125-200 microns). Maximum recommended wet film build per coat is 15 mils (375 microns). On porous substrates such as concrete or wood, a base coat (see above) is recommended.
- 4) A second coat may be applied over the first, so long as it is applied within the recoat window. Otherwise, it will be necessary to roughen the surface to ensure good intercoat adhesion.
- 5) Contact Madison for detailed application instructions.

### 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

AcrylaThane is intended for industrial use only. It contains no monomeric isocyanate 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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