



## Waterborne polyurethane coating

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### Description

**WUCTR** is a two component waterborne polyurethane coating system. It is designed according to specific properties required for concrete floors and walls. It provides outstanding appearance and hard finish highly resistant to abrasion. It can be used as a primer or topcoat on concrete, wood and other materials. **WUCTR** is available clear or colored, in a mat, satin or gloss finish. This system has been approved by the Canadian Food Inspection Agency (CFIA). It meets LEED requirements.

1. 1<sup>st</sup> coat of (WUCTR) 4 mils – 265ft<sup>2</sup>/gal (265ft<sup>2</sup>/kit)
2. 2<sup>nd</sup> coat of (WUCTR) 6 mils – 400ft<sup>2</sup>/gal (400ft<sup>2</sup>/kit)

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### Primary applications

- ✓ Interior coatings for pharmaceutical installations
- ✓ Food processing plants
- ✓ Ideal for areas requiring a satin or mat finish
- ✓ Wall coating can easily be cleaned by water

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### Advantages

- ✓ Low VOC, allows for interior applications without harmful odors
- ✓ Dense surface resistant to bacteria and moisture and easy to clean
- ✓ Excellent adhesive properties, allows for application of various substrates
- ✓ May apply several layers on itself
- ✓ Fast dry speed
- ✓ Long pot life
- ✓ Resistant to many chemicals
- ✓ UV resistant
- ✓ Potential for LEED Canada credit (Low emitting material – Paints and Coatings)



| <b>TECHNICAL DATA</b>   |   |   |               |                |                |
|---|---|---|---------------|----------------|----------------|
| <b>Packaging kg/ 1 gal us kit</b>   |   | <b>Color</b>  |               |                |                |
| 3.7 kg / 1 gal us kit   |   | <b>Part A</b>   | <b>Part B</b> | <b>Mixture</b> |                |
| <b>Recommended Thickness</b>  |   | On Request  | Clear         | On Request     |                |
| WUCTR clear   | 4-6 mils / 265-400 ft <sup>2</sup> gal US | <b>Shelf Life</b>   |               |                |                |
| WUCTR colored   | 5-8 mils / 200-320 ft <sup>2</sup> gal US | 12 months in original unopened factory sealed container. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.<br><b>Protect from freezing!</b> |               |                |                |
| Two coats are necessary for a smooth and uniform finish. For porous substrates additional coats are required.   |   | <b>Mix Ratio by volume</b>  |               |                |                |
|   |   | A : B = 4 : 1   |               |                |                |
| <i>*Please note that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage.</i>                                    |   |   |               |                |                |
| <b>Pot Life (454 g)</b>   | <b>Recommended Thinner</b>                | <b>Density (kg/litre)</b>   |               |                |                |
| 1-3 hours @ 25°C  | Water                                     | <b>Part A</b>   | <b>Part B</b> | <b>Mixture</b> |                |
| <b>VOC (g/litre)</b>  |   | 1.04  | 1.15          | -              |                |
| -   |   | <b>Solids by weight %</b>   |               |                |                |
| <b>Waiting Time before second coat (hours)</b>  |   | <b>Part A</b>   | <b>Part B</b> | <b>Mixture</b> |                |
| 12 hours  |   | 50  | 100           | -              |                |
| <b>Foot Traffic</b>   | 24 - 48 hours                             | <b>Viscosity @ 25°C (cps)</b>   | <b>Part A</b> | <b>Part B</b>  | <b>Mixture</b> |
| <b>Light Traffic</b>  | 48 - 72 hours                             |   | -             | -              | -              |
| <b>Chemical Resistance</b>  | 72 hours                                  |   |               |                |                |
| <i>*Note: Times and data mentioned are based on laboratory conditions. Field results may vary and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.</i> |   |   |               |                |                |

| <b>PROPERTIES @ 23°C (73°F) 50% R.H.</b>                        |   |
|---|---|
| <b>Adhesion to concrete, ASTM D4541</b>                         | <b>Impact Resistance: direct / reverse (lbs), ASTM D-2794</b> |
| 300 psi (substrate ruptures)                                    |   |
| <b>Abrasion Resistance, ASTM D4060</b>                          | 16/2  |
| <b>Taber Abraser CS-17 Wheel / 1000g (2.2 lbs.)/1000 cycles</b> | <b>Water Absorption, ASTM D570</b>                            |
| 0.3 g loss  | 1.5   |

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**SURFACE PREPARATION**

The surface to be coated must be well primed. Remove dust, laitance, grease, oils, dirt, impregnating agents, waxes, foreign matter, any previous coatings, and disintegrated substances by mechanical means such as shot-blasting (BLASTRAC) or any other approved method to obtain an ICRI-CSP 2 profile. The compressive strength of the concrete must be at least 25 MPa (3625 lbs/in<sup>2</sup>) after 28 days and the tensile strength at least 1.5 MPa (218 lbs/in<sup>2</sup>).

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**MIXING**

The products must be conditioned at a temperature between 18 ° C (65 ° F) and 30 ° C (86 ° F).  
Mix the resin part (A) perfectly before pouring the hardener (part B) according to the indicated mixing ratio. Depending on product amount and size of mixing equipment, mix for 1 to 3 minutes at low speed (300 to 450 rpm). During mixing, scrape the walls and bottom of the container at least once with a trowel to obtain a homogeneous mixture. As the pot life is limited, prepare amount of desired product as required in order to avoid any loss.

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**APPLICATION****APPLICATION: Primer coat WUCTR**

Apply the product with a rubber squeegee and use a roller to obtain a uniform and even coating or apply the product directly with a roller, rolling in both directions (from left to right and from front to back) to ensure a uniform coating.

**APPLICATION: WUCTR topcoat**

Apply the product with a rubber squeegee and use a roller to obtain a uniform and even coating or apply the product directly with a roller, rolling in both directions (from left to right and from front to back) to ensure a uniform coating.

(For a satin or matte finish it is advisable to use a longer haired roller 30 mm)

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**CLEANING**

Clean all application equipment with the water. Once the product has hardened, it can only be removed by mechanical means. In case of skin contact, wash thoroughly with warm soapy water.

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**RESTRICTIONS**

- ✓ Do not apply at temperatures below 10 °C / 50 °F or above 30 °C / 86 °F
- ✓ The relative humidity of the surrounding work environment during the application of the coating and throughout the curing process should not exceed 85%
- ✓ Substrate temperature must be 3 °C (5.5 °F) above dew point measured
- ✓ Humidity content of substrate must be <4% when coating is applied
- ✓ Do not apply on porous surfaces where a transfer of humidity may occur during the application
- ✓ The application of this coating on an interior or exterior substrate without a moisture barrier is at risk of detachment (by hydrostatic pressure)
- ✓ Protect the coating from all sources of moisture for a period of 48 hours

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**HEALTH AND SAFETY**

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation. Consult the material safety data sheet for further information.

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**IMPORTANT NOTICE**

The information and recommendations contained in this document are based on reliable test results according to CTM Adhesives Inc. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. CTM Adhesives Inc. assumes no legal responsibility for the results obtained in such cases. CTM Adhesives Inc. assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

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