



UCTR-725

Polyurethane Coating System

Description

UCTR-725 is a two-component, 90% solids, VOC compliant, polyurethane coating that was developed as a topcoat. The product contains a UV protector. It provides a glossy finish with superior chemical resistance. It exhibits excellent physical properties. This system has been approved by the Canadian Food Inspection Agency (CFIA).

Primary applications

- ✓ Marine protection for fiberglass, steel, concrete or wood
- ✓ UV-stable top coat
- ✓ Aircraft hangar floors
- ✓ Low temperature equipment
- ✓ Maintenance facilities
- ✓ Industrial shop floors
- ✓ Car washes or wash bays
- ✓ Secondary Containment
- ✓ Cooling towers
- ✓ Bridges
- ✓ Wastewater treatment applications

Advantages

- ✓ Long pot life (30 min to 40 min)
- ✓ Displays fast cure times in thin film
- ✓ Respectable odor
- ✓ Superior chemical resistance (compared to standard epoxy)
- ✓ Abrasion resistant
- ✓ Non yellowing and good gloss retention
- ✓ Dense surface resistant to bacteria and humidity
- ✓ Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate
- ✓ VOC compliant in Canada and the United States



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TECHNICAL DATA

Packaging litres / gal us		Color				
11.34 / 3	56.7 / 15	Part A	Part B	Mixture		
Recommended Thickness		Light Yellow	Clear	Light Yellow		
Primer : ECTR	8 mils / 200 ft ² us gal	Shelf Life				
Topcoat on solid color: UCTR-725	6-8 mils / 200-265 ft ² us gal	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.				
Topcoat on vinyl flakes: UCTR-725	8 - 12mils / 133-200 ft ² us gal					
Mix Ratio by volume						
A : B = 2 : 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>						
Pot life (150g)	Solids by weight %	Density (kg/litre)				
25 - 30 minutes 25°C	90.6	Part A	Part B	Mixture		
VOC (g/litre)	Recommended Thinner	1.06 - 1.08	1.15 - 1.17	1.09 - 1.10		
33.7	xylene	Solids by weight %				
Viscosity @ 25°C (cps)	Part A	Part B	Mixture	Part A	Part B	Mixture
	400 - 500	1750 - 3250	1100-1200	85.5	100	90.6
Waiting time between coats						
Min / 6-10 hours – max / 24 hours						
Foot Traffic	12 – 24 hours					
Light Traffic	48 hours					
Chemical Resistance	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>						

PROPERTIES @ 23°C (73°F) 50% R.H.

Adhesion (concrete-primer) ASTM D4541	Water Absorption (%) ASTM D570
500 psi (substrate ruptures)	0.2
Hardness (Shore D) ASTM D2240	Tensile Strength (psi) ASTM D638
75 - 78	6500 - 7600
Compressive Strength ASTM D695	Elongation at break (%) ASTM D638
9500 psi	100
Abrasion Resistance, ASTM D4060 (CS17/1000 cycles/ 1000 g)	Flexibility, 1/8' Mandrel, ASTM D1737
	Pass
0.05 mg loss	Tear Strength (PLI), ASTM D2240



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Water Vapor Transmission, ASTM E96 Water procedure B Film 0.01 cm (0.004")	350	
	Fire Rating CAN/ULC S102 (Estimated on similar coating)	
1 perm	Flame Spread	2
	Smoke developed	94

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 3-4 profile. The compressive strength of the concrete must be at least 25 MPa (3625 lbs/in²) after 28 days and the tensile strength at least 1.5 MPa (218 lbs/in²).

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.

APPLICATION

APPLICATION : Primer coat of ECTR

Apply the coating using a rubber squeegee and pass a roller to obtain a uniform coating. Apply evenly and avoid creating excess pools of material.

APPLICATION : Finish coat of UCTR-725

Apply the finish coat using a rubber squeegee and pass a roller to obtain a uniform coating. Apply evenly and avoid creating excess pools of material.

CLEANING

Clean all application equipment with the recommended cleaner (SCT-0001). 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

CHEMICAL RESISTANCE

CHEMICAL	RESULTS (25°C)
Acetic Acid 100%	C
Acetone	C
Ammonium Hydroxide 50%	RC
Benzene	C
Brine Saturated H ₂ O	R
Chlorinated H ₂ O	R
Clorox (10%) H ₂ O	R
Diesel Fuel	RC
Gasoline	RC
Gasoline/5% MTBE	RC
Gasoline/5% Methanol	RC
Hydrochloric Acid 20%	R
Hydrochloric Acid 10%	NR
Hydraulic Fluid (oil)	RC
Isopropyl Alcohol	R
Lactic Acid	RC
MEK	RC
Methanol	R
Methylene Chloride	C
Mineral Spirits	RC
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NaCl/H ₂ O 10%	R
Nitric Acid 20%	NR
Phosphoric Acid 10%	R
Phosphoric Acid 50%	NR
Potassium Hydroxide 10%	R
Potassium Hydroxide 20%	R, Dis
Propylene Carbonate	RC
Skydrol	C
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R, Dis
Sodium Hypochlorite 10%	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/H ₂ O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1,1,1-Trichloroethane	C
Trisodium Phosphate	R



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Vinegar/H ₂ O 5%	R
H ₂ O	R
H ₂ O 14 days at 82°C	R
Xylene	RC

R = recommended/ little or no visible damage
 RC= recommended conditional/ some effect, swelling or discoloration
 C= Conditional/ Cracking-wash within one hour of spillage to avoid affects
 NR= Not recommended
 Dis= discolorative

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.

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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