



Waterborne Epoxy Coating

## **DESCRIPTION**

**ECE-WGF** is a two component waterborne epoxy coating system. It is designed according to specific properties required for concrete floors and walls. It provides outstanding appearance and excellent mechanical properties. It can be used as a primer or topcoat on concrete, wood and other materials. This system has been approved by the Canadian Food Inspection Agency (CFIA). It meets LEED requirements.

## **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

## **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
- Can be used on damp or dry surfaces
- Potential for LEED Canada credit (Low emitting material Paints and Coatings)

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## **TECHNICAL DATA**

Packaging litres / gal us		Color			
11.4 / 3	56.7 / 15	Part A Part B Mixture		Mixture	
Recommended Thickness		On Request	Amber	On Request	
ECE-WGF clear	3-5 mils / 320-530 ft <sup>2</sup> gal US	Shelf Life			
ECE-WGF colored	4-6 mils / 265-400 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.  Protect from freezing!			
Two coats are necessary for a smooth and uniform finish. For porous substrates additional coats are required.		Mix Ratio by volume			
		A:B=2:1			

<sup>\*</sup>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.

Pot Life (454 g)	Recommended Thinner	Density (kg/litre)				
1-2 hours @ 25°C	Water	Part A	Part B	Mixtur	Mixture	
VOC (g/litre)		1.10	1.04	-		
18.78		Solids by weight %				
Waiting Time before second coat (hours)		Part A	Part B	Mixtur	Mixture	
8 hours		-	_	_	_	
Foot Traffic	12-24 hours	Viscosity @ 25°C (cps)	Part A	Part B	Mixture	
Light Traffic	24-48 hours					
Chemical Resistance	72 hours		150-250	220-280	200-300	

<sup>\*</sup>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.

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## PROPERTIES @ 23°C (73°F) 50% R.H.

Adhesion to concrete, ASTM D4541	Resistance to direct impact (Asbestos cement CGSB 1-GB-71)		
350 psi (substrate ruptures)			
Compression Resistance, ASTM D695	Not affected at 6 lb-in		
950 psi	Friction CGSB 1-GP-71 (125.1) 10000 cycles		
Abrasion resistance, ASTM D4060 Taber Abraser, CS-17 Wheel 1000g/1000 cycles	Not affected		
175 mg loss (masonite structure)	Tear Strength (PLI), ASTM D2240		
Dayman ASTM FOC	-		
Permeance ASTM E96 Water -Procedure B	Loss of lustre before and after 10000 rubbing cycles, ASTM D523		
12.6 perms at 4 mils dry	No loss		

#### **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 ECE-WGF**

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: ECE-WGF topcoat**

Apply the product with a rubber squeegee and use a roller to obtain a uniform and even coating or apply the product directly





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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)

## **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.

## 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</li>
- 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

#### **HEALTH & 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 Elite Coatings Canada 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. Elite Coatings Canada Inc. assumes no legal responsibility for the results obtained in such cases. Elite Coatings Canada 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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