

E4E-PU-HYBRID



Description

E4E-PU-HYBRID polyurea primer is a two-component, 95 % solids, VOC compliant, polyurea hybrid that was developed as a primer/basecoat for a variety of coating systems. It provides outstanding adhesion on a large number of substrates and performs well in a wide range of temperature conditions.

Primary applications

- ✓ Aircraft hangar floors
- ✓ Automotive shops
- ✓ Bathrooms and locker rooms
- ✓ Bridge decks
- ✓ Car washes or wash bays
- ✓ Industrial shop floors
- ✓ Maintenance facilities
- ✓ Primer/ Basecoat for use on concrete, wood, and block
- ✓ Sidewalks and walkways
- ✓ Wall coatings over sheetrock, wood and concrete
- ✓ Wastewater treatment applications

Advantages

- ✓ Long pot life (35 min to 40 min)
- ✓ Displays moderate cure times with excellent adhesion
- ✓ Long open times allow for self-leveling capabilities and increased hiding power as well as broadcasts of decorative aggregate
- ✓ Easy to mix 2:1 ratio
- ✓ Emits virtually no odors and can be applied indoors
- ✓ Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate
- ✓ VOC complaint in Canada and the United States

E4E-PU-HYBRID



TECHNICAL DATA

Packaging litres / gal us		Color				
11.34 / 3	56.7 / 15	Part A	Part B	Mixture		
Recommended Thickness		On Request	Amber	Same as part A		
E4E-PU-HYBRID	8 mils / 200 ft ² us gal	Shelf Life				
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.						
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)				
30 – 40 minutes 25°C	96	Part A	Part B	Mixture		
VOC (g/litre)	Recommended Thinner	Clear: 1.03	1.22	1.09		
5	xylene	Solids by weight %				
Viscosity @ 25°C (cps)	Part A	Part B	Mixture	Part A	Part B	Mixture
	2500 - 3500	100 - 200	-	94.5	100	96
Waiting time between coats						
Min / 2-6 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
550 psi (substrate ruptures)	0.2
Hardness (Shore D) ASTM D2240	Tensile Strength (psi) ASTM D638
75 - 78	3800
Compressive Strength ASTM D695	Elongation at break (%) ASTM D638
-	200
Abrasion Resistance, ASTM D4060 (CS17/1000 cycles/ 1000 g)	Flexibility, 1/8" Mandrel, ASTM D1737
	Pass
31 mg loss	Tear Strength (PLI), ASTM D2240
	355

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SURFACE PREPARATION

The surface to be coated must be well primed. Remove dust, laitance, grease, oils, dirt, impregnating agents, 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).

Pre-mixed color or clear (A): 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.

Part (A) when adding color pod: Incorporate a full colored container into the clear part (A), and then thoroughly mix until the color is uniform (one colored container pod per part A gallon) before pouring in 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 E4E-PU-HYBRID

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.

(Always apply a topcoat)

CLEANING

Clean all application equipment with the recommended cleaner. 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
- ✓ Surface may discolor in areas exposed to regular ultraviolet light

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 PA Epoxy. 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. PA Epoxy assumes no legal responsibility for the results obtained in such cases. PA Epoxy 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.