

BIO-CURE 1100 EP

TECHNICAL DATA SHEET



BIO-CURE EPOXY IS A PLANT-BASED 100% SOLIDS EPOXY PRIMER THAT OFFERS VALUABLE PERFORMANCE BENEFITS. Representing a green-friendly alternative to traditional primers, BCE dries faster than standard epoxy primers and also cures-at low temperatures. This 0-VOC formulation provides excellent hydrophobicity & water resistance while exhibiting above average adhesion over lightly-contaminated surfaces.

USES:

- » Green-Friendly Projects
- » Low-Odor Applications
- » Resinous Flooring Primer
- » Industrial Applications

ADVANTAGES:

- » Low Odor
- » 0 VOC
- » Excellent adhesion
- » Easy to use 1:1 mix ratio
- » Superior water resistance

MIX RATIO:

Clear & Pigmented:

- » 1 Part A to 1 Part B by Volume

PACKAGING & SHELF-LIFE

Bio-Cure Epoxy is available in the following Units:

- » 10-gallon kits (5-gal part A and 5-gal part B)

Shelf-Life::

- » 24 months factory sealed and stored at room temperature.

SUGGESTED APPLICATION:

Suitable Substrate(s):

- » Concrete: Apply at 4-20 mil thickness to properly profiled concrete. Please see page 2 for detailed application instructions

MATERIAL COVERAGE	
THICKNESS	APPROXIMATE COVERAGE
8 mils	200 ft ² /gallon (4.8M ² /L)
12 mils	133 ft ² /gallon (3.2M ² /L)
20-mils	80 ft ² /gallon (2.0M ² /L)

GENERAL PRODUCT INFORMATION

Colors:	Clear & pre-pigmented std colors
Solids Volume:	100%
V.O.C.:	0 grams per liter
Pot-life:	30-Minutes @ 70° F
Cure Schedule:	70° F @ 50% R.H.
	To touch: 6 Hours
	To re-coat: 10 hrs minimum 24-hours maximum
	Foot Traffic: 12 - Hours
	Heavy Traffic: 72 - Hours
Reducer:	Not recommended
Application Temp:	40°F(4.4°C) - 90°F(32.2°C)
Environment:	For Interior Use Only

GENERAL PRODUCT PERFORMANCE

TEST TYPE	TEST METHOD	RESULT
Compressive Strength	ASTMD-695	11,000 psi
Tensile Strength	ASTM 638	3,600 psi
Hardness, Shore D	ASTM D-2240	60+
Flexibility 1/4" cylindrical mandrel	ASTMD 522	Pass
Adhesion/Pull-Off	ASTMD-4541	+500 PSI concrete fracture
Impact Resistance	ASTMD-2794	> 160

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SKUs:

110-0000-05-A: Clear Part A

110-_____-05-A: Clear Part A

110-0000-05-B: Part B

SURFACE PREPARATION

Ensure substrate to be coated is clean, dry, and in sound condition. All laitance, curing compounds, concrete hardeners, and other surface contaminants must be removed. Prepare concrete in accordance with ASTM D 4259-83. Mechanical Grinding or Shot Blasting is recommended to achieve a surface profile of ICRI CSP 3-5. Surface to be coated must be completely porous and free of excessive dust & contaminants.

MOISTURE IN CONCRETE

Concrete slabs should be tested prior to application for elevated moisture vapor emission levels. Resinwerks recommends ASTM F2170-19 standard for determining relative humidity in concrete slabs using RH probes. For slabs exhibiting elevated moisture levels in excess of 75% RH, Resinwerks™ Vapor Barrier Epoxy should be substituted as a primer. For more information, please contact your Resinwerks technical representative.

DE-GREASING OF CONTAMINATED SUBSTRATES

For concrete substrates containing oil, animal fats, or other carbon based contaminants, slabs should be de-greased appropriately using an enzymatic based concrete de-greasing agent. Multiple applications may be required depending on the level of contamination. For more information, please contact your Resinwerks technical representative.

TREATMENT OF JOINTS & CRACKS

Prior to installation of any Resinwerks primer, all joints, cracks and other substrate irregularities must be addressed. For more information on specific joint treatment procedures, please contact your Resinwerks technical services representative.

MIXING INSTRUCTIONS

- » Prior to mixing, all products should be properly acclimated to the local ambient room temperature of 40°F(4.4°C) - 90°F(32.2°C). Thoroughly agitate both part A and Part B separately prior to mixing. Mix 1-part A to 1-Part B by volume for two minutes using a slow speed jiffy mixer.

APPLICATION INSTRUCTIONS

- » Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a flat or notched squeegee (1/8" - 3/16") depending on desired thickness. Immediately back-roll with 3/8" (9 mm) nap non-shedding roller to help ensure full coverage and uniform thickness. Use a brush or small roller to cut-in along perimeter walls or any other obstructions. Depending on ambient environment and slab temperatures, material will be dry to the touch and ready for subsequent

coats within approximately 3-4 hours following application. Contact Resinwerks directly for additional application specifics and recommendations.

LIMITATIONS

- » Intended for use as a primer only and will amber when exposed to UV
- » Do Not Freeze
- » Do not apply over concrete experiencing ASR
- » Do not apply to new slabs < 28-days old
- » Do not apply to concrete < 3500 PSI compression strength
- » Do not apply product when ambient or room temperature is below 40°F or over 90°F or if the relative ambient humidity is above 85%.
- » This product is not recommended for immersion service.
- » DEW POINT: Do not apply when dew point is within 5°F of the ambient temperature.

MAINTENANCE

Thoroughly read all Material Safety Data Sheets prior to use and maintain copies on job-site at all times.

The long-term performance, appearance, and life expectancy of wear surface products are dependent on an adequate routine maintenance program designed specifically for the installed wear surface. Resinous floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. Recommended maintenance programs consist of frequent and thorough cleaning utilizing a neutral PH cleaner. The frequency of washing will vary depending on floor usage type, traffic and age. Please contact your local Resinwerks technical representative for more information.

NOTES

Mock-ups and field test areas are strongly recommended in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of Epoxy products may lead to fish-eyes, blistering, pinholes, wrinkling, or out-gassing of air in the concrete and are not product defects.

TECHNICAL ASSISTANCE

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