



## **CASTING EPOXY - UC**

Product Information

Category: Epoxy Floor System

Clear

1.5 gal kit

Series 2100

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### **Description and Use:**

Granicrete's CASTING EPOXY - UC is a two-component, 100% solids, high build casting epoxy to achieve **ULTRA CLEAR** pours for many applications and can be tinted with many colorants.

Used for variety of applications:

- ✓ Tables and table cavities.
- ✓ Thick pour decorative and functional surfaces.
- ✓ Many other possibilities.

Granicrete's Dispersions, Acrylic Concrete Stains, Acryli-Shades, Acid-Free Stains, and Mica Essence Metallix pigments can be added for desired artistic effects. Colorants that are oil-based should not be used.

### **Its significant characteristics include:**

- ✓ Water clear anti-bubbling when applied correctly
- ✓ Ultra-clear non-yellowing
- ✓ Exceptional working time (35-40 minutes spread, 10-15 minutes in mixing container)
- ✓ Meets USDA compliance criteria
- ✓ Zero VOC
- ✓ 100% solids
- ✓ Chemical resistant but should receive a final coat of Granicrete Crystal Top AHD or Crystal Top Epoxy.
- ✓ Good strength
- ✓ Durable yet flexible
- ✓ Low odor
- ✓ Ultra-high build

### **Color:**

Clear.

### **Packaging:**

1 ½ gallon kits (2-Parts A to 1-Part B)

### **Coverage:**

Coverage will vary depending on condition of surface and desired thickness.  
Approximate coverage for pour kit: (360 cubic inches)

¼" thick ... 10 sq. ft.

½" thick ... 5 sq. ft.

1" thick ... 2.5 sq. ft

## Surface Preparation:

For best results, the surface to be covered must be dry and free of dust, wax, grease, or oil. Surfaces should be sealed.

**For wood:** Apply 2-3 coats of a lacquer sanding sealer, sanding lightly between coats. Better yet, Apply 1 thin coat of Granicrete's GCP 25 Gloss single component sealer which dries quickly and crosslinks. Sealing the wood surface reduces wood outgassing and latent bubbling.

**For other surfaces:** Surfaces like paper may be sealed with Granicrete's Poly Low Odor Gloss.

## Thinning:

Do not thin.

## Mixing:

1. Best temperature for application is 75°F room and surface and product temperature but can be applied in temperatures of 60-85°F.
2. If room humidity is over 50%, recommend running dehumidifier before, during, and for 12+ hours after application.
3. Mix 2-parts A with 1-part B, by volume, into a clean container. A wide-mouth container with shallow mixing height is better than narrow-mouth container with taller mixing height.
4. **Mix by hand is preferred.** Do not whip so as to minimize air bubbling. Mechanically can mix but with a low speed (400-600 rpm) drill motor. Mix for 3-4 minutes. Make sure to scrape the sides and bottom of the container during mixing.
5. Best mixing occurs to assure contents are well blended by pouring from 1<sup>st</sup> mixing container to 2<sup>nd</sup> mixing container after 2-3 minutes and then and mix the same for another 1-2 minutes.
6. After mixing is completed, remove all contents from container within 10 minutes so as to prevent epoxy from internally generating heat and losing working time. will begin to generate heat and begin to smoke and turn to gel and harden.
7. Mix what you need. Unused-unmixed resin and hardener should be kept in their original containers and be used within 60 days of opening.

## Application:

Granicrete's application technique combined with this excellent product achieves results.

**Clear Cast:** Pour 1/4" increments, lightly torch each with CO2 beyond the flame end to remove bubbles. Repeat 1/4" layers up to 1" height. Stop to allow 8-10 hours before repeating 1/4" layers.

**Color Cast:** Same 1/4" clear cast process up to 2" before stopping for 8-10 hours before repeating 1/4" increments.

### Note to avoid discoloration and bubbling:

Too deep a pour with too much torching is detrimental leading to yellowing. Too broad and deep a pour can create internal heat leading to discoloring too.

Epoxy's internal heat catalyzation must be minimized. Casting Epoxy - UC can be applied at different levels based on a combination of total thickness and the total mass of the pour. To pour larger masses or thicknesses, the volume of pour is limited and can require multiple stages.

- ✓ Pours up to 48oz can be 3" per stage at 1/4" increments.
- ✓ Pours up to 96oz can be 2" per stage at 1/4" increments.
- ✓ Pours up to 1.5 gallons can be 1" per stage at 1/4" increments.

*(A stage is the immediate repetition of 1/4" increments up to the level noted. Once the level has been met then one should stop for 8-10 hours before starting the next stage of incremental pours.)*

**Latent or deep bubble:** Heat the tip of a screwdriver or paper clip and pierce the bubble.

“Torching” using the CO2 at the end of the flame can be done up to 40 minutes. Torch should pass quickly, evenly, and methodically while seeing bubbles and micro-bubbles to become instant clear.

Granicrete Casting Epoxy – UC is engineered to be a softer epoxy. As such for functional surfaces such as tabletops that are subject to scratching, this product should be coated with Granicrete Crystal Top AHD.

**Drying Time:**

24 hours to touch at 77°F  
 Light use at 72 hours.  
 Full cure is 7-14 days pending thickness.

**Handling Precautions:**

Refer to SDS before use. Storage best at 77-80°F

**Limitations:**

Product should be used within 1 year of batch date.

**Clean Up:**

Uncured material can be removed with Acetone. Cured material can only be removed mechanically.

**Technical Data:**

<b><u>Exothermic data</u></b>	
Brookfield viscosity, cps, 25 °C	900-1,100
Gel Time, minutes (200-g mass @ 25°C)	65 min
Peak Exothermic temperature , °C	130
Pot Life (200-g mass @ 25°C)	35 min
<b><u>Coating Properties, 20 mil film</u></b>	
Drying time, hr., Set to touch	12-18
Thru-dry	18-24
<b><u>Properties of Cured 1/8 inch castings<sup>1</sup></u></b>	
Izod impact strength, J/m	40-50
Shore D hardness, 0-10 sec	60-70
Tensile Strength, ASTM D 638	56-60 mPa
Ultimate elongation, %	6.5-7%
Flexural strength, ASTM D 790	83-88 mPa
Flexural modulus	2300-2600 mPa
VOC	0 g/l
<sup>1</sup> Cured 7 days, ~25°C	

Wear Personal Protective Equipment

Read SDS before using this product

**DOT Regulated**

**Manufacturer/Distributor Warranty:** As neither the manufacturer nor the distributor has control over the actual installation of this product, the manufacturer and distributor disclaim any and all warranties expressed or implied regarding color shade, appearance, and product performance at and after opening product containers. Manufacturer and distributor recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer and distributor. Manufacturer and distributor disclaim any liability incurred in connection with the use of this product or information contained herein.