



# COUNTERFORM

CONCRETE COUNTERTOP SOLUTIONS

## Ultra Z Poxy - Deep Pour Casting Resin

### TECHNICAL DATA SHEET

#### Product Description

Ultra Z Poxy - Deep Pour Casting Resin is a two component epoxy casting system. It is UV resistant and has anti-yellowing properties, strong adhesion, good fluidity, natural defoaming. It is used for mass castings with thicknesses greater than 1 inch (2.5 cm) and up to 4-10 inches (10-25 cm) depending on the volume. The low color and low viscosity allow for bubble free, crystal clear castings ideal for casting, potting and embedding applications. It is formulated for a long gel time, with low exothermic heat buildup. Deep Pour Casting Resin has a low VOC content, for user safety and reduced environmental impact.

#### Features and Benefits

- Extreme Hardness and durability
- Self leveling properties
- Contains no solvent with a very low VOC content, allowing for interior application without harmful odors.
- Excellent adhesive properties, allowing application on other firm and hard coatings, as well as a good bond to most substrates including wood, concrete plastics and more.

#### Technical Information

<b>COLOR</b>	Clear
<b>MIX RATIO, BY VOLUME</b>	2:1 (RESIN: HARDENER)
<b>MIX RATIO, BY WEIGHT</b>	2:1 (RESIN: HARDENER)
<b>VISCOSITY @ 73°F (23°C)</b>	A = 1000 - 1500 cps B = 100 - 500 cps Mixed: 800 - 1200 cps
<b>WORKING TIME @ 73°F (23°C)</b>	2h
<b>GEL TIME @ 73°F (23°C)</b>	4h
<b>DRY TOUCH</b>	24-36 h relative to the mass
<b>IDEAL WORKING TEMPERATURE RANGE</b>	OPTIMAL 59 - 70°F (15 - 21°C)

## Technical Information (continued)

<b>MINIMUM CASTABLE AMOUNT @ 77°F (25°C)</b>	1.5 gallons (5.67L)
<b>MAXIMUM CASTABLE AMOUNT @ 77°F (25°C)</b>	15 gallons (60 L)
<b>PEAK EXOTHERM</b>	100°F (38°C)
<b>RECOMMENDED FULL CURE</b>	5 DAYS
<b>TENSILE STRENGTH</b>	9500 PSI
<b>ELONGATION</b>	6.7%
<b>FLEXURAL STRENGTH</b>	15500 PSI
<b>COMPRESSION STRENGTH</b>	8.4 kg/mm <sup>2</sup>
<b>TG ULTIMATE</b>	203°F (95°C)
<b>HARDNESS, SHORE D</b>	82
<b>VOC</b>	0 g/L

## Instructions

**Surface Prep:** Ultra Z Poxy Deep Pour Casting Resin should be poured into a mold. If you are encapsulating a material minimum prep is needed. If you are casting this epoxy between two materials such as wood, concrete or natural stone for the purpose of creating a “river” between the materials, some prep may be necessary to promote adhesion of the epoxy to the material being used. If the goal is for the epoxy to adhere to a desired material, avoid casting against smooth or polished non-porous surfaces. For wood, sand surfaces no smoother than 60 grit and ensure all previous coating, waxes or oils has been removed. For concrete, make sure the concrete has been cured for a minimum of 14 days. The surface of the concrete should be sanded to 60 grit to remove any laitance or dustiness to the finish as well as any previous coatings.

**Mixing:** Make sure that the room temperature of the resin and hardener is maintained near 70°F (21°C). This will improve the flow characteristics and bubble release. Mix only the amount that you need at one time. Limit maximum castable amount to 3 total gallons (2 gallons of A and 1 gallon of B). Unused resin and hardener should be left in original containers. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2 parts A:1 part B by volume. Mix both components for 2 - 3 minutes by hand with a mixing stick to reduce trapping of air. Any pigment or metallic powder can be added at this time. Scrape bottom and walls of container several times to ensure a homogeneous mix. After mixing, transfer the mix into a similar mixing container and mix again for another 1 - 2 minutes to ensure thorough mixing. Now let stand for 3 - 5 minutes before pouring. Improper mixing or inaccurate measuring will cause epoxy surface to remain soft or sticky spots on the epoxy surface. PLEASE REFER TO TECHNICAL DATA SHEET FOR MORE DETAILS.

## Instructions (continued)

**Application:** After epoxy is thoroughly mixed, let rest in mixing container for 3-5 minutes. Then, slowly pour fully mixed epoxy into the mold. Allow the epoxy to completely fill the mold and seek its own level. Wait 15 – 20 minutes then lightly pass a lit propane torch over the surface at a 45° degree angle with the tip of the torch being at least 6 inches from the surface until all bubbles are gone. The carbon dioxide at the end of the flame helps facilitate bubble release and popping the bubbles. This will help ensure a glass like finish. If bubbles continue to appear on surface, a similar torching can be done until off-gassing has stopped. This may continue to happen during entire working time (up to 2 hours). Drips may be sanded off after the item has cured.

When the relative humidity is greater than 85%, the surface of the cured product easily absorbs moisture in the air to form a white mist. Therefore, when the relative humidity is greater than 85%, it is not suitable for curing at room temperature. It is recommended to use warm curing. If epoxy is to be ground, please wait at least 3 days for epoxy to cure.

**Cleaning:** Clean all application equipment with acetone. Once the product has hardened, it can only be removed by sanding. It is advisable to clean immediately after use. Wash hands and skin thoroughly with warm soapy water.

## Restrictions

- Ultra Z Poxy should be stored in a dry place between 59 - 70°F (15 - 21°C), out of the sun and out of reach of children.
- Resin and hardener should not be left in an open container.
- Application should be used where humidity is under 60% and temperature is between 59 - 70°F (15 - 21°C)
- Use a de-humidifier if needed.
- Ultra Z Poxy should be used within one year of purchase.

## 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. Avoid breathing vapors released 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

Proper adhesion and compatibility tests are essential. When using this product, the substrate preparation, application, performance and all other liabilities are strictly the end users responsibility. CCS and its affiliates offers no guaranty, warranty or other claims to the success or results from the use of this product. CCS warrants the product to be free of defects and will replace or refund the purchase price of the product in the case that said products are proven defective. Any consequential damages including any labor costs are not covered by this warranty and are therefore not recoverable from the manufacturer or associated reseller.