TECHNO CAST™ ULTRA DEEP POUR

Expert-formulated for castings from 2 to 3 inches thick in a single pour

MIXING RATIO 2A:1B by volume

CHARACTERISTICS

Crystal clear transparency

High quality raw materials

Excellent impact resistance

100 % solid

Self leveling

Near zero shrinkage

Glossy finish



Contact POLYMÈRES TECHNOLOGIES for more information: support@polymerestechnologies.com

DESCRIPTION

TECHNO CAST^M ULTRA DEEP POUR is an epoxy system composed of 100% reactive materials and with high resistance to ultraviolet rays. This product makes it possible to cast river tables with a thickness of 2 to 3 inches in a single casting for volumes of approximately 30 to 90 L, almost without shrinkage, while maintaining exceptional transparency.

TECHNICAL SHEET

Its very low viscosity allows maximum infiltration into the fine interstices and porosities of the substrates on which it is poured. Given its long pot life, it is possible to mix several liters at a time and pour a large quantity of resin. This product adheres perfectly to all types of wood.

INSTRUCTIONS

PREPARATION

Before using TECHNO CAST[™] ULTRA DEEP POUR, be sure to mix 2 parts A to 1 part B by volume (or 100 A to 43 B by weight). Mix gently and evenly with a metal spatula or a mechanical mixer for a period of at least 8 to 10 minutes, making sure to scrape the sides and bottom of the container well.

USAGE

With a pot life of approximately 2200 minutes at 22° C (72° F) for a mass of 200 g, it is possible to mix several liters at a time and pour a large quantity of resin. It is important to note however that the pot life will be shortened in a warmer environment and will be lengthened in a cooler environment. Also, the greater the quantity of resin to be mixed, the more its pot life will decrease.

STORAGE

Store TECHNO CAST^m ULTRA DEEP POUR on a pallet or shelf at 22°C (72°F) and relative humidity below 60%. A colder environment will increase the viscosity of each A/B part and a warmer environment will decrease it. Uncured material can be easily cleaned using isopropyl alcohol or our POLY CLEANER^m product.



Very slow-setting epoxy Pot life of approximately 2,200 minutes

A/B kits available in sizes of 30L and 60L



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TYPICAL PROPERTIES (AT 22 °C/72 °F)	PART A	PART B	ΜΙΧ	
VISCOSITY (Brookfield (cps))	700	55	195	
CONSISTENCY	Liquid			
DENSITY (g/cm ³)	1.10	0.94	1.035	
MIXING RATIO BY VOLUME	2	1	2/1	
MIXING RATIO BY WEIGHT	100	43	100/43	
COLOR	Transparent			
POT LIFE for 200g	2200 minutes			
DEMOLDING TIME	7 days depending on the mass			
PEAK EXOTHERMIC TEMPERATURE (ASTM D 2471-71)	90-105 °C depending on mass and design of the casting			
FULL CURE*	5 days (3" thick), 7 days (2" thick) depending on mass and design of the casting			
*After material has solidified, the curing process can be accelerated at 51.7 °C (125 °F).				

PHYSICAL PROPERTIES (SOLID STATE AFTER 7 DAYS AT 22°C/72°F)				
TEST	METHOD RESULTS			
HARDNESS	ASTM D 785 65	Shore D	83	
		MPa*	91.54	
COMPRESSIVE STRENGTH	ASTIVI D 695 80	Maximum strain %	4.2	
TENSILE STRENGTH	ASTM D 638 Type 1	MPa	47	
FLEXURAL STRENGTH	ASTM D 790A	MPa	120	
ELONGATION	ASTM D 790A	%	5.2	
		455 kPa**	62 °C	
DEFLECTION TEMPERA	IONE	1820 kPa	52 °C	
IMPACT RESISTANCE	ASTM D 256 81	J/m***	81	
LINEAR SHRINKAGE	ASTM D 2566 79	cm/cm	0.0015	
ABRASION RESISTANCE	TABER CS 17-1000 GR	0.057		
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D 696 79	4.055 x 10 ⁻⁵		
*1 MD2 - 145 lb				

*1 MPa = 145 lb **1 kPa = 0.145 psi

***53.4 J/m = 1 blF/po

TAKE NOTICE

IF TECHNO CAST[™] ULTRA DEEP POUR IS CASTED BELOW RECOMMENDATIONS AND/OR IN A SMALLER MASS, THE FULL CURE TIME MAY DOUBLE.



TECHNICAL SHEET 2

TECHNICAL SHEET 3

TECHNO CAST™ ULTRA DEEP POUR

PRECAUTIONS

- Consult material safety data sheet prior to use.
- Normal health and safety measures should be observed when handling this product.
- Ensure good ventilation.
- Wear gloves, safety glasses, and protective clothing.
- Do not use part A without its part B, and vice versa. Shake well parts A and B separately before use.
- Once the container is opened, POLYMÈRES TECHNOLOGIES can no longer be held responsible for this product.
- Shelf life of this product in original containers is one (1) year from the date of purchase, under recommended storage conditions.
- Keep from freezing.

IMPORTANT:

As with all epoxy products, Part B of this system tends to oxidize over time. This is a reaction of oxygen with the product, causing a slow discoloration of Part B. High heat will also intensify this reaction. Oxidation begins as soon as the Part B container is opened.

Oxidation of Part B does not affect product performance. Adding a color pigment will mask the yellowing.

To reduce this phenomenon, we pack our products under a nitrogen atmosphere in high quality metal containers, unlike HDPE plastic containers which allow the liquid to breathe and accelerate contamination.

It is important to validate the color when mixed with part A before starting a project.

It is recommended to follow provincial and federal safety regulations. In case of eye contact, rinse well with water. In case of skin contact, rinse with soap and water. Keep away from children.

ASSUMPTION OF RISK

The customer assumes all risk and liability for the results obtained by the use of any POLYMÈRES TECHNOLOGIES product, including, without limiting the generality of the foregoing, the use of the CHILL EPOXYTM line of products, and the use of any process, whether in terms of general effectiveness, success, or failure, and regardless of any oral or written statement made by way of technical advice or otherwise, related to the use of any POLYMÈRES TECHNOLOGIES product.

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