

Ultra Clear - Casting Epoxy (A-112/B-442)

Description:	Ultra Clear Casting Epoxy is a 100% solids, self-leveling, primerless, odorless, water clear coating often used for river tables and other large castings. Ultra Clear Casting Epoxy can be used anywhere a hard, durable, crystal clear surface is required.		
Product Advantages:	<ul style="list-style-type: none"> ● IDEAL 2:1 MIX RATIO ● EXTREMELY TOUGH SURFACE ● HIGH GLOSS ● BLUSH RESISTANT ● EXCELLENT ADHESION TO WOOD 		
Application Guidelines:	For very large castings the thickness should be limited to 1.5 inches for a single pour. Do not vary or deviate from mix ratios, failure to do so can result in soft spots or partial curing. For best results the material should be used at temperatures from 70°-80°F. Work areas should be clean and dust/insect free.		
Handling/Physical Properties:	RESIN VISCOSITY, cP or mPa.s	600-800	ASTM 2196
	RESIN DENSITY	9.22	ASTM D 792
	HARDENER VISCOSITY, cP or mPa.s	120	ASTM 2196
	HARDENER DENSITY	8.2	ASTM D 792
	MIX RATIO (A/B), pbv (pbw)	2/1 (2.27/1)	
	COLOR	Clear	
	MIXED VISCOSITY, cP or mPa.s	450	ASTM D 2196
	WORKING TIME, h	6	
	GEL TIME, h (100 grams)	24	ASTM D 2471
	<u>CURING TIME (@1", 75°F):</u>		
	SURFACE TACK-FREE, h	40	
	THRU CURED, h	72	
	HARDNESS, Shore D	82	ASTM D 2240

Surface Preparation:	To achieve excellent adhesion, the substrate must be free of all loose and foreign material and should be clean. Oils, grease, waxes or other contaminants <u>must</u> be removed prior to coating.
Mixing:	The storage temperature of Ultra Clear Casting Epoxy will greatly affect the ease of mixing, application and curing time. For best results, Ultra Clear Casting Epoxy should be stored at 70-80 °F for at least 24 hours before use. Mix 2 parts A (resin) to 1 part B (hardener) using a spatula or stir stick until uniform. Be sure to scrape sides of mixing container while mixing (any unmixed or partially mixed material will cause wet spots on finished surface). DO NOT mix more material than can be used within the stated working time. REMEMBER - you will have less working time at higher temperatures.
Application:	Ultra Clear Casting Epoxy can be applied with a foam brush/roller or squeegee. Usually material is applied in stages with no pour thicker than 1.5 inches (unless casting can be cooled). Recoats can be applied as soon as current layer has “tacked up”. If your previous layer has fully cured then very light sanding with a fine grit (220) sandpaper followed by a solvent wipe (isopropyl alcohol or acetone) is necessary before application of subsequent layer. A heat gun or torch may be used after the pour is completed and the material is still liquid to burst/pop any remaining air bubbles. If a torch is used the flame should never come in direct contact with the epoxy, smooth strokes 6-12 inches above the material is all that is required.

SAFETY PRECAUTIONS

Mix and pour in a well-ventilated area. Avoid contact with skin and eyes. If contact does occur, wash skin with soap and water and seek medical help. Read and understand all CAUTIONS on container labels and safety data sheets before using this material.

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymers, sanding) may cause high vapor concentrations. **DO NOT WELD ON, BURN OR TORCH ON OR NEAR, ANY EPOXY MATERIAL. HAZARDOUS VAPOR IS RELEASED WHEN AN EPOXY IS BURNED.**

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