



# LABPOX CRYSTAL UV

100% Solids, High Performance providing Excellent UV Resistance

## Description

The LABPOX CRYSTAL UV is a two-component epoxy floor coating system which is VOC-free, 100% solids and is virtually odor free. The product is translucent and displays an excellent resistance to UV irradiation (excellent color retention over time) best suited for residential and commercial applications. It possesses superior mechanical and chemical properties as well as a long pot life and working time. It is excellent as a topcoat on LABPOX CAST UV products (see section, CASTING APPLICATIONS). The LABPOX CRYSTAL UV formulation is based on a high-performance cycloaliphatic polyamine technology displaying outstanding properties and superior aesthetic finish.

## Uses

The LABPOX CRYSTAL UV provides excellent resistance for the most demanding applications:

- + River tables
- + Countertop resurfacing
- + Casting applications
- + Furnitures
- + Wood crafting

## Advantages

- + Offering one of best UV resistance in the industry
- + Environment friendly (100% solids, VOC-free and no solvent)
- + Potential for LEED eligibility
- + Virtually odor free
- + Easy application with long pot life and working time (60 minutes)
- + Ideal for metallic epoxy countertop resurfacing systems and other wood crafting.
- + Good elongation and excellent abrasion resistance
- + High resistance to amine blush and contamination (fish eyes)
- + Excellent for letting out bubbles, even for thick layers
- + Superior mechanical and chemical properties
- + Impermeability / low moisture sensitivity
- + High density of the product prevents dirt penetration resulting in low maintenance post application

## Application Data

Mix Ratio	2A:1B	
Packaging	1 US gallon kits (2,52L + 1,26L) 3 US gallon kits (3 x 3,78L)	
Color	Clear only	
Solids Coverage / US GAL	<u>inch</u>	<u>Sq. Ft.</u>
	1/64	106
	1/32	51
	1/16	26
	1/8	13
Shelf Life	One year, in original unopened factory pails under normal storage conditions	
Substrate temp.	Min 16°C, Max 30°C	
Cure Time		
Working Time	60 min	22°C and 30% Rel. Hum.
Tack Free	9 hours	22°C and 30% Rel. Hum.
Recoat Time	9-24 hours	22°C and 30% Rel. Hum.
Dry Through	13 hours	22°C and 30% Rel. Hum.
Light usage	24 hours	22°C and 30% Rel. Hum.
Normal usage	48 hours	22°C and 30% Rel. Hum.

\* Top coat on LABCAST UV

## Technical Properties

Hardness	ASTM D2240	80	Shore D
Pull-Off Test		~3	Mpa
Elongation	ASTM D412	7	%
Tensile Stress	ASTM D412	8000	PSI
DE 500 hr	ASTM 3424	7	
Solids Content		100%	
Viscosity	Clear	800 +/-50	cps
VOC Content		9	g/l



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## Surface Preparation

Surface should be clean, dry and free of grease, oil, paint, curing agents or any contaminants that may inhibit proper adhesion.

Proper testing procedures should be practiced with regards to soil acidity and moisture vapor transmission. Take a pH reading to ensure concrete is neutral (a reading between 5 and 9 is acceptable). Use a calcium chloride test to measure moisture vapor transmission. Readings of 3.5 lbs/1000 sq. ft. during a 24-hour period or less are acceptable for applying coatings. Higher results should receive a moisture mitigation system.

Ensure the surface is free of contaminants, and the pores are open to allow the product to penetrate.

If the product is applied over an existing epoxy flooring system that has been cured for a period longer than 24 hours, it should be sanded with a proper floor machine. A mechanical bound to a sanded surface is required and the pores of the existing coating must be opened for better adhesion. Vacuum dust and properly wipe the surface prior applying the LABPOX CRYSTAL UV. Conduct adhesion tests if there is a doubt about surface preparation.

## Mixing

Mix two parts of A and one part of B together at low speed in a separate container. The mixing container must be clean and free of any outside particle. Mix thoroughly for a minimum of three minutes, until a completely homogeneous mixture is obtained. Use a low-speed drill (300-450 rpm) to minimize the entrapment of air. It is recommended to activate the mixer in the reverse mode after the first minute in order for the liquid to mix from the bottom of the mixing can to the top. Make sure to scrap sides and bottom of mixing container so no unmixed material remains. Mix only the necessary quantity to be used according to the specified pot life / working time.

## Casting Applications

For casting applications, the LABPOX CRYSTAL UV is recommended as a top coat. It is used along with LABPCAST UV products. Its transparency and viscosity allow pouring up to 1/4" and provides a smooth, crystal clear, bubble-free surface ideal for art and hobby applications. Similar to concrete floor applications, make sure the surface is clean and no contaminants are present before applying. It is best to use a serrated squeegee for the application. When mixing parts A and B, avoid mixing at high speed to minimize air entrapment. During installation, avoid excessive handling of the product in order to limit the entrapment of air in the film. Air entrapment can affect the appearance of the surface during the curing process. Refer to the LABPCAST UV products Data Sheets for further details including recoat windows.

## Recoat

Do not recoat without sanding if last coating of the product has been applied for more than 24 hours. The floor surface should be sanded/abraded until a uniform dullness is achieved. There should be no gloss on the prior coating after vacuuming and before applying the next coat.

## Clean Up

Excess material (A and B) should be mixed together and allowed to cure. Cured product may be disposed of without restriction. Uncured material should be stored in a suitable and sealed container and may be disposed in accordance with provincial and federal regulations.



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## Limitations

Requires a dry substrate. This product should not be applied to substrates that show high levels of moisture/humidity. Although this product may be applied in a wide range of thickness, limitations may apply when taking into consideration curing time. Everything else being equal, thicker is the film, quicker is the curing time. Moisture content of the substrate must be below 4% before applying the product. Drying time will be faster in a hot and/or humid environment. Conversely, the drying time will be longer in a cold and/or dry environment and the appearance of the surface may be affected. Do not clean the finished surface during the week following installation. Keeping the product stored at room temperature will make the application easier and dry times shorter. Not suited for exterior applications.

Labsurface stands behind the quality of its products. However, Labsurface cannot guarantee final results since Labsurface has no control over surface preparation, operating conditions and application procedures. Clients are solely responsible to test Labsurface's products to determine if they perform as expected. In order to meet our strict requirements, we are continuously testing our coatings and on occasion, formulations may be modified to improve certain properties within each coating. Information and data included in this reference document may not be up to date as of the date of reference. Contact Labsurface for further information regarding the limitations of this product.

## Available Colors

Clear

***Refer to the most recent Material Safety Data Sheet prior using this product***

## Labsurface

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