



LABPOX 30

100% Solids, High Performance Epoxy

Description

The LABPOX 30 is a 100% solids two-component (2A:1B) epoxy floor coating system which is virtually VOC-free. This product possesses superior mechanical properties best suited for industrial, commercial, and residential applications. It offers a long pot life and working time. The LABPOX 30 has been designed as a topcoat epoxy but it is self-priming. For heavy traffic applications, we recommend using Labsurface's EPOXY PRIMER prior the installation of the LABPOX 30. The LABPOX 30 formulation is based on a high-performance cycloaliphatic polyamine technology displaying outstanding properties and superior aesthetic finish.

Uses

The LABPOX 30 provides excellent results for the most demanding applications:

- + Industrial, commercial, and residential uses
- + Manufacturing facilities
- + Warehouses
- + Commercial centers
- + Office buildings
- + Retail stores
- + Metallic systems
- + Garages
- + Food/beverage processing and preparation plants
- + Public facilities including hospitals and schools
- + Pharmaceutical companies

Advantages

- + 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)
- + Can be used for metallic epoxy systems
- + Superior mechanical and chemical properties suited for the toughest industrial applications
- + Good elongation and excellent abrasion resistance
- + High resistance to amine blush and contamination (fisheyes)

- + Excellent defoaming even at thicker levels
- + Impermeability / low moisture sensitivity
- + High density of the product prevents dirt penetration resulting in low maintenance post application
- + Available in unlimited color range

Application Data

Mix Ratio	2A:1B	
Packaging	3 US gallon kit (3 x 3.78L) 15 US gallon kit (3 x 18.9L)	
Color	Clear or colored	
Solids Coverage / US GAL	<u>Mils</u>	<u>Sq. Ft.</u>
	8	200
	10	160
	12	133
	30	54
	40	40
	50	32
Shelf Life	One year, in original unopened factory pails under normal storage conditions	
Substrate temp.	Min 16°C / 61°F, Max 30°C / 86°F	
Cure Time		
Working time	60 min	22°C / 72°F and 30% Rel. Hum.
Tack Free	9 hours	22°C / 72°F and 30% Rel. Hum.
Recoat Time	10-24 hours	22°C / 72°F and 30% Rel. Hum.
Dry Through	13 hours	22°C / 72°F and 30% Rel. Hum.
Foot Traffic	24 hours	22°C / 72°F and 30% Rel. Hum.
Light Traffic	48 hours	22°C / 72°F and 30% Rel. Hum.

Technical Properties

Hardness	ASTM D2240	80	Shore D
Abrasion (1000 cycles)	ASTM D4060	78	(mg loss)
Pull-Off Test		>3	Mpa
Elongation	ASTM D412	9	%
Tensile Stress	ASTM D412	7700	PSI
Viscosity	Clear / Colors	900 +/-100	cps
Solids Content		100%	
VOC Content		9	g/l



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Surface Preparation

Concrete should be clean, dry and free of grease, oil, paint, curing agents or any contaminants that may inhibit proper adhesion. Concrete should be cured at least 28 days before applying the coating system. If the concrete slab has been installed within 28 days, the LABPOX MVB moisture mitigation system could be considered system (refer to the LABPOX MVB technical data sheet for application details).

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 Tramex® CME / CMExpert to measure the moisture content of the concrete slab. Moisture content must be below 4% before applying the product. It is necessary to take several measurements at various places on the slab. If the reading is higher than 4%, steps will be required to neutralize the soil moisture. The first thing to do is to make sure that the floor is completely dry before application. Floors with higher results can receive the LABPOX MVB moisture mitigation.

Surface must be shot blasted or prepared with an equivalent mechanical means in line with CSP-2 or more depending on the application. Ensure the surface is free of contaminants, and the pores are open to allow the product to penetrate.

If the product is applied to an existing LABFAST/LABSHIELD flake flooring system that has been cured for more than 24 hours (at 22°C / 72°F), the floor surface should be sanded properly until a matte appearance is reached above and between the flakes. To achieve this result, we recommend the use of a sander equipped with a sponge pad which will follow the profile of the surface and allow the sandpaper to reach the low points between the flakes. It is necessary to sand in a multidirectional way. Repeat until a matte finish is achieved on the entire floor. It is also necessary to use xylene to remove all dust after sanding and to soften the existing layer so that it can bond with the new layer. The use of xylene for this task is mandatory as it will soften the previous coat for better adhesion. The xylene must be completely evaporated before applying the next coat.

If the product is applied over an existing LABPOX flooring system that has been cured for a period longer than 24 hours, it should be sanded with a proper floor machine. A

mechanical bond 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 with alcohol or solvent prior applying the LABPOX 30. The alcohol or solvent must be completely evaporated before applying the product. This preparation is necessary to ensure proper adhesion. Conduct adhesion tests if there is a doubt about surface preparation.

Once cured, the base coat with the flakes should be scraped and cleaned after appropriate hardness is reached prior applying the top coat.

Mixing

Before final mixing, pre-mix part A at low speed. Special attention must be paid to colored versions of the product since pigments may have separated from the rest of the formulation during storage. Mixing should be done until the color is uniform. If a metal pigment system is being considered, it is imperative to read the LABTEC METALLIC PIGMENTS data sheet for mixing times as well as advice.

Then, 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 particles. 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 90 seconds for the liquid to mix from the bottom of the mixing can to the top. Make sure to scrape 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.

Application

Apply only when air and slab temperature is between 16°C / 61°F - 30°C / 86°F and the relative humidity of less than 85%. If a heated floor is installed, ensure that the system is turned off during application and for the full duration of the cure. The product has been designed to adhere to concrete surfaces.

The LABPOX 30 is self-priming. When used as a base coat, apply with a squeegee in thin coat without back rolling to seal properly the surface, this will help reduce the creation of pin



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holes. For the second coat, repeat the same steps and back roll the product. It is recommended to apply the product in a multi-directional (north-south, east-west) motion to ensure proper coating thickness. If there is a significant presence of pinholes after applying the first coat due to the porosity of the concrete, sand and plug the pinholes with epoxy gel.

We recommend the application of one base coat and one topcoat for total system thickness of approximately 20 mils for standard systems. For metallic systems, we recommend a thickness level between 30 and 50 mils for the metallic topcoat. The LABTEC METALLIC PIGMENTS system requires specific installation steps (Refer to the LABTEC METALLIC PIGMENTS technical data sheet or contact us for additional details).

For high traffic applications, it is recommended to use Labsurface's EPOXY PRIMER before installing the LABPOX 30. The EPOXY PRIMER will seal the slab and display higher flexibility. A thickness of 4-6 mils is recommended for the EPOXY PRIMER. Labsurface's EPOXY PRIMER cures within 4 hours under normal conditions while proving a working time of 45 minutes (contact us for more details about Labsurface's EPOXY PRIMER).

For better stain and chemical resistance, we strongly recommend the usage of a AQUALAB PUR, LABFAST or LABSHIELD product over the LABPOX 30 or over any epoxy product other than a Novolac epoxy. In addition to the superior chemical resistance and cleanability, the matte version of the AQUALAB PUR MATTE possesses a unique characteristic which is to make the scratches less apparent. The AQUALAB PUR, LABFAST or LABSHIELD products also provide additional UV protection that will significantly slow the yellowing of the epoxy.

We recommend the LABTEC vinyl chips when installing a flake system. Proper testing should be conducted prior application.

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.

Limitations

Requires a dry substrate. Moisture content of the substrate must be below 4% before applying the product. This product should not be applied to concrete substrates that show high levels of moisture/humidity unless a moisture LABPOX MVB moisture mitigation system is used. 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. Drying time will be faster in a hot environment. Conversely, the drying time will be longer in a cold environment and the appearance of the surface may be affected. Do not clean the finished surface during the week following installation. Keep the product stored at room temperature to ensure consistent results. Not suited for exterior applications.

Labsurface stands behind the quality of its products. However, Labsurface cannot guarantee 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.

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.



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Available Colors

Standard Color Chart - Pre-Tint and LABTEC Universal Pods



+ Full color customization available

Metallic Color Chart



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

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