Bio-Clear 810[®] Epoxy Technical Data

Pourable Table Top Coating - Solvent-Free Epoxy Coating

Cycloaliphatic Crystal Clear Slow, Gentle Cure Cures to Wet or Damp Surfaces **Solvent-Free**

Easy 2:1 Mixing Ratio (1:.43 by weight)

Approx. 20% Elongation

VOC Class: Mastic VOC = 0

STANDARD PRODUCT

DESCRIPTION

Bio-Clear 810 Epoxy is a 100% solids, low viscosity, clear resin system designed for many applications including damp and wet surfaces. This product is moisture insensitive and has good chemical resistance and physical properties including approximately 20% elongation, slow and gentle exotherm and has a cycloaliphatic curing agent. Best applied to rough surfaces or as a thick fflm as product will 'dimple', crawl/creep if brushed or rolled onto smooth surfaces.

USES

Sealing Concrete Clear Coat Surface Table Tops
Yacht Core Repair

FEATURES

Low viscosity

Convenient 2 to 1 ratio by volume (1 to .43 by weight)

Bonds to damp concrete

Self-leveling

Solvent-free (no odor)

CURE SCHEDULE

DIRECTIONS

Surface to be topcoated must be clean and free of oils, grease and loose contamination. The epoxy and the surface to be coated should be at a constant 68 degrees or warmer for 24 hours before and after the pour. Do not apply in direct sunlight. Epoxy and application surface should be approximately the same temperature prior to application. This will minimize any effects that temperature may generate during the curing process.

Mix Bio-Clear 810 epoxy base with the Bio-Clear 810 curing agent. Part B may have a slightly yellow tint and A should be clear prior to mixing - if not, do not proceed and contact supplier). Mixture will also be clear after mixing. A mechanical mixer will help ensure thorough mixing but if using a mechanical mixer, use a low speed to reduce the generation of air bubbles. Do not mix the epoxy in the same containers that the epoxy came in. Pour the proper ratio of the two components into a large enough container to allow adequate, vigorous mixing without having the epoxy splash out. The mixing ratio is 2/1 (base/curing agent) by volume or 1/0.43 by weight. Bubbles resulting from the mixing will rise to the surface and most or all will pop. Heat from a torch or hair drier (set on low) will usually pop most remaining bubbles. It is never possible to completely mix all of the epoxy in your mixing container. The epoxy at the corner of the bottom and sides, and on the bottom will probably not be mixed well enough. Therefore, after mixing do not try to get every last drop out of the mixing container (don't overturn the mixing container and drain it for a long period of time). Bio-Clear 810 does not require a 'sweat-in' or induction time and the mixed components should be used immediately.

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FOR BEST RESULTS

TEST the epoxy on your surface. Mix up a small amount of the epoxy (2 to 1 mix ratio) and apply to a test surface to ensure compatibility and to test your mixing method. Some surfaces will release a lot of air bubbles. Incompatible inks may bleed. Unknown or unsuspected contaminants on the surface may discolor the epoxy. If the epoxy is not thoroughly mixed, tacky/sticky spots that never harden will result. Do not use the small amount of epoxy that collects at the bottom of the mixing container as it most certainly will not be correctly mixed epoxy. Sudden changes in temperature or humidity may affect the epoxy. Make sure your raised edges or sills are leakproof and level. Once poured, it is almost impossible to stop an epoxy leak in a corner. Bio-Clear 810 cannot be brushed on. It must be poured at sufficient depth to prevent surface tension related "sheyes. A fan blowing over the freshly poured epoxy may help to reduce exotherm (heat) related problems.

The epoxy will feel dry and hard overnight, but it takes a week for it to fully cure and harden. Do not place objects on the epoxy before then as they will stick or leave a dent or impression in the still hardening epoxy.

Potlife is approximately 40 minutes at 75°F for a 6 ounce amount, so mix only the amount of epoxy that can be easily applied within that time limit. Apply 1/4 to 1/2 inch thick on smaller pours and 1/4 inch on larger pours. The more mass of epoxy that is poured, the thinner the layer should be. Do not mix more than 3 gallons at a time, even on big jobs exotherm related stress cracks or distortions may form.

NOTES

Part A (Epoxy base) should be slightly yellow. If it is milky, it has crystallized. This is common with very pure, clear epoxy resins. Warming the resin to 90 - 110° overnight (oven, microwave, heat lamp, etc.) will dissolve the crystals. This does not affect the performance of the product.

Unless top-coated with a UV absorber, this epoxy will yellow and eventually turn cloudy with exposure to sunlight. This epoxy will generate a considerable amount of heat when it hardens. Thin plastic containers will melt.

Mix slowly to avoid introducing excess air bubbles. After pouring, most bubbles will come to the surface and burst. Most of the remaining bubbles may be removed once they come to the surface with the quick pass of a heat gun. This must be done before the epoxy has set up.

As noted before, test the epoxy on your surface. What happens after the clear epoxy is poured upon the surface is the sole responsibility of the purchaser. Supplier liability is limited to 1 three gallon unit maximum for Bio-Clear 810. See warranty statement.

Shelf life is a minimum of six months.

TEMPERATURE

Temperature will exert a considerable in" uence on the rate of curing of chemically cured coatings such as Bio-Clear 810 epoxy. In broad terms expect each 10°C, (18°F), rise or fall in temperature to half or double dry times and pot lives.

The epoxy and the surface to be coated should be at a constant 68 degrees or warmer for 24 hours before and after the pour.

TRANSPORTATION

Epoxy base - Nonregulated by USDOT, IATA & IMO.

SAFETY: This is a hazardous material if misused. Read and understand the Material Safety Data Sheet (MSDS) before use.

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