

Amazing Deep Pour Deep Casting Epoxy

Product Description:

Amazing Deep Pour (ADP) is a 2-part, extremely clear, deep-cast epoxy. It is ideal for applications requiring thicker pours (up to 2 inches thick) and produces a glass like finish. This 2:1 mix ratio product was formulated to reduce exotherm (heat build-up), allowing users to pour thicker sections without the delays of layering as with standard epoxies. Amazing Deep Pour is compatible with Alumilite Dyes and Polycolor Resin Powders, Glow Powders, and Glitters. Other colorants may be compatible, testing is required.

Physical Properties:

Color	Clear
Mixed Viscosity (cps)	450
Hardness, (ASTM D-2240) Shore D	77-80
Specific Gravity	1.05
Tensile Strength (ASTM D-638) (psi)	7,500
Elongation (in/in)	5-6%
Heat Deflection (ASTM D-648) (Degrees F)	108
Izod Impact (ASTM D-256) (lb/in)	50
FDA Compliant (FDA 21 CFR 175.300)	Yes - when accurately measured, thoroughly mixed, and fully cured.

General Properties:

Color	"A" Side	Clear with slight color
	"B" Side	Clear
Mix Ratio		2:1 by volume
Shelf Life		1 year
Open Time at 75 Degrees F (100g mass)		60-90 minutes
Demold Time at 75 Degrees F (100g mass)		24-72 hours
Full Cure Schedule		5-7 days

Packaging:	24 fl.oz.
	1.5 gal
	3 gal
	6 gal
	Drum Kit

General Instructions

Before Starting

Make sure your work area is appropriate for measuring, mixing, and pouring casting resins that can and will stain any porous materials such as carpet and clothing. Also make sure to use and store materials in an area where children cannot reach or access.

Open time & Mixing

Amazing Deep Pour has work time of 60-90 minutes conservatively. Larger amounts of mixed resin will shorten your work time as will warmer ambient temperatures. The mix ratio of the Amazing Clear Cast is 2:1 by Volume. Using a graduated measuring container, measure 2 parts side "A" to 1 part side "B" by volume based on the total amount of resin needed for the project. Measure each side separately to ensure accuracy. Pour together into a mixing container and mix slowly until absolutely no swirls are seen (3-4 minutes), scrape sides and bottom thoroughly. Once no swirls are seen, mix for an additional 3 minutes. When mixing volumes greater than 1 gallon, a low speed drill mixer is recommended, although you must still stop and scrap sides and bottom of mixing container periodically to ensure complete mixing. Once mixed, immediately pour resin into casting area or mold. Slowly pour close to surface and in one area to avoid introducing additional air bubbles. *Note that resin should not sit in mixing container for more than 10-15 minutes or heat will build and prematurely begin to cure. Note: Varying the mix ratio will alter the cure and change the physical properties in a negative ways such as tackiness or uncured surfaces.* When mixing multiple batches, it helps to have a dedicated side A and side B measuring container.

Vacuum Degassing & Bubble Management

When pouring deeper sections, it is recommended to pour $\frac{1}{4}$ inch at a time, then wave a propane torch approximately 6-8 inches from the surface to assist with popping of air bubbles. This layering method creates a shorter distance for air bubbles to travel and escape, versus pouring the entire thickness at once. Once air bubbles subside, the next layer can be poured, repeating the same process until you reach your desired depth.

If available, a vacuum pump and chamber can be used to remove air from the resin before pouring onto surface. Vacuum puts negative air pressure on the material and expands the air bubbles to a large size which gives them the buoyancy to float to the top and pop. Once mixed thoroughly and placed under vacuum, the air bubbles will come up and then go back down. Once the bubbles go back down under full vacuum and begin to clear up, you may remove the mix container from the vacuum chamber and pour onto surface. A minimum of a 2 stage 6 CFM pump is recommended.

Surface Preparation:

Clean & seal the surface to be coated prior to pouring. Surface porosity found in substrates such as wood, concrete, or stone will cause air bubbles to appear as resin soaks in and penetrates the surface. To achieve the best results, it is highly recommended to apply a skim coat of Amazing Clear Cast onto the surface. In some instances, the skim coat will fully absorb into the surface, therefore a second seal coat may be necessary. **Embedments/Decals:** It is important to seal all objects to be imbedded into the Amazing Deep Pour to eliminate bubbles showing up while the resin cures. Paper-based decals should be sealed with a product such as Mod Podge to prevent color changes or bleeding colors. They should also be glued down (Mod Podge) and fully sealed to the surface to prevent air bubbles from leaching out from underneath them. Allow to dry thoroughly prior to embedding.

Color – Dyes, Powders, and Fillers

Amazing Deep Pour can be dyed or pigmented using non-water base dyes. Alumilite offers a line of translucent and opaque dyes in a variety of dyes that react/crosslink chemically with the resin to achieve beautifully translucent cast pieces with no worry of leaching or color ever coming out of the cured piece. Use very small amounts of dye to achieve translucent colored castings. If you are looking to use a dye, pigment, or filler that you have not used before, we highly recommend making a small test sample to ensure compatibility before using in resin. Heavier powders or fillers may settle due to the long open time of resin. In these instances, it may be necessary to stir resin periodically to keep powder suspended until resin thickens.

Color Stability - Yellowing

As with all epoxy chemistry, ADP will develop a yellow hue over time. Many times, this is not ever noticed based on the underlying surface color, although in applications where ADP is applied over bright white surfaces or when pouring thicker layers, yellowing may be more evident. Adding Alumilite dye, Alumidust, or Polycolor powder to color the resin can negate or minimize the yellowing, although shifts in color can occur over time. We do not recommend ADP for outdoor applications, as the UV exposure will cause the resin to develop a yellow hue rather quickly. *Note: when using small amounts of translucent dyes, uv exposure can cause the dye to fade or drop out completely.*

Top Coating & prep between layers

For a more durable surface, consider adding a final/top-coat of Amazing Clear Cast or Amazing Clear Cast Plus (for added uv protection). This can be done when resin has hardened enough to accept another layer of epoxy. If applying beyond 48 hours after last application, it is recommended to lightly sand surface, vacuum up debris, and solvent wipe with alcohol or acetone (use clean 100% cotton rag) prior to applying fresh material. This will better prepare the surface and increase the bond between layers.

Shelf Life

One year in unopened containers. Best if stored in a dry place out of direct light. Ideal storage temperature is 70°F. As all epoxy will yellow over time in it's unmixed state, it is recommended to purchase only what you need for your given application unless dyes or pigments will be used to color the resin.

FDA Compliancy:

Amazing Deep Pour complies with FDA 21 CFR 175.300 for coatings intended for indirect and direct repeated food contact use when accurately measured, thoroughly mixed, and fully cured.

Sticky, Soft, or Tacky Spots:

Soft or sticky spots are a result of off ratio or inadequate mixing. Make sure you have measured the resin accurately by volume per the instructions and mix thoroughly. **Most common mistake is under mixing!** Additionally, do not scrape mixing container onto surface. This can cause unmixed resin to be deposited onto the surface causing tacky or uncured areas.

Humidity and Temperature

Ideal application temperature is 75-80°F. Amazing deep pour should be placed in the same room/climate prior to using to ensure that material acclimates to the surrounding temperature. Using product when warm or in ambient temperatures that are too warm will cause material to cure too quickly and not allow for adipate air release.

Work Area & Clean Up

Cover any surfaces including floors with plastic sheeting, cardboard, or plywood to prevent damage from spilled resin. To clean up unmixed or still liquid material, use rubbing alcohol on a rag or paper towel to quickly clean and remove. Once cured, resin is extremely durable, chemical resistant and nearly impossible to remove.

Warranty

NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED OR ANY RELATED PRODUCT. User is responsible for determining whether the Alumilite product is fit for user's particular purpose and suitable for user's use or application. Given the variety of factors that can affect the use and application of an Alumilite product, it is the user's obligation to determine the suitability of the product for its intended application, and user assumes all risk and liability for safe use of the product. Alumilite's liability is limited to product replacement only after review/testing of product alleged to be defective that is returned to Alumilite in accordance with Alumilite's Shipping and Returns Policy. In no event shall Alumilite be liable for punitive, consequential or indirect damages or damages in excess of the purchase price of the product.