



Amazing Clear Cast 80D Clear Epoxy

Product Description:

Alumilite's Amazing Clear Cast is a clear casting and coating system that cures to a rigid, durable, clear plastic. Use Amazing Clear Cast for coating or finishing applications such as bar tops, floors, taxidermy scenery, lenses, and all sorts of other clear casting or coating applications. Amazing Clear Cast is an easy to use, 1:1 mix ratio system that cures overnight which allows time for air bubbles to evacuate prior to curing. Amazing Clear Cast can be colored with Alumilite dyes, alcoholic inks, or other non-water base colorants. Complies with FDA 21 CFR 175.300.

Physical Properties:

Color	Clear
Mixed Viscosity (cps)	2,600
Hardness, (ASTM D-2240) Shore D	80
Specific Gravity	1.08
Shrinkage (in/in)	.003
Tensile Strength (ASTM D-638) (psi)	8,000
Elongation (in/in)	1-3%
Heat Deflection (ASTM D-648) (Degrees F)	N/A
Izod Impact (ASTM D-256) (lb/in)	2.26
Compression (psi)	27,000
Temperature Resistance	Not recommended beyond 130°F

General Properties:

Color	"A" Side	Translucent Lt Blue
	"B" Side	Clear
Mix Ratio		1:1 by vol.
Shelf Life		1 year
Open Time at 75 Degrees F (100g mass)		45-60 minutes
Demold Time at 75 Degrees F (100g mass)		18-24 hours
Full Cure Schedule		72 hours

Packaging: 8, 16, 32 fl.oz.
1, 2, 10 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 Clear Cast has work time of 30-40 minutes based on 100 gram sample at 70°F. Larger amounts of mixed resin will shorten your work time as will warmer ambient temperatures. Mixing large volumes similar to 1 gallon volumes, you can expect the open time to be cut in half.

The mix ratio of the Amazing Clear Cast is 1:1 by Volume. Using a graduated mixing container, measure out equal parts per side. 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 cup, which are then added to a larger mixing container. After the materials have been poured together, mix thoroughly (keeping the stir stick in contact with the bottom of the cup - reduces air from being introduced into your resin) for approximately 3-5 minutes. Make sure to scrape the sides and the bottom of the mixing cup and continue to mix until no swirls are seen. Once no swirls are seen, mix for an additional 2 minutes. Because of the differences in viscosity between the two parts, mixing takes extra time.

Pouring thicker layers: When used at room temperature, ACC can be poured up to 3/8" at one time. Additional layers can be added 3-4 hours apart, but not beyond 12 hours without sanding in between layers. This can be repeated up to desired thickness. Pouring beyond 3/8" in one pour can produce excessive exotherms (heat) that can cause bubbling, cracks and deformations in the resin. For the ability to pour in thicknesses beyond 3/8" at one time, consider using Amazing Deep Pour Epoxy.

Vacuum Degassing

For instances where large surface areas are being coated and drill mixers will be used for mixing, vacuum 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

Color – Dyes & Painting

Amazing Clear Cast can be dyed or pigmented using non-water base dyes. Alumilite offers a line of translucent dyes in standard colors 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. Alumilite's Fluorescent, White, and Black are not completely transparent as they contain some filler. When used in small quantities, they do not affect the transparency of the piece. However, if used in higher percentages, they can add opacity to the cast piece. Use very small amounts of dye to achieve bright 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.

Color Stability - Yellowing

As with all epoxy chemistry, ACC will develop a yellow hue over time. While there are UV inhibitors in our system that help it resist longer than some competitor products, a yellow hue will still develop over time. Many times this is not ever noticed based on the underlying surface color and the relative thin layer. Applications where ACC is applied over bright white surfaces or when pouring thicker layers, yellowing may be more evident. We generally do not recommend ACC for outdoor applications, as the UV exposure will cause the resin to develop a yellow hue rather quickly. There are some instances where it may be reasonable such as adding Alumilite dye or Alumidust to color the resin, which often negates or minimizes the yellowing. Also applying it over certain toned wood surfaces that have more yellow and orange hues to it would make the yellowing less noticeable.

Shelf Life

ACC has a shelf life of 1 year. Once ACC is opened, this time can be shorter based on moisture contamination from humidity. Amazing Clear Cast B side will naturally yellow over time and when exposure to air. While this can cause a yellow hue to cured coatings, it does not have an effect on the ultimate cure of the product.

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.