55 Hilton Street, Easton PA 18042
(269) 488-4000
www.alumilite.com

TECHNICAL DATA SHEET

EX-74

EX-74 is an extremely clear, tough, high gloss surface coating formulated to produce a deep glass like appearance in a single layer on a sealed surface. Two or more layers are often applied for added depth and protection. EX-74 has been formulated for improved UV resistance to reduce yellowing and surface degradation from UV exposure. EX-74 has an open time of 25 minutes if poured immediately after mixing (70F). Warmer temperature will reduce open time, therefore it is recommended to pour immediately to allow for self-leveling of the epoxy and maximum bubble release. EX-74 is waterproof, heat & alcohol resistant.

- Convenient 1:1 mix ratio by volume
- 20-30 minute working time / 5 hour tack-free time
- Full cure in 72 hours
- FDA Complaint (FDA 21 CFR 175.300) when accurately measured, thoroughly mixed, and fully cured.
- Produces a durable high-gloss surface coating for artwork, table tops, crafts, and more!

PRODUCT SPECIFICATIONS

Mix Ratio	1:1 by weight or volume
Mixed Viscosity	3000 cps
Working Time	25-30 minutes
Tack Free Time	24-48 hours
Heat Deflection	130ºF
Hardness	80-D
Full Cure Time	7 Days
Tensile Strength	3380 psi
Elongation Strength	22%
Shelf Life	1 Year
Color	Clear

BEFORE USE: Thoroughly read Safety Data Sheets, product labels and the “SAFETY” section in this Technical Data Sheet.

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BEFORE YOU BEGIN

Work Environment: The ideal working temperature is around 65-75°F in a clean, dry, dust-free environment. Avoid working in high humidity. If you are pouring in large volumes of 2 or more gallons, we suggest keeping room temperature closer to 65°F. We highly recommend keeping fans on your project to help dissipate heat.

Materials: Be prepared with all necessary materials and tools before beginning your project.

- Stir-sticks
- Mold box
- Cleaning Materials
- Misc. handling tools – X-acto knife, pliers, a drill or Dremel tool, heat gun, etc.

Color – Dyes & Painting: EX-74 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 Flourescent, 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, EX-74 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 EX-74 is applied over bright white surfaces or when pouring thicker layers, yellowing may be more evident. We generally do not recommend EX-74 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 times 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.

MIXING & POURING

Step 1: The mix ratio of the EX-74 is 1:1 by volume. Using a graduated mixing container, measure equal parts per side. Varying the mix ratio will alter the cure and change the physical properties in 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.

Step 2: The material must be mixed thoroughly for 3-5 minutes. Be sure to scrape the sides, corners

and bottom of container as you mix. Be careful not to whip excessive air into the mixture. If mixing a gallon, use a power mixer set to "hand speed". For smaller quantities, use stir sticks. Do not mix more than 3 gallons at one time. If you need to mix several batches, be sure to use a clean, dry container for each batch. Using the same container may lead to curing issues.

Step 3: Pour the mixed resin into the mold or onto surface of project. Do NOT scrape out the last of the resin onto your project as unmixed epoxy on the sides or bottom of the container could contaminate your project, leading to curing issues.

Step 4: To remove air bubbles that have risen to the surface, use a heat gun or torch in a sweeping motion, holding the heat source approximately 6-10 inches away from the surface until no bubbles remain. Avoid heating any one spot for too long to prevent any distortions in the finish.

Step 5: Curing times can vary greatly by project, depending on mass and temperature. Open time ranges between 20-25 minutes, and full cure time is 3 days. Do not use or place any items on your project during this time.

CLEAN UP & DISPOSAL

Tools can be cleaned with Isopropyl Alcohol 99% or a residue-free cleaner. Do not use soap and water. Dispose of product and container according to Federal, State and local regulations. Store any remaining product in the original bottles, tightly sealed and locked up in a cool, dry environment.

SAFETY

Safety: Before use, thoroughly read Safety Data Sheets and product labels. Follow safety precautions and directions.

- Wear gloves
- Safety glasses
- Protect clothing with a work smock or other outer garment
- For cleaning surfaces, containers – use Acetone, rubbing alcohol or nail polish remover
- When stored separately, epoxy & hardener have long shelf lives – store in a cool dry area in tightly sealed containers

Part A: Keep out of reach of children. Wear impervious gloves, such as butyl rubber or nitrile rubber. Wash skin thoroughly with soap and water after handling. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical help. Wear eye protection, such as chemical safety glasses/googles. If in eyes, rinse cautiously with water for several minutes, removing contact lenses if present and easy to do. If eye irritation persists, get medical help.

Part B: Keep out of reach of children. Do not eat, drink, or smoke when using this product. If swallowed, rinse mouth and get medical help. Use with adequate general or local exhaust ventilation to minimize exposure levels. If needed, a NIOSH-approved respirator with organic vapor cartridge may be used. Wear impervious gloves, such as butyl rubber or nitrile rubber. Wash skin thoroughly with soap and water after handling. Wear eye protection, such as chemical safety glasses/googles. If in eyes, immediately rinse with water for several minutes, removing contact lenses if present and easy to do. If eye irritation persists, get medical help.

WARNING: THE CURE REACTION IS EXOTHERMIC. Do not apply in thicknesses greater than the recommended maximum application thickness for the product.

DISCLAIMER: The information contained herein is considered accurate; however, Alumilite makes no warranty regarding its accuracy. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.