

TotalBoat MakerPoxy Crystal Clear Artist's Resin by Jess Crow — Tech Data Sheet

Ultra clear, glossy, durable epoxy system preferred by makers, artists, woodworking professionals, and DIYers because it's easy to use, self-leveling, and can be tinted with a variety of pigments that blend and flow easily. Perfect for artwork, furniture, and craft projects on wood, plastic, fiberglass, and metal.

SUPPORT PRODUCTS:

Thinning: Do not thin TotalBoat MakerPoxy by Jess Crow.

Cleanup: Scrape up and remove any uncured material, as needed. Denatured alcohol, lacquer thinner, or acetone may be used to clean up uncured epoxy. Cured epoxy must be removed mechanically.

Colorants and Dyes: Epoxy dyes, colorants, or special effects additives can be added and mixed in. Only use products designed for epoxy. **IMPORTANT:** Always perform a small test prior to using a colorant or dye on a larger project.

SURFACE PREPARATION:

All surfaces should be dry, clean, and free of any dust, dirt, oils, or grease. Always put plastic sheeting under and around the area of application to collect any spillage—do not use paper, as epoxy can be absorbed through it.

MIXING:

- 1 MakerPoxy has a long working time of up to 60 minutes***, but it is strongly recommended to mix only as much as you can apply in 20 minutes. Dispensing and mixing in smaller batches optimizes working time and reduces waste.
- 2 Into a clean, dry, plastic mixing pot, measure 1 part RESIN - PART A and 1 part HARDENER - PART B, by volume (1A:1B), or 100 parts RESIN - PART A to 84 parts HARDENER - PART B, by weight. Do not adjust the mix ratios because doing so will negatively affect the cure and final results.
- 3 Thoroughly mix both components in one mixing pot for 2-3 minutes, scraping the bottom and the sides to ensure proper mixing, then pour into a second mixing pot and mix thoroughly for another 2-3 minutes.
- 4 Epoxy dyes, colorants, or special effects additives can be added and mixed in, as desired, before pouring.
- 5 Pour the MakerPoxy onto the substrate and level with a spreader.
- 6 Bubbles created from the reaction will rise to the surface. Quickly waving a hair dryer or heat gun across the epoxy for a few seconds (wave it quickly to prevent burning and keep it moving) will help the bubbles rise to the surface and disappear. Only do this 2 or 3 times, at intervals of 10 minutes.

APPLICATION:

- Environmental conditions are extremely important to the quality of the cure, and to achieving the best clarity and surface finish.
- For the epoxy to cure fully, the ambient temperature must be between 70°F and 80°F.
- When pouring for larger projects, such as slabs or tables, do not exceed a pour depth of 1/8" to 1/4" to prevent yellowing or excessive heat from the cure.

STEP POURING: Step pouring with multiple layers will achieve the best results. When the previous layer has cooled but is soft enough to indent with a fingernail, pour the next layer directly on top (generally 4-8 hours after the previous application of MakerPoxy). If the epoxy has cured beyond that, lightly scuff the surface with a Scotch-Brite™ pad, remove any sanding residue, and apply the next layer.

CURE TIMES: Tack free time (1/8" - 1/4" pours @ 77°F): 4-6 hours. Sandable in 8-10 hours @ 77°F. Full cure (ready for use) takes 5-7 days @ 77°F.

IMPORTANT: DO NOT PLACE ITEMS HOTTER THAN 110°F ON CURED MAKERPOXY SURFACE.

EXOTHERMIC REACTION! EXOTHERMIC REACTION! Mixing the epoxy resin and hardener components together will create an exothermic reaction that generates heat. The more epoxy that is mixed, the hotter the mixture will get.

STORAGE:

Store at 60-90°F, in a dry place. Ensure that containers are thoroughly sealed directly after use. Store products on a raised surface off the floor during cold weather, and avoid storing near outside walls or doors. Epoxy resins that are contaminated with dust or moisture, or are subjected to low temperatures, may crystallize. Do not use material that has any sign of crystallization, until it has been liquefied. A CRYSTALLIZED RESIN OR HARDENER CAN BE EASILY RETURNED TO ITS ORIGINAL STATE BY HEATING THE MATERIAL TO 140°F-150°F AND STIRRING UNTIL IT RETURNS TO THE LIQUID STATE.

SAFETY AND HANDLING:

Work in well-ventilated areas. Wear gloves, eye protection, and clothing protection. Avoid contact to the skin and eyes. Avoid clothing contamination. Wash hands thoroughly after handling. These products may cause skin and respiratory allergic reactions. Consult Safety Data Sheets (SDS) for complete health and safety information.

APPLICATION DATA:

Application Temperature: 70°F to 80°F
Mix Ratio by Volume: 1A:1B
Mix Ratio by Weight: 100A:84B
Resin Density @ 77°F: 9.7 lbs/gal
Hardener Density @ 77°F: 8.2 lbs/gal
Resin Viscosity @ 77°F: 9,000 cP
Hardener Viscosity @ 77°F: 1,700 cP
Mixed Viscosity @ 77°F: 3,500 cP
Working Time @ 77°F: 10-60 minutes***
Gel Time @ 77°F (150g mass): 1 hour

***Dependent on mixing mass, material temperature, ambient temperature, mixing time, speed of mixing, speed of application, and coating thickness.

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PHYSICAL DATA:

Color: Clear
Izod Impact: .71 ft-lb/in
Tensile Strength: 5,400 psi
Tensile Elongation: 5.7%
HDT (Room Temperature Cure): 110°F
HDT (Post Cure): 111°F
Compressive Strength: 8,000 psi
Flexural Strength: 8,400 psi
Flexural Modulus: 242,000 psi
Cured Density: 1.11g/cm³ (.04 lbs/in³)
Volumetric Yield: 25.0 in³/lb, or 6 sq ft (at 1/4" thickness) per gallon of mixed product
Volumetric Shrinkage: 3.19%
Hardness, Shore D: 82