

MANUAL

MR. BOAT 
epoxy



Epoxy Clear Casting

Clear epoxy casting resin
for various applications

PREPARATION

Ensure that the surface is clean and free from grease. Epoxy does not adhere well to a dirty or greasy surface. Always clean and degrease the surface first with acetone, water and ammonia, or Mr. Boat Bio degreaser. Do not use turpentine, white spirit, or other cleaning agents for this purpose. Roughen the surface with a coarse grit (approximately 120). If you are applying epoxy on an object like a painting or artwork and cannot degrease it, small surface defects may occur, in which case it may be necessary to apply a second layer. Always work with epoxy at room temperature. If it's cold, warm the bottles to room temperature, for example, by placing them in warm water, so that the epoxy becomes thinner and easier to mix.

To prevent air bubbles caused by degassing of the (porous) surface, it is advisable to treat it first with a fast-curing epoxy. After curing of this initial layer, you can pour the epoxy casting resin. The epoxy mixture practically does not affect anything, but if in doubt (e.g., freshly painted tabletop), please do a test first.

SAFETY

Epoxy can cause an allergic reaction. Avoid contact between uncured epoxy resin and hardener and bare skin. Wear nitrile gloves for this purpose. Respiratory protection is not required for these

epoxy resins. Use an appropriate dust mask when sanding.

Epoxy should be stored safely to prevent contact with bare skin or ingestion, especially by children. Before use, read the safety labels on the product. The complete safety data sheet can be requested via info@mrboat.com or found on the product page at mrboat.com.

MIXING

Ensure that resin and hardener are thoroughly mixed before use to avoid tacky spots in the final result. Mixing can create air bubbles, especially when the epoxy is cold. After mixing, let the epoxy rest for 2-5 minutes to allow the air bubbles to dissipate and the mixture to become crystal clear. Epoxy can be mixed by weight or by volume. The mixing ratio for both methods is indicated on the hardener.

COLORANTS

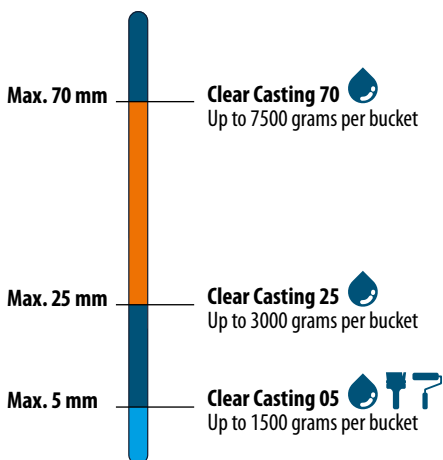
Epoxy casting resin can be combined with various color pigments. For opaque epoxy pigment pastes, use 1 to 3% for casting. For transparent color pigments, add a few drops to the mixture. For metallic pigments, use approximately 5 grams per kilogram. If you want to apply metallic pigments on a floor, first color the substrate with a basecoat, the usage for flooring is approximately 30-50 grams of pigment per kilogram for a usage of 1.1 kg per square meter.

UV BLOCKER

If the epoxy is exposed to a lot of sunlight and is used transparently, we recommend adding a UV blocker for maximum protection against long-term yellowing due to sunlight. Add 1% to the mixture. For example: 1 gram per 100 grams of mixture.

CASTING

Depending on the chosen system, you can cast up to a certain thickness. If you pour the epoxy thicker than the recommended pour thickness, the epoxy may become yellow or even crack due to heat.



Please note: The maximum pour thickness is an indication to prevent flash cure and applies at 20°C. If the temperature is higher than 20°C, the maximum pour thickness does not apply. For example, when the processing temperature is around 28°C, the maximum layer thickness will be halved. Keep this in mind when working on large projects. If in doubt, contact us.

Example of maximum pour thickness for Clear Casting 70:

- Rectangle of 5 by 5 cm: 25 cm.
- Cube: 10 by 10 cm.
- River tables approximately 25 cm wide: 7 cm.
- Casting up to approximately 4 cm is possible regardless of the dimensions for large projects.

REMOVING AIR BUBBLES

To remove surface bubbles, you can briefly pass a low gas flame over the casting using a gas torch. You can also use Bubbles Away.



This epoxy is not intended to withstand large forces. For tabletops subject to heavy loads, consideration should be given to the placement of table legs or reinforcement.

CURING

Curing begins after mixing. Higher temperature speeds up curing, while lower temperature slows it down. The minimum processing temperature is 15°C. The curing time varies depending on the hardener used.

Curing per hardener

- **Clear Casting 05**
Processing time approx. **30 min.** | Tack-free **8-12 hours**
Final strength **24 hours** at 20°C.
- **Clear Casting 25**
Processing time approx. **60 min.** | Tack-free **12-16 hours**
Final strength **48 hours** at 20°C.
- **Clear Casting 70**
Processing time approx. **75 min.** | Tack-free **48-60 hours**
Final strength **7 days** at 20°C.

STORAGE

Store in a cool and dark place. The epoxy can be used for at least 1 year. After this period, the epoxy can still be used, but its clarity may decrease.

CHEMICAL WASTE

Dispose uncured epoxy resin and hardener as chemical waste.

Disclaimer Clear usage instructions are provided with our products. We are always available to answer questions regarding safe use. Mr.Boat is not liable for any damage resulting from the use of our products. We always recommend making a test piece to determine if the desired result is achieved.