



# TOTALBOAT WAVE + MARBLE EPOXY

- High-viscosity formula supports wave crests, marbling, and lacing effects
- Cures to a crystal clear, glass-like finish
- Simple 1:1 mix ratio by volume
- Can be tinted with alcohol inks, mica powders, and other epoxy-compatible colorants and special effects

Wave + Marble Art Epoxy Resin is a high-viscosity, two-part epoxy for wave pours, marbling, lacing, and fluid art techniques where color separation and structure matter. Simple 1:1 mix ratio by volume. This self-leveling formula lets you easily build layered depth in your projects. Cures crystal-clear to a smooth, high-gloss finish with excellent resistance to scratches, moisture, and yellowing. Compatible with alcohol inks, mica powder, and pigment dispersions. Create vivid effects on wood, metal, glass, ceramic, canvas, and other common substrates in resin art and furniture builds.

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**VERY IMPORTANT — TO ENSURE THE BEST RESULTS, PLEASE READ ALL DIRECTIONS BEFORE MIXING OR POURING!**

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**CLEANER/SURFACE PREPARATION:** Denatured alcohol, acetone (only for use on compatible substrates)

**CLEANUP:**

**Part A – EPOXY RESIN:** Denatured alcohol or acetone

**Part B – HARDENER:** Denatured alcohol

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

**THINNER/REDUCER:** Do NOT thin this product.

**COLORANTS/TINTS:** Epoxy-compatible dyes, colorants, tints, or special effects additives can be added and mixed in. Only use products designed for use with epoxy.

**IMPORTANT:** Always perform a small test with Wave + Marble Epoxy and any colorants, dyes or other special effects to ensure that it achieves the desired results.

**MOLD RELEASE AGENTS:** When making small castings, use mold release paste wax, or an appropriate aerosol mold release agent for epoxies.

**COVERAGE:** Seal Coat: Roughly 24 sq. ft., Flood Coat of 1/4": 6.4 sq. ft. per 1-gallon kit (1 ounce of mixed epoxy covers roughly 6.5 sq. inches @ 1/4" thickness).

- Actual coverage is dependent on any number of factors including the surface area of the pour, the thickness of the pour, any epoxy that is absorbed by porous surfaces, and any wasted material.

**SAFETY AND PERSONAL PROTECTIVE EQUIPMENT:**  
Always use proper safety equipment, clothing, and PPE in accordance with the Safety Data Sheet for each component.

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**Exothermic Reaction!**

The cure of TotalBoat Wave + Marble Epoxy is an exothermic reaction and will generate heat. It is not uncommon for a mass of mixed epoxy left in a mixing cup beyond the working time to reach 200-300°F during the cure cycle.

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## SURFACE PREPARATION

- All surfaces must be clean, dry, and free of contamination. Contaminants include, but are not limited to, dust, oil, moisture, lint, sap, and sanding debris.
- Do not use paper towels, dirty rags, contaminated sandpaper, or touch the surface with oily fingers.
- Sand, as needed, and remove all sanding residue. Wipe the surface down with a clean, dry cotton rag dampened with one of the approved surface preparation solvents.
- DO NOT use a tack cloth.

**WOOD AND OTHER POROUS SUBSTRATES:**

- The purpose of a seal coat is to minimize the effects of off-gassing by creating a thin, air-tight barrier between a porous wooden surface and the TotalBoat Wave + Marble flood coat. This stops air bubbles from rising out of the wood and getting stuck in the curing epoxy, creating unwanted cosmetic defects.
- ALWAYS apply a seal coat before flood coating. Start with a prepped surface, clean, dry, and free of contamination.
- Apply a thin coat of mixed epoxy. Knots or indentations may take more material to seal.
- Take care to cover and seal any voids or cracks. Allow the seal coat to cure to a rock-hard solid and sand with 80- to 120-grit sandpaper, paying careful attention to imperfections such as air bubbles.
- Wipe clean with a clean, cotton rag dampened with denatured alcohol and allow the surface to dry completely.

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## APPLICATION CONDITIONS

- The optimal ambient environmental conditions are 75°F and less than 60% relative humidity.
- All epoxy materials and the workspace should be maintained at 70-80°F during the whole application and cure process. Epoxy is a temperature-sensitive material.
- When cool, it's thicker, is harder to self-level, and cures slower.
- When warm, it is thinner, has better self-leveling, and sets faster. If the material or working conditions are below 70°F, TotalBoat Wave + Marble Epoxy may become too viscous to properly release air bubbles.



# TOTALBOAT WAVE + MARBLE EPOXY

- Working in conditions or with material above 80°F, Wave + Marble Epoxy may set too quickly, which can generate excessive heat during the cure, leading to yellowing, distortion on the surface, or cracking.

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## DISPENSING & MIXING

- The mix ratio for TotalBoat Wave + Marble Epoxy is 1 part epoxy resin to 1 part hardener (1A:1B), by volume, or 100 parts resin to 86 parts hardener (100A:86B), by weight.
- Using the specified mix ratio is VERY important when working with epoxy.
- DO NOT deviate to speed up or slow down the gel time.
- An excess of resin or hardener will not speed up the reaction. It will negatively affect the cure and could cause a wide range of short- and/or long-term problems with your epoxy coating.

### MAXIMUM MIXING QUANTITY:

- The best practice is to combine the resin & hardener at the recommended mix ratio, mix for a minimum of 3-5 minutes while scraping the sides and bottom of the container until there are no streaks or striations, transfer to a second container, and mix 2-3 more minutes until fully blended.
- There should be no streaks or striations visible when it has been sufficiently mixed.
- Stir slowly to avoid whipping excess air bubbles into the epoxy while mixing.

### ADDING TINTS AND COLORANTS:

- Only apply epoxy-compatible tints or colorants.
- It is strongly recommended to perform a small test with any tints or colorants before using them on the final project.
- Cure the sample completely to see if it achieves the desired results.
- Do not add any tints or colorants until the resin and hardener have been mixed together completely.
- Tints and colorants can be added at any time during the 'working time' of the mixed epoxy.

### MIXING TECHNIQUE:

- The best practice is to combine the resin & hardener at the recommended mix ratio, mix for 3-5 minutes while scraping the sides and bottom of the container until there are no streaks or striations, transfer to a second container, and mix 2-3 minutes again, until fully blended.
- Take special care not to whip in excess air while mixing.
- DO NOT use a drill mixer for mixing Wave + Marble Epoxy.
- If any tints or colorants are desired, they can be added now. Let it sit for 1-2 minutes to allow air bubbles to start rising to the surface, then apply immediately.
- The whole mixing process shouldn't take more than 8-10 minutes.

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## APPLICATION

### COATING APPLICATION THICKNESS:

- Do not apply Wave + Marble Epoxy thicker than ¼" per coat.
- When creating coatings thicker than this, pour Wave + Marble Epoxy in layers of ¼".
- Exceeding the maximum coating thickness may cause excessive heat from the cure reaction.
- Symptoms of excessive heat during the cure include a distorted or wavy surface, yellowing, and cracking.

### WORKING TIME:

- The working time of any epoxy is the time that it can be poured, worked, or applied after mixing.
- Epoxy is a mass- and temperature-sensitive material. The working time can vary drastically.
- Factors such as material temperature, ambient temperature, amount mixed, mixing time, and mixing speed can influence the working time.
- The more you mix, or the warmer it is, the faster it will begin to thicken.
- Knowing this, 10-15 minutes is an estimated average working time for most applications using Wave + Marble Epoxy at room temperature. If the mixed epoxy starts to heat up in your mixing cup, apply it immediately.

### POURING:

- When applying as a coating, pour the mixed TotalBoat Wave + Marble Epoxy onto the surface in an S-shaped pattern.
- Using a plastic spreader or straight-edge tool, spread the epoxy evenly over the entire surface, pushing epoxy to the edges.
- Do not apply the epoxy thicker than 1/4" per coat.

### REMOVING BUBBLES:

- Once poured into the desired location, let the epoxy sit for 10 minutes to allow air bubbles to rise to the surface. Using a heat gun or propane torch, apply heat 6-10 inches above the surface, moving constantly in a back-and-forth motion to remove air bubbles.
- Do not let the heat sit in one spot for more than a few seconds. Be careful not to overheat, scorch, or burn the epoxy, as this can cause permanent surface imperfections.
- Be aware, heating the epoxy can move around some colorants, tints, or other special effects, potentially changing the appearance.
- Check periodically for additional bubbles, and remove as needed, but do not overwork isolated areas.

### STEP POURING AND OVERCOATING:

- The maximum coating thickness of TotalBoat Wave + Marble Epoxy is 1/4" per pour, but deeper coatings can be achieved by step-pouring multiple layers.
- Before recoating, the previous layer MUST be allowed to cool to room temperature (70-80°F) before overcoating or adding additional layers. It does not have to be fully hardened or tack-free to recoat.
- The next layer can be poured without additional surface prep.



# TOTALBOAT WAVE + MARBLE EPOXY

- No sanding is necessary between coats unless there is a flaw or issue with the previous layer.
- Large batches of mixed epoxy will also cure much more quickly than small batches.
- If allowed to cure past the point of being able to indent a fingernail, you will want to scuff-sand lightly between coats to promote adhesion. In general, if you can sand, you should.

## CURE AND FINISH:

- The cure times for TotalBoat Wave + Marble Epoxy are as follows when applied up to ¼" thickness at 70°F: Tack free in 6 hours, sandable (if necessary) in 24 hours, ready for light use in 48 hours, and fully cured for full use in 5-7 days.
- Thinner coats or cooler conditions will require more time to cure, while thicker layers, or warmer conditions can shorten these cure times.
- Wave + Marble Epoxy can also be wet sanded and buffed to a mirror finish, removing any surface blemishes or scratches that can occur from use.
  - Start with coarser sandpaper and work to finer grit sandpaper, finishing with a minimum of 2500- to 4000-grit sandpaper before buffing.
- When exposed to extreme UV exposure, a clear urethane or varnish should be applied to the surface to help the epoxy to resist yellowing over time.

## TROUBLESHOOTING

Mistakes can happen, no matter what your skill level is with epoxy. Here are some of the most common problems, causes, and solutions for troubleshooting issues with TotalBoat Wave + Marble Epoxy.

### BUBBLES:

1. **TEMPERATURE:** If the environmental conditions or the epoxy being mixed are below 60°F, this can render the mixed epoxy too thick to release air bubbles and self-level properly.
2. **COATING THICKNESS:** Applying Wave + Marble Epoxy thicker than the 1/4" maximum will make it more difficult to release air bubbles, even with a heat gun or torch.
3. **SEAL COAT:** ALWAYS apply a seal coat to wood or porous substrates before applying a flood coat. Without a seal coat, air bubbles will constantly rise out from the grain and get trapped in the epoxy as it cures. Using a torch or heat gun will not remedy this, it will only become worse.
4. **MIXING:** Mixing too vigorously will whip excessive air bubbles into the blending resin and hardener. This can make the mixture appear white due to thousands of tiny bubbles. The smaller the bubbles, the harder it is for them to rise to the surface and pop naturally.

### FISHEYES:

- Fisheyes are a surface defect caused by surface contamination.
- Oil, wax, dust, moisture, and sap are just a few contaminants.

- Even in small amounts, these can repel the epoxy, forming small, isolated areas without epoxy.
- Small fisheyes can be filled with a clear CA-glue such as TotalBoat TotalBond, or a clear UV-cure resin such as TotalBoat UV Cure Clear Resin.
- Make sure any products used to remedy the fisheyes have fully cured and been sanded with 220-grit sandpaper before applying another coat of Wave + Marble Epoxy.

## SURFACE IMPERFECTIONS:

- To fix imperfections, let the epoxy surface cure to the point it can be sanded after 24 hours.
- Lightly sand trouble spots with 120-220 grit sandpaper.
- Clean away sanding debris and wipe with a clean cotton rag soaked in denatured alcohol.
- Next, mix a small amount of Wave + Marble Epoxy and fill in the freshly sanded trouble spots.
- This can also be done with clear super glue for a quicker fix on very small imperfections such as fisheyes.
- Fill the spot and let it fully cure, then lightly sand the entire surface and apply another coat to level it out.

## EPOXY DID NOT CURE PROPERLY:

1. **IMPROPER MIX RATIO:** Verify that the proper mix ratio was used – 1:1 by volume, OR 100A:86B by weight. Mixing too much of either component may cure to a sticky or soft material.
2. **RESIN AND HARDENER:** Make sure you used resin and hardener; not all resin or all hardener. They need to be mixed together, one does not get poured before the other, as stand-alone layers.
3. **NOT MIXED THOROUGHLY (THIS IS THE MOST COMMON ISSUE):** While mixing, be sure to scrape the sides and bottom of the mixing container to ensure all resin and hardener are fully blended. WE STRONGLY RECOMMEND THE 2-CUP MIXING METHOD as de-scribed in the MIXING section. Failing to mix this product thoroughly can and will result in soft spots in the coating, due to areas rich in resin or hardener.
4. **POURING:** NEVER scrape or brush the sides or bottom of the container you just mixed in to remove every last drop. No matter how thoroughly you may have mixed, there will always be an unmixed portion which can be dislodged and will leave a wet or sticky spot on your coating. The 2-cup mixing method (clarified in the MIXING section) will also help to prevent this issue.
5. **TEMPERATURE:** If the temperature is below 60°F while Wave + Marble Epoxy is initially setting up, it can dramatically slow the chemical reaction needed for the development of the epoxy's final hardness. Increasing the ambient temperature to at least 80-90°F for 12-24 hours should help to revive the chemical reaction for hardness to develop.
6. **INCOMPATIBLE TINTS, COLORANTS, ADDITIVES:** Only use compatible tints, colorants, pigment, or special effects that



# TOTALBOAT WAVE + MARBLE EPOXY

are compatible with epoxy. ALWAYS perform a small test sample to ensure compatibility.

## CRYSTALLIZATION:

- Crystallization can make liquid epoxy resin appear cloudy, chunky, grainy, or even solid.
- Under most circumstances, this is due to improper storage conditions. Do not use crystallized epoxy.
- Crystallization is not permanent, however, and can be de-crystallized and reconstituted to its original state for normal use. Heating the resin throughout the container to roughly 125-140°F will return the crystallized material to a clear liquid.
- The most common method of achieving this is placing the bottle of epoxy into a warm water bath.
- Seal the bottle very thoroughly, or place it in a sealable bag, then place it in a tub or basin of warm water.
- Change out the water, as needed, to maintain the temperature at 125-140°F.
- Shake or stir the resin in the bottle periodically to help maintain an even temperature through liquid epoxy.
- Once the epoxy crystallization has been fully de-crystallized, it is safe for use again, because it has been restored to its original working and physical properties.

## PRODUCT STORAGE

- Store between 60-90°F, in a dry place, tightly sealed to prevent any moisture or contaminants from coming in contact with the liquid epoxy material.
- Ideally, it should be stored at a consistent temperature.
- Do not allow any TotalBoat Wave + Marble components to freeze during winter storage. After use, tightly reseal all containers.
- During cold weather, store products on a raised surface off the floor, and avoid storing near outside walls or doors.

## SHELF LIFE:

The shelf life of TotalBoat Wave + Marble Epoxy is a minimum of one year, under proper storage conditions. However, it is typically viable for a significantly greater amount of time if stored properly.

## APPLICATION DATA:

<b>Application / Epoxy Type:</b>	Coating
<b>Maximum Pour Depth:</b>	Up to ¼" per coat
<b>Coverage:</b>	6.4 sq. ft. at ¼" per 1-gallon kit 12.8 sq. ft. at ¼" per 2-gallon kit
<b>Number of Coats:</b>	As many as desired
<b>Application Temperature/RH:</b>	70-80°F, 0-60% Relative Humidity
<b>Pot Life:</b>	10 Minutes at 70°F
<b>Working Time:</b>	20 minutes at 70°F
<b>Gel Time (150g mass):</b>	30 minutes at 77°F (ASTM D2471)
<b>Cure Time Between Coats:</b>	3 hours minimum at 70°F — no sanding required
<b>Minimum Cure for Use:</b>	3-5 days
<b>Full Cure Time:</b>	5-7 days
<b>Resin Density:</b>	1.16 g/cm <sup>3</sup> at 77°F
<b>Hardener Density:</b>	0.99 g/cm <sup>3</sup> at 77°F
<b>Resin Viscosity:</b>	9,000 cP at 77°F (ASTM 2196)
<b>Hardener Viscosity:</b>	1,750 cP at 77°F (ASTM 2196)
<b>Mix Ratio (By Weight):</b>	100A:86B (Calculated)
<b>Mix Ratio (By Volume):</b>	1A:1B (Calculated)
<b>Mixed Viscosity:</b>	3,500 cP at 77°F (ASTM D2196)
<b>Shelf Life:</b>	Minimum of 1 year (under proper storage conditions)

## PHYSICAL DATA:

<b>Cured Color/Finish:</b>	Crystal clear, High Gloss
<b>Components:</b>	Two — Epoxy Resin (Part A), Hardener (Part B)
<b>Units:</b>	2-Half Gallons 2-Gallons
<b>UV Stable:</b>	Yes
<b>Izod Impact, Notched:</b>	0.76 ft.-lb./in (ASTM D256)
<b>Tensile Strength:</b>	7,400 psi (ASTM D638)
<b>Tensile Modulus:</b>	382,000 psi (ASTM D638)
<b>Tensile Elongation:</b>	5.9% (ASTM D638)
<b>HDT (Room Temperature Cure):</b>	118°F (ASTM D648)
<b>HDT (Positive Cure):</b>	124°F (ASTM D648)
<b>Compressive Strength:</b>	10,400 psi (ASTM D695)
<b>Flexural Strength:</b>	12,800 psi (ASTM D792)
<b>Flexural Modulus:</b>	370,000 psi (ASTM D790)
<b>Cured Density:</b>	1.11 g/cm <sup>3</sup> (ASTM 792)
<b>Volumetric Yield:</b>	25.0 in <sup>3</sup> /lb. (ASTM D792)
<b>Volumetric Shrinkage:</b>	3.85% (ASTM D792/D1475)
<b>Hardness:</b>	82 Shore D (ASTM D2240)