

- Two-part, acrylic liquid and mineral casting compound
- Simple 1A:2B mix ratio by volume
- Easy to tint with powdered TotalBoat Razzo Pigments
- Crumbles easily to make color chips.
- Long working time; cures in as little as one hour.
- No VOCs, solvent smells, or sticky residue; easy water cleanup.
- Can be used with the same types of silicone molds used for casting epoxy.

TotalBoat Razzo is an environmentally friendly, nontoxic, two-part mineral casting compound for creating elegant home decor and unique gifts for family and friends. It's easy to use, with a simple 1A:2B mix ratio, by volume. Just combine the Razzo Acrylic Liquid (Part A) and Razzo Mineral Powder (Part B) and stir thoroughly. Blend in TotalBoat Razzo Pigments to add color, then pour into a clean silicone mold. Enhance your creative designs using simple techniques to create a variety of eye-catching effects, including terrazzo, marbling, random patterns, and overlapping color designs. Razzo makes it easy to create one-of-akind coasters, tea light holders, napkin rings, jewelry, soap dishes, picture frames, and more. The hardest part will be deciding what to make first!

APPLICATION CONDITIONS: 50-100°F, and a relative humidity range between 0-90%. Warmer and or drier conditions will promote a faster cure, while cooler conditions or higher humidity will slow the cure rate of Razzo.

CLEANUP:

Acrylic Liquid (Part A): Warm water and a mild soap, then rinse thoroughly with water.

Mineral Powder (Part B): Carefully sweep or vacuum up spilled mineral powder. Residual material can be washed away with water.

Mixed Material: If the compound is still in the liquid form, scrape up and remove any large

amounts, then wash away any remaining residue with water and a mild soap, then rinse well. If the mixed compound has hardened, chip or peel it away, removing it mechanically.

THINNER: After the Acrylic Liquid and Mineral Powder have been mixed, water can be added to Razzo to help improve flow and working characteristics. Avoid adding excess water, as it may lead to cracking as the water escapes the material during the cure process.

COVERAGE: The volumetric yield of TotalBoat Razzo is equal to the amount of Mineral Powder added, in most circumstances. The Acrylic Liquid does not increase the volume once it's mixed in. NOTE: Adding extra Acrylic Liquid adds very little to the overall coverage/volumetric yield.

COLORANTS: TotalBoat powdered Razzo Pigments (Black, White, Red, Orange, Yellow, Emerald Green, Blue, and Violet)

PERSONAL SAFETY:

TotalBoat Razzo consists of non-toxic materials. Refer to the specific TotalBoat Razzo Safety Data Sheets for more info regarding personal safety. When directed, always use proper Personal Protective Equipment while using any TotalBoat products.

MOLD/SURFACE PREPARATION

- Any molds or surfaces that TotalBoat Razzo pieces are to be cured in/on should be completely cleaned of all surface contaminants, such as dust, dirt, grease, oil, wax, or other substances.
- Mold release agents are not required with Razzo.
- Silicone is the most common mold material used with Razzo. It promotes the easiest demold process, detailed surface textures, and a long useful life.
- Other mold materials can be used very successfully; however, they should be constructed of non-porous materials, and be flexible to allow for easy demolding.

MIXING

• The mix ratio of the Razzo Acrylic Liquid component and the Mineral Powder component creates a chemical reaction, forming a plaster-like material. Take extra care to follow the



directions carefully to achieve the best results possible, and the most predictable working/cure times.

- TotalBoat Razzo has a very easy 1A:2B (1 Part Acrylic Liquid:2 Parts Mineral Powder) mix ratio, when mixing by volume.
 - For larger projects, Razzo can also be dispensed by weight, the ratio is 1A:2.2B (1 Part Acrylic Liquid:2.2 Parts Mineral Powder)
- Razzo comes complete with a plastic measuring scoop to ensure the easiest and most accurate measuring.
- Establish the total desired volume of mixed Razzo that is desired.
- The desired mixed volume of Razzo is equal to how much Mineral Powder is required. The Acrylic Liquid is dispensed first into the mixing cup, using the included scoop, then clean and dry the scoop.
- Next, use the scoop to dispense the Mineral Powder at the rate of two times the volume of Acrylic Liquid that was dispensed.
- Use a stir stick or drill mixing blade (high-shear blades are the most effective) to blend the two components together to form a uniformly smooth, creamy, paste consistency. There should be no lumps.
- Small adjustments to the mix ratio can be made at this point to achieve the necessary consistency. Larger batches of mixed Razzo (more than ½ gallon at a time) may require extra Acrylic Liquid to achieve the desired consistency for pouring.
- Adding a little extra Mineral Powder will help to speed up the cure rate, however, it is a little more difficult to mix and pour.
- **IMPORTANT!** The working time of TotalBoat Razzo is 30-60 minutes (this is dependent on the mass of Razzo that has been mixed, ambient environmental conditions, and the very specific ratio of Acrylic Liquid to Mineral Powder added, and if any colorants have been added). Working time is defined by the amount of time that Razzo remains workable after the Acrylic Liquid and Mineral Powder have been mixed together. The working time is kept alive by continually mixing the Razzo. If it's left for more than a couple minutes without mixing, it will begin to thicken and cure, shortening the working time.
- As soon as the Razzo Acrylic Liquid and Mineral Powder have been mixed, Razzo Pigments can be added, as desired.

ADDING COLORS

• Powdered TotalBoat Razzo Pigments are designed specifically as the most effective colorants for adding beautiful and vibrant color to Razzo.

- Razzo Pigments can be added to Razzo once the Acrylic Liquid and Mineral Powder have been mixed thoroughly. Adding the Razzo Pigments before the Acrylic Liquid and Mineral Powder have been mixed, will make it significantly more difficult to mix them together.
- The maximum amount of Razzo Pigment that can be added is 5-10%.
- Emerald Green is the most concentrated color and should be added slowly, while White, Black, Orange, and Yellow may require more powder to achieve the same concentration. The remaining Razzo Pigment colors are in the middle concentration range.
- Razzo can be poured off into other mixing cups to add other colors, if desired, before pouring Razzo into the mold.
- Different colors of Razzo will not bleed into each other but can be blended by mixing them together manually.
- Without the addition of Razzo Pigments, Razzo will cure to a very slight off-white color. To achieve a pure white color, add Razzo White Pigment.
- **TIPS, TRICKS and HINTS for COLORING AND EFFECTS:** Stepby-step instructions for a variety of different coloring techniques can be found on the Razzo Mineral Casting Compound Kits page on <u>www.totalboat.com</u> under the DATA tab, in the section called ADDITIONAL PRODUCT INFORMATION.

POURING INTO MOLDS

- TotalBoat Razzo should be poured into the desired molds as soon as it has been mixed, and any desired pigments have been added.
- When casting TotalBoat Razzo into a mold, it is strongly recommended to coat the inside of the mold with a thin layer of Razzo, using a small, clean, paint brush or other appropriate brush prior to filling the mold. Adding this thin layer to the inside of the mold promotes the most accurate molded pieces, with the fewest bubbles. If this layer is not applied, air bubbles tend to remain in corners.

HINT! Mixing a small amount of extra Acrylic Liquid to the Razzo that is applied on the inside of the mold ensures an even smoother finish, and an easier time applying it to the mold surface. Do not add Acrylic Liquid to the point where the Razzo can sag on vertical surfaces.

- Fill the mold with Razzo. Razzo will not have any noticeable shrinkage, so it's not encouraged to underfill molds, or overfill too much. Any extra Razzo that is protruding from the mold can easily be sanded smooth later.
- Once the mold has been filled, pinch and massage the edges of the mold, tap the mold, and, for smaller molds, it



pick up and gently tap on the bottom to help bring air bubbles to the surface.

• A toothpick can also be used to pop stubborn bubbles that are visible just below or on the surface.

DEMOLDING RAZZO

- TotalBoat Razzo can be demolded as soon as the casting has a cool feel to it and is firm to the touch. During the cure process, Razzo warms slightly and firms up. The minimum demold time ranges from 1-12 hours; 1 hour for smaller, thinner castings, and up to 12 hours for thicker castings.
- There is no maximum demold time for TotalBoat Razzo.
- Razzo can be sanded to remove any rough spots 24-48 hours after demolding. Razzo can be wet sanded or dry sanded.
- Razzo can be sanded to smooth out any imperfections. If possible, wet sanding will leave a better finish than dry sanding. Start with lower grits like 220-grit, and finish with a higher grit, such as 1000-grit (or higher), for the smoothest finish possible.
- Razzo can also be polished, if desired.

SEALING RAZZO

- Once cured for a minimum of 72 hours, TotalBoat Razzo can be sealed with TotalBoat Halcyon Clear Satin, or Halcyon Clear Gloss Varnish.
- Two coats are recommended, waiting 1-2 hours between coats, for best results.

MAKING CHIPS WITH EXTRA RAZZO

- Extra mixed Razzo can be used to make Razzo chips for future Razzo projects.
- Spread extra mixed Razzo in a thin layer on a non-stick material such as a silicone mat or wax paper.
- Allow this material to cure for two hours at normal room temperature.
- This cured Razzo can then be broken into small chips of various shapes and sizes.
- Save these chips for future projects. The chips can be added into future castings of Razzo to create a terrazzo effect.

MAKING TERRAZZO

• Terrazzo effects can be easily made by adding Razzo chips into a base material of mixed Razzo. Blend the chips in as evenly as possible and pour into the desired mold.

• Directly after demolding, reveal the terrazzo effect by wet sanding the outside starting with 220-grit, and working up to 400-grit (or finer) for a smooth finish.

USES AND CARING FOR RAZZO

- Razzo can be used for a wide variety of items from coasters to trivets, artistic castings, planters, and more.
 Razzo is safe for indoor or outdoor use, however, for Razzo applications where it is exposed to water or lots of moisture, it is recommended to use a sealer.
- Sealing Razzo with TotalBoat Halcyon varnish will provide a water-resistant and stain resistant finish.
- Razzo can work great as trivets, however, exposure to excessive heat beyond the acceptable range may mute or change some of the color from the pigments. Wet sanding can help revitalize the surface.
- Razzo can tolerate being placed in a microwave oven once it has fully cured for at least 5-10 days under normal cure conditions. Take care not to overheat the Razzo beyond the specified limits.
- Fully cured Razzo is dishwasher safe.
- Broken Razzo can be repaired by gluing it back together with two-part epoxy adhesives, polyurethane-based adhesives, or CA glue (Super Glue). Razzo is no longer microwave or dishwasher safe if it has been repaired. Only use for room-temperature applications.
- Stains on cured Razzo can be removed by wet sanding lightly with a higher sandpaper grit such, as 400 or higher.

STORAGE

- ACRYLIC LIQUID: Store with the cap on tightly in a location where it will not go below 35°F. Do not allow this component to freeze. Freezing a couple of times will not have a noticeable effect on this material, however, multiple freeze-thaw cycles may start to compromise some of the working or cured properties.
- **MINERAL POWDER:** Store in a dry, well-ventilated location, with the cap on tightly. Avoid allowing the Mineral Powder inside from coming in contact with acid, high humidity, moisture, or water.
- SHELF LIFE: The shelf life of Razzo is a minimum of 1 year from the date of manufacture, under proper storage conditions. In most circumstances where it has been stored properly, Razzo is perfectly usable for much longer.



APPLICATION DATA:	
Cleanup:	ACRYLIC LIQUID: Warm water and a mild soap, then rinse thoroughly. MINERAL POWDER: Carefully sweep or vacuum up spilled mineral powder.
	Residual material can be washed away with water.
	MIXED RAZZO: If the compound is still in the liquid form, scrape up and remove any
	large amounts, then wash away any remaining residue with water and a mild soap,
	then rinse well. If the mixed compound has hardened, chip or peel it away, removing
	it mechanically.
Mix Ratio (By Volume):	1A:2B (1 Part Acrylic Liquid:2 Parts Mineral Powder)
Mix Ratio (By Weight):	1A:2.2B (1 Part Acrylic Liquid:2.2 Parts Mineral Powder)
Application Temperature/RH: Mold Materials:	45-100°F, 0-90% RH Silicone is the most common, other flexible materials that allow for demolding are
	Silicone is the most common, other flexible materials that allow for demolding are also acceptable.
Ideal Initial Mixed Consistency:	Creamy paste, free of any lumps
Maximum Thickness for a Single Casting:	There is no limit to how thick Razzo can be poured.
	Larger castings that are over 2" thick and use at least one gallon of mixed Razzo
	may generate heat during the cure process.
Working Time:	Varies: 30-60 minutes (dependent on ambient temperature, amount mixed).
	Working time will be reduced significantly if it is not constantly mixed. Addition of
	pigments will extend working time. The addition of extra Acrylic Liquid or water will
Colorants/Pigments:	extend working time. TotalBoat Razzo Pigments–5-10% (too much pigment may lead to cracking or poor
Colorants/Fightents.	cured properties). Emerald Green should be added slowly, as it is the most potent
	color, while white, black, orange, and yellow may require up to 10%)
Demold Time:	Varies, typically 1-12 hours depending on ambient temperature/relative humidity,
	mass/thickness of Razzo casting.
	IMPORTANT: To be demolded, the surface should be cool to the touch and firm.
Cure Time for Use (Room Temp. Cure):	24-48 hours (depending on thickness, mass of casting, higher humidity may take
	longer)
Full Cure Time (Room Temp Cure):	5-10 days after demolding (thicker, larger castings will need longer than smaller
	ones, higher humidity will take longer)

PHYSICAL DATA:

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Components:	2: Acrylic Liquid (Part A), Mineral Powder (Part B)
Acrylic Liquid Color:	Milky, White (When wet)
	Clear, Hazy (When dry)
Acrylic Liquid Viscosity:	58.9cP (22°C, #1 Spindle @ 50rpm)
Acrylic Liquid Density	1.03 g/cm ³ (8.6 lb./gallon)
Mineral Powder Color:	White to Off White
Mineral Powder Density:	2.96 g/cm ³ (Relative)
	55-70 lb./ft. ³ (Bulk)
Mineral Powder Particle Size:	Varies
Cured Hardness:	60-75 Shore D (Cured for at least 2 weeks) (may vary by mix ratio or colorants
	added)
Cured Color:	White to Off White (unless colors were added)
Cured Density:	1.2-1.6 g/cm ³ (Depending on actual mix ratio, and pigments added)
Maximum Service Temperature:	390°F (Short term)* and 235°F (Long term)*
	*Razzo must be completely cured. Pigments may fade from high service
	temperatures, Razzo may be more prone to staining if it comes in contact with any
	foods, liquids, or substances that leave a color behind.
Microwave Safe:	Yes – Razzo should never be heated more than the maximum service temperature
	and may be more prone to staining from foods or liquids.
Dishwasher Safe:	Yes
Food Safe:	No
UV Resistant:	Yes
Shelf Life:	TotalBoat Razzo has a minimum shelf life of 1 year, if stored properly.
Razzo Storage:	ACRYLIC LIQUID: Store with the cap on tightly above 35°F. DO NOT FREEZE!
Razzo Storage.	
	MINERAL POWDER: Store in a dry, well-ventilated place with the cap sealed tightly. Avoid allowing any contact with acid, humidity, moisture, or water.
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