

CREATING A MARBLE EFFECT

Using Smooth-Cast 325 Liquid Plastic

Overview — Creating a realistic cast marble effect is possible with Smooth-Cast 325 liquid plastic. Calcium carbonate (also known as “marble dust”) is mixed with SC 325 casting resin until the mixture is thick and creamy. This mixture is then simultaneously cast with black pigmented Smooth-Cast 325 to create the “veining” effect commonly found in marble. Getting the effect you want will take practice and we offer the below as a step by step outline to get you started.

Products Needed:

- A. Calcium Carbonate (moisture free)**
- B. Smooth-Cast 325 Casting Resin**
- C. Liquid Color Pigment (black & white)**

- A. **Calcium Carbonate** — Calcium Carbonate (marble dust) should be completely free of moisture. Calcium Carbonate is available from many Smooth-On distributors. Call our technical help line to find your nearest distributor.
- B. **Casting Resin - Smooth-Cast 325 Colormatch** is recommended because it is “color neutral” and readily accepts powders and/or pigments.
- C. **Liquid Pigment** - Adding a pigment to the resin/calcium carbonate mixture will give the final casting added definition and dimension.

Also required: Rubber Mold; Mold Release Agent; measuring and mixing containers; mixing paddles; Gram scale or triple beam balance for weighing components.

Amount of resin, calcium carbonate and pigment required will vary depending on the desired effect. You will have to experiment by varying the amounts of resin, calcium carbonate and pigment used in combination to attain an effect that suits your application.

For this example, we will use the following proportions:

Part B of SC 325 Resin: 100 Parts **Calcium Carbonate:** 100 Parts
Part A of SC 325 Resin: 100 Parts **Liquid Pigment:** Black & White (1/2 Part Each)

Measuring can be done by volume. Greater accuracy is achieved with a gram scale.

1. **Apply Release Agent to Rubber Mold**** - To prevent resin mixture from sticking to rubber mold a light application of spray mold release agent (Smooth-On Universal Mold Release™) into mold cavity and all surfaces that will contact the resin. Brush lightly and follow with second light mist coating. Let dry for 20 minutes.
2. **Create Calcium Carbonate Pre-Mix** - mix calcium carbonate thoroughly with Part B of SC 325 (Blue Label). Dispense 100 Parts of Part B into clean mixing container. Add 100 Parts of calcium carbonate and mix thoroughly. The consistency of the mixture will be very thick.
3. **Create White Pigmented ‘Part A’ Pre-Mix** — Dispense 100 parts of Smooth-Cast 325 Part A into mixing container and add 1/2 part of white pigment. Mix thoroughly.

4. **Create A Black Color Concentrate For Veins** — Dispense 1/2 part of Smooth-Cast 325 Part B into a separate mixing container. Add 1/2 part of black liquid color dispersion. Mix thoroughly. This color concentrate will be added to the calcium carbonate mixture prior to pouring.
5. **Combine Part A (with pigment) & Part B (with calcium carbonate)** and mix thoroughly.
6. **Pour Mixture While Adding Pigment** - Slowly pour the SC325/calcium carbonate mixture into mold cavity. At the same time, pouring the black pigmented resin. This dual pouring technique will create the swirl or “veining” effect that is commonly found in marble. As we said earlier, achieving an acceptable veining effect may take some practice.
7. **Allow Casting To Cure Before Demolding** - Remember: the resin/calcium carbonate mixture or filled resin will take longer to harden than unfilled resin. Cure time depends on size of casting, mold configuration, amount of fillers used, etc. Generally 30 to 40 minutes is a sufficient amount of time. Applying mild heat will accelerate cure time. Let cool to room temperature.
8. **Demold the casting from mold** - Lightly polish casting with a wax until the desired luster is attained.

** Use only a release agent specifically made for mold making and casting such as Universal Mold Release™ or Ease Release 2300™.