

# SILICONE CAULK MOLD MAKING TUTORIALS

# SILICONE CAULK MOLD MAKING TUTORIAL

## Method #1

Pro's: Fast, cheap in comparison to other mold systems, effective when procedures are followed, these molds can be used to cast wax, plaster, plastics, concrete and more  
Con's: Strong Vinegar odor (Acetic Acid), small margin of error (won't work if you don't follow directions carefully), detail is limited in comparison to other silicone mold systems



- Prepare your model with water based clay on a plywood board or dinner plate (Some oil based clays will work with this method depending on their sulfur content and various other chemical reactions that can occur). Our models are for a one part mold but multiple part molds can be made with some advanced study in mold making technique. Make sure the surface of your model is finished to your liking. A firm, "leather hard" surface is desirable.



- Brush Vaseline on the base/plate about an inch or two inches around the perimeter of the model so that the silicone will not stick to it. The silicone will not stick to the clay so it is not necessary to brush Vaseline over your model (though I sometimes do a little for good measure).

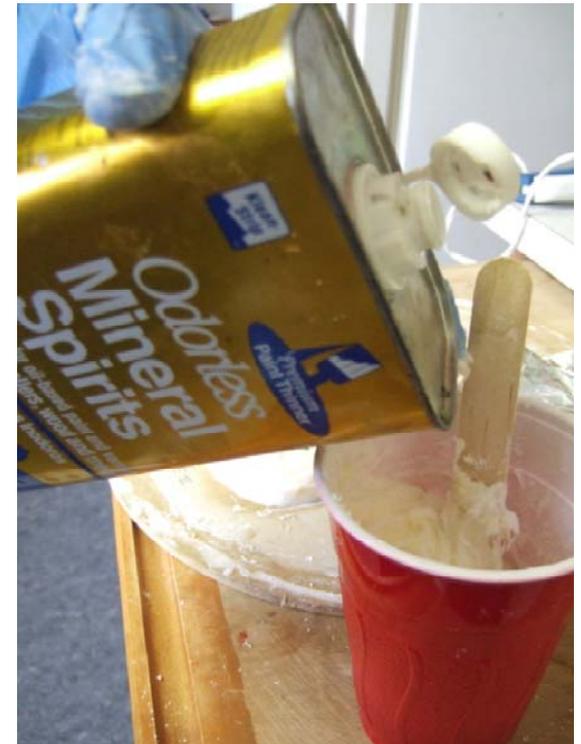
- Prepare your tools. Things may happen quicker than you expect so plan the materials you will need all the way through the process and have them at hand. Cover your work surface with newspaper. **Wear rubber or latex gloves.** Place the caulk tube in the caulking gun, slice the pointed nozzle of the tube and insert a long nail or skewer into the nozzle to puncture the foil seal. Keep a rag or paper towel nearby. Don't wear nice clothes- Silicone is permanent.



- Depress the plunger of the caulk gun and empty the entire tube of silicone into your disposable quart sized mixing container.



- Add about the same amount of cornstarch as there is silicone and mix thoroughly into a white paste.



- Add small amounts of mineral spirits and continue to mix. Continue doing so until the consistency is loose enough to spread like frosting



- Use the mixing stick and your gloved hands to smear the mixture into the crevices of your design. Avoid trapping air between the clay and the silicone.



- Be sure that you have a thick covering around the sides and bottom of the piece, all the way to the base. You should not see clay through the silicone. Use the mixing stick to smooth the surface and make a flat top.



- Once you have the silicone in place-STOP TOUCHING IT. Leave it to cure overnight or until the next class. Successful completion of this project means that your mold does not leak, the mold material sets and is not gooey inside, the mold comes cleanly away from the clay model.

- Wash the fully cured mold with soap and water and your stiff paintbrush.

- Position your mold so that it sits level. You may need to set it on a rag or in some sand.

- Pour wet plaster into the mold and allow it to set undisturbed.

**DO NOT MOVE YOURS OR ANYBODY ELSE'S MOLD WHILE THE PLASTER IS WET OR SLUSHY**

# SILICONE CAULK MOLD MAKING TUTORIAL

## Method #2

## **Making a Silicone mold from Clear 100% Silicone Caulk**

Pro's: Fast, cheap in comparison to other mold systems, effective when procedures are followed, these molds can be used to cast wax, plaster, plastics, concrete and more

Con's: Strong Vinegar odor (Acetic Acid), small margin of error (won't work if you don't follow directions carefully), detail is limited in comparison to other silicone mold systems.

1. Prepare your model with water based clay on a plywood board or dinner plate (Some oil based clays will work with this method depending on their sulfur content and various other chemical reactions that can occur). Our models are for a one part mold but multiple part molds can be made with some advanced study in mold making technique. Make sure the surface of your model is finished to your liking. A firm, "leather hard" surface is desirable.



2. Brush Vaseline (or smear it with your fingers) on the plywood board (or dinner plate) about an inch or two inches around the perimeter of the model so that the silicone will not stick to the board. The silicone will not stick to the clay, so it is not necessary to brush Vaseline over your model.



3. Prepare your tools. Things may happen quicker than you expect so plan the materials you will need all the way through the process and have them at hand. Cover your work surface with newspaper. Fill your 1 gallon (or larger) bucket about  $\frac{1}{2}$  full of lukewarm water. Add about 2 tablespoons of dish soap to the water and create some good suds. Place the caulk tube in the caulking gun, slice the pointed nozzle of the tube and insert a long nail or skewer into the nozzle to puncture the foil seal. Keep a rag or paper towel nearby. Don't wear nice clothes-Silicone is permanent. **DON'T FORGET THE DISH SOAP.**

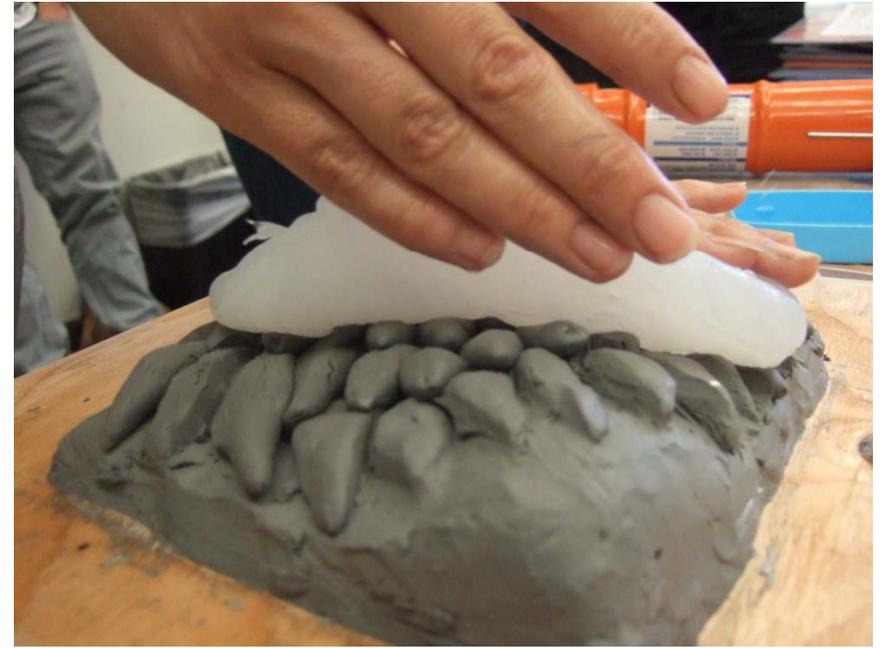


4. Depress the plunger of the caulk gun and empty the entire tube of silicone into the soapy water. (It doesn't have to be the whole tube at once if you're more comfortable with a few smaller amounts)



5. Wet your hands in the soapy water.

6. Gently handle the caulk under water with your wet soapy hands. The acetic acid will begin to dissipate into the water. The mix of the acetic acid in the silicone, the moisture, and the Glycerin that is in the dish soap will react together to begin stiffening the texture of the silicone (making it rubbery). About handling the caulk: If you squeeze it too much or if your hands are not wet when you touch it, it will stick to you. It will also stick to you if you have caulk already stuck to your hands. If your hands get sticky, quickly clean and dry them before continuing. Do not poke or pinch at the caulk. Let it rest lightly on your cupped hands and lightly pat it into a ball shape over the course of a few minutes.



7. When the silicone is shaped into a doughy ball, remove it from the water and flatten it to about a 1" patty. You may want to make 2 or 3 patties from the ball instead of one giant one. They will be easier to handle.
8. Take your silicone patty and press it down onto the clay surface. Press the silicone into the textures, trying to avoid leaving air pockets between the clay surface and the silicone. Repeat this until the entire clay area is covered with an even layer of about  $\frac{3}{4}$ " thick. Be careful to make the silicone consistent and thick at the bottom of the clay model, where the silicone touches the plywood. If this wall is weak, it may leak and cause your casting material to spill out.

Once you have the silicone in place-STOP TOUCHING IT. Leave it to sit overnight or until the next class.

Successful completion of this project means that:

- your mold does not leak
- the mold material sets and is not gooey inside
- the mold comes cleanly away from the clay model.