

# How to Slush Cast

## Products used in this How To:

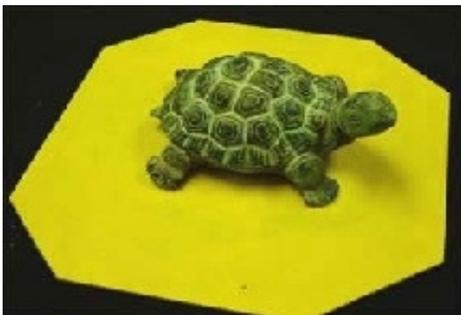
- \* Original Piece
- \* Alumilite High Strength 3 Silicone Rubber
- \* Alumilite Casting Resin
- \* 610 Foam
- \* Alumilite Liquid Dye or Alumidust
- \* Corrugated Plastic
- \* PVC Pipe
- \* Glue
- \* Stir Stick
- \* Cups
- \* Alumilite Synthetic Clay



To slush cast is to pour a fraction of the amount of resin into your mold (typically of a bigger piece that has a lot of volume) and coat the sides with it by rotating the mold while the resin cures. Once the sides are coated, you can back fill the piece or leave it to be hollow.



To start, pick an original that you would like to slush cast. This turtle is approximately 6"x4"x3" which would require a large amount of resin to fill ... approximately 40 ounces of resin.



Pick a piece of plastic or wood to use as a base for the mold box. You will want the base to be approximately double the size of the piece to make sure you have room to seal the mold box thoroughly to prevent leakage.



Make a mold box around the turtle. Ideally you want your piece to be 1/4' to 3/8' away from the mold box but no more than that to prevent wasting silicone rubber.



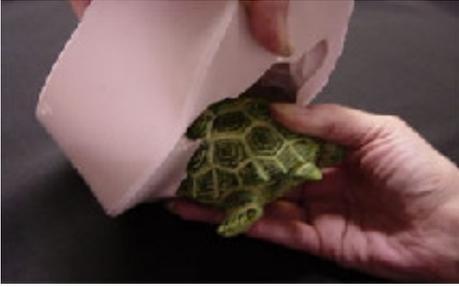
As you can see we fastened the turtle in the mold box off center to reduce the amount of wasted space. To eliminate the wasted space we cut a piece of Aluilite Corrugated Plastic and sealed it with Aluilite Synthetic Clay. We also sealed the PVC pipe to the base using the synthetic modeling clay.



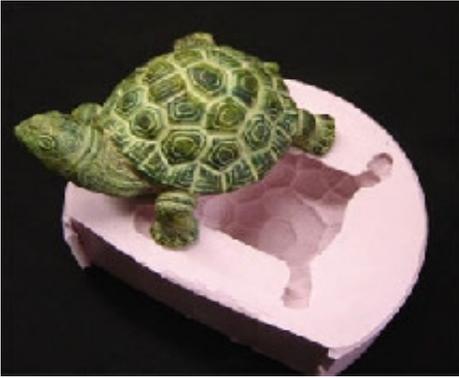
Once the mold box has been sealed, mix and pour the silicone rubber. We have chosen to use the Aluilite High Strength 3 silicone rubber because of its low durometer and high tear strength which will aid in demolding the piece.



Cover the highest point of the turtle by 1/4' to 3/8', then let the silicone cure according to directions.



Once the silicone rubber has cured, remove the rubber from the mold box, and demold your original.



Here you can see the silicone rubber and the perfect original unaffected by the molding rubber. The moldmaking rubber will not bond to your master. Silicone rubber only bonds to other silicone rubbers. Therefore, as long as your original is not made out of a silicone rubber, the moldmaking material will not bond to it or affect the original in any way.



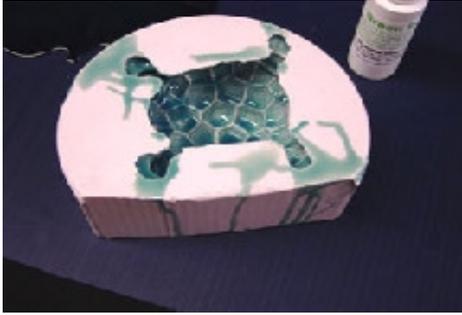
We recommend warming your mold prior to casting to ensure the thin section of the slush cast cures properly. Here we are adding a touch of green dye to the A side of Alumilite Resin to give us a light green finished color. Once we've mixed the green dye in thoroughly, we add the B side to the green A side.



Once we've thoroughly mixed the B side with the green A side, we slowly pour it into our mold.



This is where the slush cast term comes from. The amount of mixed resin is a fraction of the amount required to fill the mold. Next, we pick up the mold and continually tilt it, forcing the resin to coat all of the sides in the mold. We continue to slowly slush the resin around in the mold until the resin sets up (approximately 2 minutes with Alumilite Regular).



Once the resin has stopped flowing and has set up, you can set the mold back on the table. You can see where some of the resin spilled out of the mold by the feet of the turtle as we slushed the resin. Be careful not to get the resin onto your clothes or carpet. The other option is to put a flat piece of wood or glass that has been mold released over the back side to prevent it from spilling out. I would recommend slush casting it over a cardboard box, garbage can, or anything else that would catch the resin to prevent any unwanted messes. The green resin that has coated the outside of your mold will give you an exact replica of the surface of your original turtle.



Because the outside surface is so thin and fragile, we chose to use our 610 Foam to reinforce the turtle's skin and to fill the hollow void on the inside of its body. The 610 Foam expands 10 times the original liquid volume to give you a very durable 6 lb density foam backing.



Once we've mixed equal amounts of the 610 Foam, we poured it into our mold. Because of the fine detail and multiple layers of the the turtle's head, neck, body, and feet we slushed cast the foam a couple of times to make sure we had all of the surfaces in the mold covered.



Once the foam starts to rise, we simply put the mold back down and let the foam take full form inside the turtle's hollow green slush cast. To ensure a good bond between the Alumilite resin and the 610 Foam, we recommend pouring the 610 Foam within 5-10 minutes of pouring your slush cast layer. The sooner you pour one to another, the better the bond. They would still bond to one another even after waiting a long period of time, but the sooner the better.



Once the 610 Foam is cured (approximately 5 minutes), flex the High Strength 3 moldmaking rubber and remove your reinforced slush cast. Notice where the foam expanded out the bottom of the mold making a rounded bottom to the turtle. You can simply sand that down to make it perfectly flat or you could have used a flat piece of mold released glass or wood to lay on top of the mold as it was expanding to compress or not allow the foam to expand out giving you a flat bottom when you went to demold it.



Here you can see the original turtle along side of our slush casting that was backed with the 610 Foam. The original turtle on the left used approximately 40 ounces of resin, whereas the slush cast turtle on the right used 4 ounces Alumilite resin and 3 ounces of the 610 Foam. Therefore we cut the amount of resin used from approximately 40 ounces to 7 ounces.