Alternative flexible mold techniques

One part silicone caulk molds
Standard Waterproof Caulk 100% Silicone
Acetic Acid curing agent

+ Readily available at hardware and home improvement stores in 2-10 oz tubes.
+ Costs significantly less than tin or platinum cure silicones.
+ Rarely needs a release agent once cured.
+ Handles relatively high temperatures
+ Can be built to varied thicknesses
- Acetic acid (vinegar smell) lasts through the curing process
- Should not be considered food safe
- Depending on additives shrinkage can occur over time.
- Does not work well with plasticines containing sulfates.

Silicone caulk requires moisture to cure. If used on its own the outer layer will skin over sealing the underlying caulk from the necessary moisture. By adding non-oil based humectants like glycerin, the necessary curing can occur throughout the mass of the mold material. In water submersion methods glycerin is pulled from the dish soap. Strait from the tube, one part silicone is usually two thick for good detail retention. Naptha can be used as a thinning agent but leads to a greater degree of shrinkage over the life of the mold. The purpose of the acrylic paint is varied. It is used first as a visual signifier of a complete and uniform mix between two clear materials. By using different colors layers or part of each mold can be color coded. The paint also brings additional moisture into the silicone mix and can speed up the cure time.

Soap/Water submersion method
Works best for objects that are completely encapsulated by the molding material.
Does not work with plasticine. Soap breaks down the oil bonds.

Supplies

Bowl
Water
Silicone caulk
Dishwashing liquid-No sulfates or phosphates

Work in a well ventilated area

1. Fill the bowl with warm water, add a level teaspoon of dishwashing liquid and mix well. Avoid foaming by mixing slowly beneath the surface
2. Dispense silicone directly into the soapy water.
3. Use your hands to gather and briefly kneed the silicone into single mass.
4. Press and spread the mass of silicone, making sure to fully encapsulate the object.
5. Molds of an even thickness (approximately 1/8" – 1/2".) will allow for even shrinkage over the life of the mold.
6. Allow mold to cure overnight
7. Create mother mold as needed
8. Cut parting lines and pour cup.

Brushable/spatula method

Supplies

Mixing tray
Spatula
Brush
Naptha
Glycerin
Silicone caulk
Acrylic paint

1. Dispense enough silicone for the first mold layer.
2. Thin the mixture with naptha to a paintable consistency.
3. In the mixing tray add 2 drops of glycerin to each ounce of caulk.
4. Add 1-3 drops of acrylic paint and mix until a uniform color is achieved.
5. Spread the mix over your pattern.
6. As each layer begins to cure the next can be started (approximately 10 min)
7. Continue layering until the desired thickness is achieved.
8. Let cure overnight.