

# Cool Tools Ring Pellet Mold Instructions - Ultra Smooth Investment

## SAFETY FIRST!!!

- ❖ Do not breathe the investment powder. Investment contains silica and can cause silicosis over time if breathed. We recommend wearing a dust mask any time you mix investment.
- ❖ Do not pour unused or spent investment down your drain. The particles in the investment are heavy and will stick to your pipes and result in a concrete-like sediment that will lead to blockage. Instead, wipe out your freshly used mixing container with a damp paper towel and place in recycling bin, or rinse off your mixing tools outside.

## Casting your own ring sizing pellets

- ❖ Your ring pellet mold is ready to use. Simply unwrap it, mix your investment and pour. A release agent is not required. Casting investment is normally measured by weight, but is not necessary for our purposes. Instead, we will measure by volume. Before you measure the powder, stir to fluff it up.
- ❖ I use ordinary kitchen tools for making the pellets: a Pyrex 1 cup measure to mix the investment in, a small spoon to stir, a regular set of measuring spoons to measure the water, and a dry measuring cup for the investment.
- ❖ **BASIC RECIPE**  
This recipe makes a full set of pellets from size 4 through 12. If you want to pour select sizes, reduce the recipe proportionally for the number of pellets you wish to cast. You can pour the pellets to the top of the mold for wide rings or halfway for thin rings to save even more.

In a 1 cup glass container place:  
1T plus 2 tsp water  
Add 1/4 cup plus 1 tsp investment powder

Stir until smooth and creamy (about 1 minute). If you find lumps, mash them with the back of the spoon. Pour into mold cavities. Let the mold sit undisturbed until set, at least 30 minutes. The actual time needed for the investment to set up depends upon the humidity in your area when you pour. When humidity is low, you can de-mold in 25 minutes. When humidity is very high, it can take up to 40 minutes to set up.

De-molding is easy. If done properly, all pellets will come out clean and smooth. If pellets break, they are not ready to demold. Each pellet needs to be pressed out individually. Turn the mold over and place both thumbs behind the pellet and press while you flex the mold slightly outward, repeat this motion a few times for each pellet.

## Using your ring sizing pellets

- ❖ Make your ring 2 to 3 sizes larger than you want it to end up. When ready to fire, place the pellet that is the size you want the ring to be into the ring and fire. Allow the fired ring to cool completely. When cool, place the ring in a container of water to dissolve the pellet. You can assist the dissolving by poking at the pellet with your fingers. Do not quench the ring when hot! If the pellet is quenched while hot a potentially dangerous thermal shock can occur.

## Caring for your mold

- ❖ Your Ring Pellet Mold will last for years if well cared for. Do not leave your ring mold in direct sunlight. When not in use, wrap the mold in plastic cling wrap or place it back in its original box or in a plastic container with a tight fitting lid. Do not wrap in paper or leave sitting on paper. Paper will leach the oils from the mold and cause it to dry out and shorten its useful life.



# Cool Tools Ring Pellet Mold Instructions - Silica Free

## IMPORTANT!!!

- ❖ Do not pour unused or spent investment down your drain. The particles in the investment are heavy and will stick to your pipes and result in a concrete-like sediment that will lead to blockage. Instead, wipe out your freshly used mixing container with a damp paper towel and place in recycling bin, or rinse off your mixing tools outside.

## Casting your own ring sizing pellets

- ❖ Your ring pellet mold is ready to use. Simply unwrap it, mix your casting powder and pour. A release agent is not required. Before you measure the powder, stir to break up any lumps.

- ❖ I use ordinary kitchen tools for making the pellets: a Pyrex 1 cup measure to mix the investment in, a small spoon to stir, a regular set of measuring spoons to measure the water, and a dry measuring cup for the casting powder.

- ❖ **BASIC RECIPE**

This recipe makes a full set of pellets from size 4 through 12. If you want to pour select sizes, reduce the recipe proportionally for the number of pellets you wish to cast. You can pour the pellets to the top of the mold for wide rings or halfway for thin rings to save even more (cut the recipe in half for this).

Prepare your mold by misting with a soapy water solution. Add a few drops of Dawn dishwashing soap to a small fine mist spray bottle (4 oz is perfect). Spray the mold lightly with this solution. The mold should just be misted, not pooled with the water. This will allow the pellets to release from the mold. Next, mix your casting powder.

In a 1 cup glass container place:

3T water

Add 1/3 cup casting powder

Stir until smooth and creamy. If you find lumps, mash them with the back of the spoon. The mixture should be the consistency of thin batter. If the mixture is too thick, add additional water, 1/2 tsp at a time until the consistency is right. Too much water will result in pellets that do not set up properly or are not smooth. Be cautious in adding additional water. Pour into mold cavities. Let the mold sit undisturbed until set, at least 2 hours.

De-molding is easy. If done properly, all pellets will come out clean and smooth. If pellets break, they are not ready to demold. Each pellet needs to be pressed out individually. Have a soft cloth ready to receive the pellets so they don't chip. Turn the mold over and place both thumbs behind the pellet and press while you flex the mold slightly outward.

## Using your ring sizing pellets

- ❖ Make your ring 2 to 3 sizes larger than you want it to end up. When ready to fire, place the pellet that is the size you want the ring to be into the ring and fire. Allow the fired ring to cool to the touch. When cool, place the ring in a container of water to dissolve the pellet. You can assist the dissolving by poking at the pellet with your fingers. Do not quench the ring when hot! If the pellet is hot and the water is cold, a potentially dangerous thermal shock can occur.

## Caring for your mold

- ❖ Your Ring Pellet Mold will last for years if well cared for. Rinse in warm, soapy water after each use. Do not leave your ring pellet mold in direct sunlight. When not in use, wrap the mold in plastic cling wrap or place in a plastic container with a tight fitting lid. Do not wrap in paper. Paper will leach the oils from the mold and cause it to dry out and shorten its useful life.

