### Project X .925 Sterling Silver Clay

### **Clay Revolution, LLC**

#### Working with Project X .925 Sterling Silver Clay

Project X .925 Sterling Silver Clay is crafted by expertly combining microscopic metal particles in the precise proportions of 92.5% silver and 7.5% copper, mirroring the composition of traditional sterling silver. These metal powders are carefully blended with water and binder, resulting in a material that exhibits the same pliability as modeling clay. Utilizing simple tools, users can shape objects according to their preferences. The formed pieces are subsequently dried and may undergo further refinement as necessary. In the next step, the objects are subjected to a firing process that eliminates water, burns off the binder, and effectively melds the particles together, resulting in solid metal structures. The end result bears remarkable similarities to cast sterling silver, allowing for polishing, soldering, and patination, just like any other precious metal.

## Firing

Due to the presence of copper in the alloy, Project X .925 Sterling Silver Clay necessitates special firing procedures. To achieve optimal results, you must have a controllable kiln, a stainless steel mesh shelf, a stainless steel firing container, and activated coconut carbon granules. During the firing process, it is advisable to ensure proper ventilation to maintain a conducive environment.

#### **STEP ONE**

To initiate the solidification process and eliminate the binder, place your work on a stainless steel shelf in the kiln. Ensure that the work is thoroughly dry before proceeding. Use a Ramp of 1500°F/815°C, Target Temperature Target 1000 °F/537 °C and maintain this temperature for a duration of 15 minutes. For thicker pieces, additional time may be necessary.

## **STEP TWO**

Once the work has cooled sufficiently to be handled safely, proceed to transfer it into a firing container that contains a layer of activated carbon measuring half an inch (10 mm) in thickness. Ensure that the pieces are positioned at least ¼ inch apart to allow for proper heat distribution. Sprinkle an additional layer of activated carbon over the pieces, creating a layer approximately half an inch deep (10 mm). If you have multiple pieces, it is possible to fire them in layers; however, it is crucial to provide a half-inch (10 mm) layer of carbon in between each layer.

Place a lid over the firing container, then use a Ramp of 1500°F/815°C, Target Temperature 1500 °F/815 °C, and maintain this temperature for a duration of 1 hour. Once the firing process is complete, allow the work to cool while it remains buried within the carbon. This method not

only ensures safety by preventing potential burns, but it also preserves the clean white color of the Project X .925 Sterling Silver Clay.

## ALTERNATIVE

To reduce potential handling issues, it is possible to achieve STEP ONE in the stainless steel firing container. Place the piece ontop of a layer of acivated coconut carbon measuring half and inch (10mm) in thickness. Use a Ramp of 1500°F/815°C, Target Temperature Target 1000 °F/537 °C and maintain this temperature for a duration of 25 minutes. For thicker pieces, additional time may be necessary.

Once the work has cooled sufficiently to be handled safely, fill the container with the carbon and proceed to STEP TWO as normal.

# Finishing

Project X .925 Sterling Silver Clay can be shaped, smoothed, refined, and polished using standard jewelry techniques such as filing, sanding, tumbling, and polishing. Similar to other precious metals, any filings or scraps can be sent for refining. If you desire a dark patina, you can achieve this by utilizing liver of sulfur or a specialized oxidizer.

## Health and Safety

While it is rare, some individuals may experience skin rash or itchiness after contact with the clay. If you encounter any adverse reactions, it is important to discontinue use and consult a physician. After handling the clay, remember to wash your hands. Refrain from ingesting the clay and keep it out of reach from children. Additionally, exercise caution to avoid burns during the handling and firing processes.