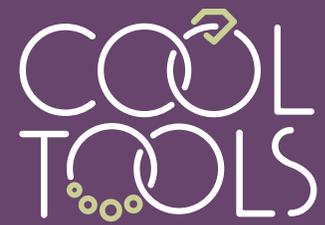


White COPPRclay™ Overview & Firing Guide



WHITE COPPRclay created by Metal Adventures is easily sculpted, molded, carved and formed. White COPPRclay presents a silvery-gray color after firing that can be oxidized, textured or highly polished to a bright shine.

Like any clay, it's highly workable but it also dries quickly. You'll notice the clay stiffening and cracking when it begins to dry. Refresh the clay periodically with a small amount of distilled water.

Note: WHITE COPPRclay is composed of copper and nickel.

Making Slip (Paste)

Simply mix tiny pieces of clay (filings, small dried or wet pieces etc) with distilled water until you reach a paste consistency. A mini palette knife is great for this. Keep your slip stored in a sealed container. Paste is ideal for adding details and findings to your designs, making repairs, adding parts and pieces in the wet stage, greenware and post firing.

Drying the Clay

Once you've finished your piece, you will need to dry the clay before firing it. Gently place the piece on a warming surface such as a metal clay hot plate or in a dehydrator. Once dry, you'll notice the clay is leather hard, making it very easy to add finishing touches such as filing, drilling, sanding and carving. Once White COPPRclay is fired, it's much more difficult to finish, so take advantage of this pre-fired stage to do as much of your detailed finishing work as possible.

Firing

To reduce oxygen, the piece(s) must be embedded in activated carbon during firing. Firing White COPPRclay is a two-step process that uses low heat to vaporize the binder, then high heat to sinter the alloy.

Phase 1

1. Place dried piece(s) on a stainless steel mesh rack inside the kiln.
2. Fire with a ramp of 500°F/hour (270°C/hour) to 600°F (320°C) and hold for 10 minutes.

Phase 2

1. Spread a layer (1/4" minimum) of activated carbon on the bottom of a stainless steel firing container.
2. Place the piece(s) on top of the layer (piece can be cool or still warm); if firing two or more pieces, leave at least 1/2" between pieces, more if the pieces are large.
3. Pour another 1/2" layer of activated carbon granules on top of the piece(s). If you are firing many pieces in layers, make sure there is at least 1/2" of space between the vertical layers as well.

Note: For best results, do not fire more than 100 grams of clay at once; overloading may cause poor sintering.

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Phase 2 Continued

4. Put the stainless steel lid on the firing container and place it in the kiln on stilts to allow good heat circulation. Note: Most kilns are cooler in the front near the door. Compensate for this by placing the pieces closer to the sides and back of the firing container. If you are have top-loading kiln, there is no need to adjust.

5. Fire at full ramp speed to 1850°F (1010°C) and hold for two hours.

White COPPRclay can be combined with COPPRclay to produce interesting mixed-metal patterns and designs! Fire according to the same schedule outlined above.

Finishing

Once fired, the White COPPRclay piece is a solid piece of metal. As with other metals, it can be sawn, drilled, sanded, patinaed or soldered using traditional jewelry tools and materials. Keep in mind that many finishing techniques will be easier to perform at the dried, pre-fired stage. For a brown to black patina we recommend using Cool Tools Patina Gel.

Safety

Though rare, it is possible for some individuals to experience some sensitivity to White COPPRclay. We recommend wearing a dust mask while working with activated carbon.