



# Welcome to the exciting world of Precious Metal Clay

## Working With Precious Metal Clay

Precious Metal Clay (PMC™) combines microscopic particles of metal with water and a nontoxic binder to create a material that can be worked as easily as modeling clay. Objects can be made with simple tools, then they are dried and heated in a small kiln or with a torch. This drives off the water, burns away the binder and fuses the particles into solid metal.

Tools for shaping PMC™ include rubber stamps, cookie cutters, children's toys, and many household items like pens, playing cards, toothpicks, and combs. A piece of plastic or glass makes a convenient waterproof work surface. Avoid aluminum foil and aluminum tools.

All versions of PMC™ are ready to use directly from the package. Pull off only what will be needed immediately then rewrap in plastic so it doesn't dry out. Apply a thin layer of olive oil to your hands and tools before working. Avoid drafts and hot lamps that will dry out the clay as you work. At the end of a work session, add a few drops of water and rewrap the clay in plastic film to rejuvenate it for the next project. Collect your scraps in an airtight container and add a little water to make slip.

PMC™ can be cut, textured, layered, and shaped to create a range of forms limited only by your imagination. Use water to seal joints and to smooth surfaces, but be careful not to add too much.

Most artists do their work when the PMC™ is soft and pliable, but another technique is to create a general form, then refine it after the clay is dry by filing and carving. Set pieces aside to dry or use a hair dryer, lamp, or warming tray to speed initial drying.

When the moisture and binder are removed during the firing, PMC™ shrinks proportionately. PMC+ and PMC3 shrink 10–15%; All versions and styles of PMC™ are compatible—always fire for the longer/hotter style.

## Setting Stones

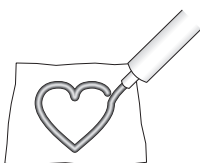
Laboratory-grown gemstones, ceramic shards and some glass components can be fired in place in PMC™. Work as usual,

but press the ornament into the clay, pushing it deep enough that the clay curls over the top. Remember that the clay will shrink, so set the stone deep enough that a lip will remain above the stone even after the piece shrinks.



## Using a Syringe

This style of PMC™ has been formulated to create a material that can be extruded through a nozzle. After firing, Syringe PMC™ is 99.9% fine silver, just like all other versions of PMC™. Snip off the tip of the syringe and press the plunger to start the flow of the clay. Wipe the first bud off the tip, then position the nozzle just above the place you want the thread to start. Press the plunger with a smooth, even pressure as you allow the thread to sag into the desired location. When wrapping an object with Syringe PMC™, use a looping trail to provide for shrinkage. It is possible that air will be trapped between the base of the plunger and the PMC™; this is normal. As with other forms of PMC™, keep the container sealed, and use promptly for best results.



## Using Slip

Slip, also called paste or slurry, is a form of PMC that has a brushable consistency. Like the other versions, this can also be used with all forms of PMC, and after firing, it is 99.9% fine silver. Use slip to glue parts together, to fill cracks, and to create interesting surface textures. You can create an object by building up layers of slip, for instance on a burnable core. Slip is also used to capture organic textures, for instance by painting it on a leaf.



## Firing

PMC™ can be fired in any kiln that will hold the correct temperature for the required time. A small programmable kiln is ideal. Set the work on ceramic bisque tiles, soft brick, or soldering pads. **Use in well ventilated area or with exhaust fan.**

Objects with metal implants, glass, or gemstones might mandate the minimum firing schedule shown here, but whenever possible fire all versions of PMC™ to the highest recommended temperature for the longest recommended time. To avoid the potential for a burn injury it is safest to allow work to cool before removing it from the kiln.

Silver			Time*
PMC+	1650°F	900°C	10 min
PMC+	1560°F	850°C	20 min
PMC+	1470°F	800°C	30 min
PMC3	1290°F	700°C	10 min
PMC3	1200°F	650°C	20 min
PMC3	1110°F	600°C	30 min
<b>Gold</b>	Same as PMC+ or		
22k	1290°F	700°C	90 min

\*Minimum times; longer is OK

## Finishing

After firing, PMC™ is solid metal that can be sawn, drilled, sanded, soldered, or enameled using conventional jewelry tools. Typical finishing involves hand burnishing, brass brushing, or polishing papers. Soldering on PMC+ and PMC3 is very similar to soldering on wrought fine silver.

## Safety

Though rare, it is possible for some individuals to experience skin rash or itchiness after contact with PMC™. If you have a reaction, discontinue use and consult a doctor. Use care to avoid burn injury. Do not ingest. Keep out of reach of children. Wash hands after use.