



MITSUBISHI MATERIALS
TRADING CORPORATION

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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.

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. Ventilation is recommended during firing.

	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.
Gold 22k	Same as PMC+ or 1290°F 700°C			90 min.

* Minimum times; longer is OK

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.

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, brassbrushing, or polishing papers. Soldering on PMC+ and PMC3 is very similar to soldering on wrought fine silver.

Safety

Tough 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 physician. Wash hands after use; do not ingest and keep out of the reach of children. Take care to avoid burn injury.