

# POLYMER CLAY BASICS

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All clays must be conditioned before use, no matter how soft. FIMO Soft can easily be conditioned by hand or in a clay dedicated pasta machine. FIMO Classic may need a bit more work before putting it into a pasta machine. If the clay seems crumbly after trying to roll a thin slice through the largest setting your machine, here's some tips to conditioning easier:

- Slice the block into the thinnest sheets you can with a clay blade. It may help to cut the block in half before slicing into sheets. Starting with one sheet at a time, roll over it with an acrylic rod using very firm pressure on a smooth, ceramic work tile. Fold the clay over onto itself and repeat 3-5 times until the clay begins to soften. You can now continue to condition with your hands or through the pasta machine until smooth and pliable.
- To make conditioning firmer clays even easier, place wrapped blocks on a zip bag filled with rice or barley. Microwave the bag for 30-45 seconds. The clay will stay warm for up to an hour (Never microwave your clay!). Unwrapped clay can be set on the bag with parchment paper in between the two. Flip the clay over every few minutes until it begins to soften. Do not overheat the rice to keep it warmer longer. This can cause the clay to begin curing prematurely and ruin it. The rice/barley should feel warm to the touch through the bag. If it feels hot, place a thin towel or oven mitt between the clay and the bag to insulate some of the heat.
- You can even sit on wrapped bars of clay or put them in your pocket to warm before conditioning.

A smooth ceramic tile is the best work and baking surface. A piece of deli/parchment paper can be placed between clay and tile to prevent shiny spots to develop during baking. Since paper can curl when cooling, remove thin, flat or light pieces of clay from the paper immediately after baking and before cooling. If the piece of clay you baked is left on paper and it has curled, reheat the clay in the oven for a few minutes. Immediately after removing it, gently flatten it against a cool tile for several minutes. You can use a heavy book to keep the clay flat while you apply pressure with your hand.

Never leave uncured clay on a painted, varnished or lacquered surface. Once the clay is baked, it is inert and cannot harm furniture. Polymer clays should never be used for projects that come in direct contact with food. Even though polymer clay is non-toxic, kitchen tools used for clay use should be dedicated for clay or craft use.

Bake all polymer clays at a minimum of 20 minutes for every ¼" inch of thickness. Always follow the temperature and time recommendations for baking temperatures, listed on the package. An oven thermometer is a must to prevent burned or under-cured clay. I recommend two or three thermometers to ensure that even these are correctly calibrated. If you have two thermometers that show the same temperature, you will know they are accurate. It will require a third thermometer if the two you use don't match. When you find two that match or within a few degrees of one another, you can be confident that your temperature is as accurate as you need for proper clay curing. Most ovens are off and some even fluctuate every time you use them from the temperature setting. Multiple thermometers are the best investment you can make in your clay work.

Always preheat your oven before baking. Clay should not be any closer than 2-3 inches from the heating elements to avoid color shifting (darkening) or burning. Even at the correct temperature, clay that sits too close to the heating elements may overly darken or scorch. You cannot over-bake clay if the oven temperature is correct.

Polymer clay is tested and certified to be non-toxic. Some people have concerns that baking clay may leave a residue in the oven and are not comfortable with the idea of baking food in the space. There has never been any proof that polymer clay baked in the same oven as food poses any health risks. However, it's always best to use caution whenever working with art materials. If you do not have a dedicated baking oven for polymer clay, here are a couple of safety precautions you can use:

- Wipe the walls with oven cleaner after every clay baking.
- Create a baking chamber. Use an old roasting pan with a lid to bake your clay in. If the clay is too tall to bake with the lid on, tent the pan or baking sheet tightly with aluminum foil. When using a baking chamber, allow it to preheat along with the oven in order to bring up the internal temperature. Use oven mitts to prevent your hands or arms coming into contact with the sides or edges of the pan when placing the clay inside or removing it after baking.

Let clay cool completely before handling. While hot, even the strongest clay can still be soft and brittle.

After working with clay, clean hands thoroughly before handling food. Rub a pumice-based waterless hand cleaner or hand sanitizer over hands followed by water. Finish with a soap and water washing to remove all traces of clay residue. Baby wipes work well to clean hands between clay colors.

### **Lisa Pavelka's Top 10 Polymer Clay Tips**

1. Always, always, always bake your clay with an oven thermometer! Why go to all of that work to create a thing of beauty only to find out your oven is running too hot? It's the best few dollars you'll ever spend. It also is great for making sure a class or friend's oven is correctly calibrated before use.
2. Use a smooth ceramic tile for your work and baking surface. They don't scratch, they're easy to find and inexpensive. They go straight from your worktable to your oven.
3. Work on waxed deli sheets when you don't wish your clay to stick to your work surface. These are commonly found at warehouse grocery stores and restaurant supply stores and may be found under names like "waxies or patty paper" too. They also make great stamping and powder masks on your clay. When handling a piece of uncured clay, tear a small piece of deli sheet and place under your fingers to prevent leaving a fingerprint.
4. Always begin conditioning and working with the lightest colored clays first, whenever possible. This will help prevent color contamination. Clean hands often between colors with a baby wipe. For stubborn residue, rub a dab of hand sanitizer on your palms and fingertips before wiping with a baby wipe. For final cleanup, wash with a pumice-based waterless hand cleaner followed by soap to remove all traces of clay residue.
5. Use Armor All™ or STP Son-of-a-Gun™ automotive protectant spray to prevent clay from sticking to molds, rubber stamps, plastic texture plates and acrylic rollers. Spray a small amount on the clay and spread with your fingertips and not on the stamp directly. This ensures a fine, even coating on the entire surface of your clay for better results.
6. Keep your clay blades sharp and extend their life by sanding with 600 or 800 grit (automotive- grade wet/dry sandpaper). Fold a small square of sandpaper in half (about 2" x 2"). Hold the folded sandpaper inside of a piece dishwashing sponge for safety and slide the paper back and forth over the edge of the blade to clean and sharpen. Make sure to turn the blade over and do this on the other side. This will clean residue from the blade and sharpen it at the same time.
7. Camouflage surface defects such as fingerprints and nail marks by stippling clay with a texturing tool. Ball tip styluses are great for creating a spoon carved look. Try other items such as the end of a retracted ballpoint pen or coffee stirrers for interesting circle patterns. Rummage through the junk drawer for interesting items including button, screw heads and more for making interesting texture treatments, even when you're not hiding surface imperfections.
8. Separate the ends of millefiori canes by color families (i.e. purples, blues, greens, etc.). When you've accumulated a large amount of clay in these colors, mix them together through the pasta machine to create a whole new color.
9. You can cover almost anything with clay and bake it: metal, paper, chipboard, wood, glass, and even some plastics. If you're unsure if an item is safe for baking, make a template of the surface to be covered. Build the clay veneer on a ceramic tile and use the template to trim the finished clay piece to size. After baking and cooling, carefully slide the clay blade under the veneer to remove it from the tile. Attach to the surface to be decorated using a 5-minute setting two-part epoxy.
10. Recycle old jewelry findings by removing the existing stones or cabochons from the metal settings. Make a new piece to glue into the old settings for a completely new and updated look. Many centerpieces can easily be formed over scrap clay and used to make the new clay insertion.

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