



**Resins:**

Types of resin recommended:

- 5 minute epoxy
- Castin Clear Epoxy
- Ice Resin Epoxy

**Other materials needed:**

- receptacle (your piece)
- freezer paper, wax paper and or plastic wrap
- sm cup
- popsicle stick
- inclusions
- glue or decoupage sealant
- colorant
- fan/ventilation and mask
- bbq lighter and small vibrator
- Attack for cleanup or removal

1. Prepare your finished piece of work (receptacle) for the resin by cleaning it with alcohol.
2. Set up your work area. I like to use Freezer Paper and tape it down to my work surface. This protects the area in case of a spill and also provides quick and easy cleanup.
3. Place your piece on a hard surface that can be easily picked up without disturbing your resin. An acrylic sheet, 2.25" square, is perfect for this.
4. Prepare your inclusions. If it is a picture, the paper will discolor if not first sealed with either packing tape, decoupage glue, or sealer. Make sure you get the edges of the paper.
5. Decide on the colorants you will use. Alcohol ink and resin colorants are ideal. However, many like to also use small amounts of acrylic paint and spices. Remember to use these sparingly as the resin will darken once inside the receptacle.
6. Mixing visually is possible but I always recommend being as accurate as possible. Therefore, I use a scale. Cover the scale with plastic wrap to avoid drips and spills.
7. When mixing part A with part B, use care not to whip the resin creating bubbles. Folding the resin for 2–3 minutes is best.
8. When pouring into your receptacle you'll minimize bubbles by pouring onto a popsicle first, and letting that then run into the receptacle. Fill it to it is just below the top.

9. After pouring, place a small hand-held vibrator under the acrylic sheet and allow the vibration to bring the bubbles from the bottom to the top of the mold or receptacle
10. Move the piece to a small container filled with sugar or sand. This will allow you to level the piece before adding the final amount to the top with drops from a toothpick. This will keep additional bubbles to a minimum. As the pot life expires, you can continue to add more to make the resin dome. The difference between doming resin and regular resin is that a thickener has been added. You can dome any resin you just have to wait for the resin to thicken or the pot life begin to expire (20–25 minutes into the pour).
11. Using a bbq lighter, run the flame over the resin to pop any surface bubbles that have not yet popped but are at the surface. You do not need a lot of heat. Actually hot breathe will work just as effectively, but be sure to pull your hair back!
12. The pot life is normally 30 minutes after mixing. The exception would be for 5 minute epoxy. Check the mfg instructions for this information. At this time you can speed cure the resin if you have a dehydrator with a temperature mechanism. You do not want to apply more than 115F heat to the resin and never before the pot life has expired. If you do not need to speed cure your resin, allow it to cure normally over a 24 hour period.
13. If your resin runs over the edge or you need to remove it, Attack is the product you will need. Remember that once you open it, you will want to add marbles to the can to keep the air out of the can. If you do not, the Attack will evaporate and it will be only good for a short time.

***Tip:***

- If you use 5 Minute Epoxy your piece will take on a natural yellow hue. It is not clear and will not stay clear.
- Ice Resin has the least amount of smell but ventilation is required and at minimum you should always have cross ventilation. Eye protection and gloves are recommended.



## Enamels:

Types of enamels recommended:

- Thompson Unleaded Transparent & Opaque
- Fusemaster Unleaded Opaque Painting Enamels
- Reusche Unleaded Painting Enamels

## Other materials needed:

- penny brite & green scour pad
- yellow pages or magazine pages
- particulate mask (wear this)
- Klyr Fire
- sifters (make your own)
- trivet
- firing cloth
- firing rack
- masonry trowel or firing fork
- heat proof gloves
- torch or kiln
- safety shade 2.5 glasses (wear these when working with the kiln)
- paint brush, oil (clove/squeegee), turpentine
- rubber stamps and fun foam

## *To enamel on copper:*

1. If you are using transparent enamels you will need to clean them. This is a good time to turn on the kiln (RA= full, 1500F, 2hr HLD).
2. Organize your workspace by pre-folding magazine pages, get your mask ready, safety glasses, etc.
3. Dome your work if not already done. This will help with the counter enamel. Don't forget to anneal your metal first before doming.
4. Clean your metal with Penny Brite and a green scour pad.
5. Spray/Spritz Klyr Fire (optional) and sift on counter enamel.
6. Place in trivet and fire to at least an orange peel or full fuse.
7. Remove and cool. Allow firescale to pop off and try brushing the rest off. You can pickle the enamel at this stage if the enamel is unleaded or has been tested to be acid resistant. If not, then using sandpaper and water, remove firescale.
8. Sift on second coat and fire again in the trivet.
9. pickle and or sand again
10. take a file to the edges of the piece if any firescale remains that can pop off during firing and land on the front side
11. enamel the front side of the piece and place on the firing cloth on top of the firing rack and fire to a minimum of orange peel
12. remove from kiln and remove fire scale from edges

13. apply subsequent coats as desired

## *To enamel on fine silver or fired metal clay:*

The steps are essentially the same with the following notations:

- If your piece is 6 cards thick, you do not need to counter enamel.
- There is no need to pickle or file the firescale or oxidation off the metal as there will not be any. There is no alloy or copper in the silver which is what oxidizes.

## *Notes for torch firing opaque enamels on copper:*

- You do not need to wash the enamels.
- Fuel oxidizes the pigments and in turn mixes with the oxides contained in the metal adding a unique look to torch fired enamels along with its firescaled edges.
- Remember that the trivet, rack and tripods are all heat sinks, and with a butane torch you may not have enough heat to fuse the enamels. Try to minimize these tools if you are using a butane torch.
- Torch firing counter enamel results in a color shift. This is why I prefer either setting the piece so you do not see the counter enamel or use black enamel.
- Do not focus the heat on the top enamels, only from underneath the front.
- ventilation is essential for torch fired enamels

## *To Torch Fire Enamels:*

1. Spray/Spritz Klyr Fire (optional) and sift on counter enamel.
2. Place in trivet and then on a lightweight firing rack across two fire bricks (butane torch) or on a firing trivet if you have an oxygen/propane or acetylene torch.
3. Torch fire from beneath until you have a minimum of an orange peel fused finish.
4. Pickle or sand off firescale.
5. repeat for counter enamel as required
6. repeat removal of firescale
7. repeat for front side of metal as desired

## *Safety Tips:*

- Ventilation is always recommended when firing. You have less risk when working with unleaded enamels. Leaded enamels require a hooded ventilation system.
- Wear a minimum of safety shade 2 glasses when enameling and looking into a hot kiln.
- Wear a particulate mask when working with enamels especially when sifting or mixing.
- It's always best to work in a room that has cross ventilation.



**Colored Pencil:**

Types of colored pencils recommended:

- Verithin Prismacolor Pencils
- Premium Prismacolor Pencils

\*\*The high wax content in this brand is ideal. The was also makes it fantastic, in that with heat and turpentine, the colors with blend beautifully.

**Other materials needed:**

- sandpaper, sandblaster or flexshaft with grinding burrs
- penny brite & green scour pad
- liver of sulphur
- gesso (optional)
- heat burner
- turpentine or Turpenoid
- qtip or brush
- Nikolas spray

**To prepare the metal:**

\*\*the instructions below are for both milled metal and metal clay

\*\*metal clay requires less work

1. Sand the metal with 80–100 grit sandpaper and go in two directions at minimum. You can also sandblast the metal or use your flexshaft to abrade the surface with grinding wheels.
2. Texture the metal through hammering, rolling mill or if using metal clay imprint the texture prior to firing.
3. Clean the metal with Penny Brite and your green scrub pad. If you are using metal clay it's best to start this process when the item comes directly out of the kiln. Do not touch the surface and do not brush the surface. Leave the surface as it is out of the kiln.
4. Prepare a solution of Liver of Sulphur and patina your metal.
5. You can paint the surface with gesso or skip this step. I like using the gesso, but only apply it where I am putting the pencil. I also prefer black gesso. However there are lots of colors of gesso available, even metallic silver. You can also tint it with acrylic paint.

\*\*\*turn the burner on low to medium

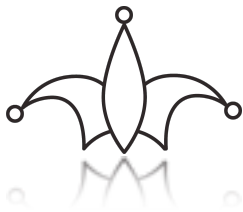
**To apply the colored pencil:**

\*\*work in a well ventilated studio when using turpentine.

1. Use the side of the pencil versus the tip as you will scratch the gesso.
2. Apply the color as smoothly as possible.
3. Using a brush apply a thin coat of turpentine to the surface of the color.
4. Place metal on the burner. The turpentine will aid the wax in the colored pencils, to blend effortlessly. Keep the heat low to medium.
5. Add more color and repeat with the turpentine and heat.
6. Once you reach the desired color and look then seal the piece with Nikolas Spray

***Tips:***

- It's always smart to wear a particulate mask when sanding anything.
- Use care when sharpening pencils as they are fragile



## **Faux Bone:**

This product comes in many forms:  
1/16", 1/8", 1/4", 1/2" sheet  
bracelet blanks  
ring blanks  
rectangle and circle blanks

## **Other materials needed:**

- faux bone peeler (or forming tool)
- inexpensive files
- skip tooth of faux bone blades
- jewelers saw
- adirondack inks
- shoe polish
- heat tool (embossing gun)
- sand paper
- resin
- stamps or marking tools
- craft knife, gouges, needle tools, etc

## ***Steps for Faux Bone:***

1. Load the skip tooth blade in the jewelers saw
2. Draw your design on the Faux Bone in sharpie marker.
3. Begin to saw out your shape, making as few turns as possible. If you have turns in your design try coming in from the outside edges.
4. File the edges or use the peeler/forming tool to bevel the edges
5. Sand the edges
6. If you want to bend any portion of the piece, gently heat it with the heat tool/embossing gun.
7. Scrape gouging tools, craft knife or other marking tools into the surface to impart knowledge and communicate your messages to the viewer.

## ***To color Faux Bone:***

1. Rub acrylic paint or shoe polish onto the surface and then rub it off with a soft cloth.
2. You can also create a very interesting look by dripping adirondack inks on the surface or use q-tips dipped in ink. This gives you unique color combinations
3. You can mix up resin in any color and pour it into grooves and indentation.
4. You can imbed epoxy putty as well.

## ***To refine the color applied:***

- If you have used adirondack ink, resin, or epoxy putty you will need to file this off and re-sand the surface.
- The backside of wet dry sandpaper works well to buff the Faux Bone.

## ***Other helpful tips:***

- You can drill holes and imbed findings with epoxy
- You can create fantastic bracelet cuffs and rings with Faux Bone.