



Crackle Experiments Tools & Supplies

The following tools & supplies are used in the 'Experimenting with Crackle Enamels' video. You will need a basic knowledge of enameling. Please see my 'Intro to Enameling' series for more information if you are new to the process. I use a kiln in this video. Crackles and the process I share will work with a torch, too. I've included recommendations for each product/tool below as hyperlinks. I am not an affiliate for any of the products or brands listed here.

Note: When a specific supplier is not identified in the list, most tools and supplies can be found at Thompson Enamels (thompsonenamel.com).

Supplies

- **Copper:** I prefer using 24 gauge copper for the samples I create in the studio. It's thin enough to use shears with and a good weight for testing the behavior of enamels on pieces like earrings for later production.
- **Enamels:** In the video, I'm using two 80-mesh colors (1319 Bitter Green and 1720 Mauve Purple). The crackle enamels come in clear (2008), white (1006), and black (1997)
- **Scalex/Amacote/Ball Clay:** This is a clay-based substance used to prevent enamel from sticking. It adheres to the enamel, so is not recommended to apply to areas you will display when the pieces is finished. Scalex is the Thompson Enamel version of the product. The competitor product, Amacote, is available at Rio Grande.
- **Catch Paper:** To sift enamel over so it can be put back into containers.

Tools

You will need an enameling kiln or a torch with a flame hot enough to fuse your enamel to the copper. The Sterno torch head and butane canisters work well for this process ([available on Amazon](#)). Smith Little torches can work on smaller pieces, or using a Paige tip for larger pieces. In my own studio, I use a Smith Silversmith with a size 0 tip for most torch-fired enameling work. ([Smith torches available at Rio Grande](#))

Basic Enameling Setup:

- **Firing Screen:** For the kiln, I prefer the screens with sides bent down. These act as a natural shelf allowing air to flow around the pieces. For the torch, I like to lay a heavy, flat screen on top of a tripod resting in a lazy susan pan (the same pan I use for soldering).
- **Firing Fork/Spatula:** to move items to and from the kiln or your torch setup.
- **Trivet:** Typical method of keeping enamel on the back of pieces from fusing to firing screens. In this video, I'm demonstrating how to use the Woven Fiber Kiln Disc. This does not apply to torch firing (i.e. you cannot have something blocking the heat from your torch). If you are torch firing, you can skip the steps where I'm showing how to apply Scalex to the back and talking about the fiber kiln discs.
- **40-mesh Sifters:** I'm using the 'Small' and 'Medium' sizes in the video. I mis-spoke and called them 80-mesh sifters.
- **Kiln Glasses:** The green 3.0 Ir filter lenses are suitable for kiln and torch use. I bought mine from Amazon [here](#).
- **Dust Mask:** Using an N95 particulate respirator is recommended.

- **Jar for counter enamel:** When enamels are cross-contaminated, I dump them into a jar dedicated for counter enamel. It isn't pretty, but is very useful for sample pieces and those where the back will not show.
- **Cleaning Agent:** You will need a way to clean the oxides from your copper after firing operations. Some people prefer using jewelry pickle. Penny Brite ([available at Amazon](#)) also works well. When I'm working on many pieces at a time, I like to use Scalex to coat the bare copper side, then follow up with 3M fiber wheels on my flex shaft to brush the pieces clean. In the video, I forgot to do this, so I ended up sanding them behind the scenes 😊
The goal is to clean the metal when you want to remove copper oxides.
- **Optional:**
 - **Woven Fiber Kiln Disc:** I called this a 'firing pad' in the video. If you're using a torch, you won't need this, but will need a trivet. They are available in a 3-pack at Rio Grande [here](#).
 - **Mica Sheet:** This works like a woven fiber kiln disc. Available at Thompson Enamel.
 - **Palette Knife:** I use this to move pieces from my work area to the firing screens/onto trivets/etc. I bought mine from Hobby Lobby as part of a painting set.
 - **2 Ounce Solo Cups and Lids:** I find these to be extremely useful in the shop. At my enameling station, I use them to hold small portions of enamel powders, Scalex, water for dipping, and so on.