



These notes accompany the Midwest Penturners Gathering Virtual Symposium of April, 2021.

- ❖ Three parts to this system:
 - UV resin
 - UV flashlight
 - UV safety glasses

- ❖ Shelf life of resin is virtually infinite as long as it is protected from light and temperature extremes. Store between 50 and 80 degrees, use between 60 and 75 degrees.

- ❖ Use a metallic tape as the base layer on brass tube if using a stamp or other object that does not cover the entire tube. Or paint the tube. Or affix solid materials using a non-water based glue. Make sure the embedded items are not too thick for the finished pen! There has to be a complete resin top finish on the final pen. For printed labels it is not necessary to use waterproof labels.

- ❖ Use a tube inserter, dowel rod, or similar to hold the tube and keep the ends free. Apply resin as a bead between 1/8" & 1/4" wide, then use UV light for 10-20 seconds to do a quick set of the material. This is NOT the final cure, just enough to keep it from running.

- ❖ Be sure that the overall depth of the resin is greater than the finished depth needed on the pen.

- ❖ When there is enough thickness, expose the entire tube to about 3-5 minutes of the UV light, or 15-20 minutes of BRIGHT sunlight. Make sure to rotate the tube so that everything gets exposed evenly. Test by trying to make a fingernail mark on the material. It should not make a mark if properly cured.
- ❖ The finished blank will feel waxy, or slightly tacky. This will lathe off. This is not a problem, but it can dry if left alone for a few days. While tacky do not leave it on a surface to which it could stick or damage.
- ❖ For the first passes on the lathe go easy and round off the high spots. Have the chisel enter carefully, and maintain a constant distance from the blank as it is turned down. Do NOT at this point let the chisel follow the hills and valleys on the blank. Once it is rounded, then proceed as for any other blank. Negative rake chisels are strongly recommended but not required.
- ❖ Polish using WET SANDING starting at 320-400 grit and going up as high as you want. Use Stone's Diamond Polishes, or MicroMesh or Zona with Hut Ultra Gloss, or any other preferred means. Do NOT use CA as a finish! No finish is needed; just polishing with fine abrasives. If using pastes it is not necessary to go beyond 80,000 grit. In many cases a high gloss will be attained at 4000 grit. Basically, polish as for any other plastic blank.
- ❖ Add some sparkle or color to the resin using any dye or colored mica products that are compatible with Alumilite. In other words, no water-based products. Pour a spot of resin onto cardboard or stiff paper, add colorants, mix, and then use a toothpick or craft stick to apply to the tube. Insure you

do not expose to a lot of UV light while you are mixing and applying.

- ❖ Never expose resin to UV light except for what should be cured.
- ❖ Always protect your eyes from the UV light.
- ❖ Make sure the ends of the blank are covered, to the depth needed to match the pen bushings.
- ❖ Wear Nitrile, not vinyl, gloves!

Product Links:

UV Resin

Berea Hardwoods

www.BereaHardwoods.com

Countertop pads (Chux), 23"x36" about \$0.32 each

NorthshoreCare.com: Item #1709

Negative Rake Chisels

Easy Wood Tools

Available at Rockler, EasyWoodTools.com, Woodcraft, and others

Diamond Polishing Paste

www.StonesPenBlanks.com

See this website for instructional video on the polish

Hut Ultra Gloss Polish

Woodcraft, Rockler, and others

Metal adhesive foils

Copper foil tape on Amazon:

Lovimag Copper Foil Tape #CFT-01

Search Amazon for other colors of craft foil tape