# Pen Finishing with Plexiglass

**By Les Elm**

I found this article on using Plexiglass for finishing pens on another site. Unfortunately there was no author attached, so I don't know who to acknowledge for this article. So I thought why not give it a try?

Through experimentation along with some trial and error this is what I have found that works for me. I am sure that others will find what works best for them when trying this application of plexiglass as a pen finish.

**A word of caution!!** Good ventilation is a must when making and applying the Plexiglass solution. Acetone and Acetone vapours very flammable! Do not seal the gallon can when making the solution! I just place the lid on top of the gallon can so the vapours can escape. I make up my solution where there are no ignition sources. Be sure to dispose of the applicator pads in a metal container in a well ventilated area!

First I make a thick solution of plexiglass by dissolving small pieces of plexiglass in Acetone. I break up enough plexiglass to cover the bottom of a new clean gallon paint can to a depth of 1-½ to 2 inches. I get new metal paint cans from a local paint store and used plexiglass from a sign supplier. Do not use plastic as the Acetone will eat away the plastic container. I pour in enough Acetone to completely cover the plexiglass. Over the next couple of days I stir the solution and add enough acetone to keep the melting plexiglass covered.

Once I have a batch of thick solution made I pour some of the solution into a new pint metal container and thin the solution with Acetone to the consistency of Thin CA. I pour this thinned plexiglass solution into a plastic squeeze bottle.

Once I have my blank turned down to required dimensions I sand from 400 through 1500 grit. I sand the blank length-wise between each grit to ensure there are no visible sanding rings. At this point I wipe the blank down with a tack cloth to remove any sanding dust and the wipe down with DNA with the lathe running.

Now I fold 1"x 5" strips of blue shop towel in four to make an application pad. With the lathe slowed down to 1800 RPM I soak the application pad with the solution. I apply the first coat moving quickly once along the length of the blank. I immediately place a puddle of solution on the same applicator pad and apply from the opposite end of the blank. I continue to apply 8 to 10 coats of solution alternating opposite ends. I found that doing this way helps to ensure and even coating of solution the entire length of the pen blank.

The application of the plexiglass solution has to be done fairly quickly before it has a chance to dry. Once I am happy with the final coat I will continue to let the lathe run for 1 to 2 minuets to allow the solution to cure.

Now I increase my lathe speed back to my normal turning speed and wet sand and polish from 1500 through 12,000 MM wiping the blank down between grits. I further polish the blank with Brasso and apply 2 protective coats of Brazilian Carnauba.

When finished the Pelxiglass finish looks and feels just like Acrylic and is just as hard and durable.

With oily woods like Cocobolo or Thuya Burl I apply one coat of Thin CA to seal in the oil, otherwise to plexiglass will never dry.

**Don’t forget that this process requires good ventilation and do your work well away from any ignition sources !!**