

Polyester Resin Ribbons

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Polyester Resin Ribbons For Casting

by Jay Pickens

First, let me say that I haven't a clue as to how other folks do this process. Seems that it gets to be a very "hush-hush" process by those who have done this for awhile. Because of that, I try to figure these things out and then pass the process on - be it right or wrong - it works! By doing this, the art of pen-making is shared with all, giving perhaps, few steps forward (without all the experimentation and time I have spent) and push the art ahead for those who wish to give it a try.

What you will need. . Or what I use. . .

First, to Wal-Mart, Target, (or wherever). Buy yourself a picture frame (cheap one), unless you have some glass pane available already. I bought a 16" x 20" frame. **BE SURE TO BUY A FRAME WITH GLASS and NOT PLASTIC GLAZING.** They have both available.

I mix all my PR in a 9-oz plastic tumbler. These are Crystal-clear, smooth, rigid containers. These are also available at Wal-mart, Target, any Supermarket, etc. My mix for making ribbons (or pouring them on the above size picture frame), is **4-OUNCES**.

I also lay onto the picture frame, (where the glass meets the wooden frame), a strip of masking tape all the way around. This prevents the resin from seeping under the frame, when poured onto the glass.

After pouring the clear Polyester Resin into your mixing container, add **WHITE** colorant, be it Acrylic Artist Paint (in a tube), or white PR colorant offered by PR suppliers. Just add some and start stirring. You want an **OPAQUE** white and that's all - **DON'T OVERDO YOUR COLOR PIGMENT - start with small dab of color.** Just take your time - nothing takes place until you add your catalyst. Now, you're ready to add your catalyst . . .

IMPORTANT:

PR casting offers **curing times** that are in some proportion to the **thickness** of the pour. I normally add 5-drops of catalyst per ounce of PR resin for my **normal molds** that are around 1" deep.

BUT...because of the ribbon pour is over glass, and it flows out to maybe 1/32 inch thick in some places, the heat generated through a **THICK** pour just isn't there. In past pours, I have only put in 5 drops/ounce in my ribbon pours. This can take up to 5-8 hours to get to the consistency to start slicing your ribbons away from the glass panel.

My plan is to use 10 drops per ounce next time and keep an eye on it (maybe every 30-minutes) to check its' "**stickiness on the surface**". And my guess is that even 20 drops of catalyst (per ounce of PR) would be ideal.

I would guess that it would be useable in maybe less than an hour (only theoretical at this time).

It's ready when the tackiness is still somewhat there, but it doesn't stick to your fingers as you slice it and pull it up from the glass. You have to be able to handle and bend it freely. Really sticking to the fingers just doesn't do the job (speaking from early experience!). If it's still that sticky, wait another hour and give it a try.

NOW, LETS TAKE A LOOK



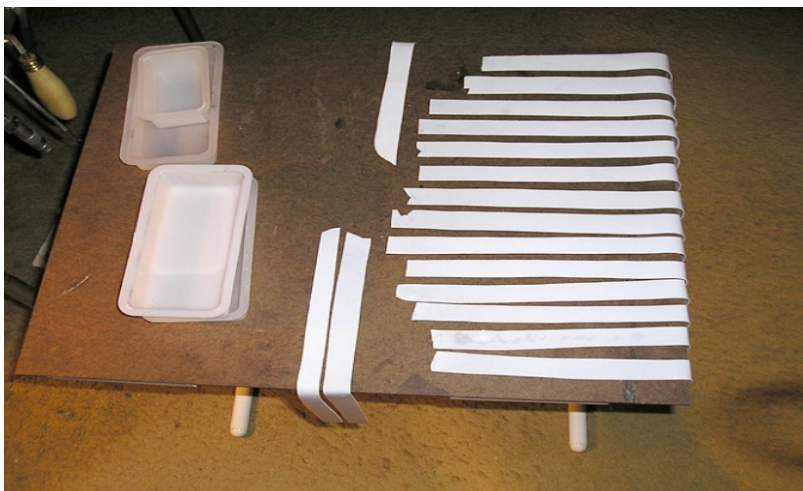
Here's how the pour should look. Just pour it into the center of the glass frame and when all poured, pick up the frame and tilt it in all directions so that it spreads as much as possible over the entire frame.

NOTE MASKING TAPE AROUND THE FRAME.



Cut your strips with a knife or single edge razor blade - about 7/8" wide. I just "eyeball" the width.

I seldom ever pour my molds up to the top, but rather about 1/8" below the rim (which is 1-1/8" deep). Any more and your additional PR ends up on the floor below your lathe.



Another view of the strips, ready to place into the molds.

I get comfortable by using a TV tray and sitting in front of a good television program, as I form the ribbons into the molds.



Here, I have filled four molds with Polyester Ribbon. It's flexible, but doesn't stick strongly to my fingers.

A 4-OZ POUR on your picture frame glass, will fill about 2 molds and maybe a part of the third one (at the density of ribbon I show at the left). You can put in more ribbon or less, your choice.

When the ribbon is totally cured (stiff, like Fritos and generally allowed to sit overnight). The colors are now ready to be mixed.



Flange of mold

I mix into two of the highball cups, (one color in each) - **4 ounces PR in each.**

Add color as you did for coloring ribbon. When you get the color you want, add 5-drops of catalyst for each ounce of PR, for a total of 20 drops for each 4-ounce mix.

Get to stirring immediately. Stir each with a different hand, if you can.

After 2-3 minutes, take a cup into each hand and pour into mold, however you wish - each time you learn something - and each time you might pour differently. It all looks GOOD! When thoroughly mixed.



If you use a Pressure Pot, get to it and give it the pressure. If no pressure pot, take the flange of the mold with your two hands and "tap" it down on to your counter-top (or something sturdy) several times and it will pretty well cause any trapped bubbles on the bottom, or stuck between ribbons, to be jarred loose and float to the top surface of your mold.

That's what I did long before I got a pressure pot and it seemed to work pretty well.

Then just set aside and let it cure. At left, after fully cured, go to band saw (or whatever) and cut your strips for your blanks. And then drill and glue tubes as you would for any blank.

The fun of this pouring into ribbon is that you can do it anyway you wish - and regardless, the outcome is always unknown - but is useable and looks good. What could be better?

In time you'll experiment by (after the two colors are poured) grabbing a toothpick or paper-clip and grabbing one color and then transferring it to the other color and giving it a little stir or "punching it" down into the contrasting color. Just do whatever you like - it's really quite an adventure, with each "pour".

ENJOY!!!

Jay Pickens - 2/2006

Here are looks you can expect - but with a little practice, you'll do much better!

