

Guidelines for Using Epoxy - Marilyn Campbell

West System Epoxy

2 Parts: Resin 105

Hardener 205 fast 20 min. working time at 70 F
206 slow for use in warmer temperatures

Mixing:

The correct ratio is 5 parts resin to 1 part hardener. West System sells pumps that dispense the correct ratio and are well worth the price. Even if the required amount of epoxy is less than the set quantity dispensed by the pumps, the measuring of smaller amounts is made easier with the pumps.

Fillers:

The fillers are what make epoxy workable. West System sells a range of fillers suitable for a variety of uses; high density which cures to a strong, hard-to-sand plastic for applications requiring great strength; and low density, easily sandable for more decorative purposes.

The two I use are: 407 Low density Filler – easily sanded yet strong enough for lightweight structural applications. Use this filler in “sculptural” work to join pieces together.

410 Microlight – very easily sanded, ideal for filling small voids, decorative purposes. Can be colored because of its light pigment. Use this filler for decorative banding on bowls and platters.

Use a dust mask when mixing in the filler – the dust is very light and easily becomes airborne. Add enough filler to achieve the desired consistency. This is described in “food” terms such as syrup (runny), mayonnaise (slight slump) or peanut butter (stiff). Choose your consistency according to the use it will be put to. For example, use “peanut butter” to prevent epoxy from running or drooping.

Colors:

Because West System was designed for boats, it offers only a few pigments, white, tan and gray. So be inventive. Any powdered pigment will mix in successfully.

*Earth Pigments - are very natural, earthy colors in tones of brown, green, yellow, red and black.

Available from Lee Valley at www.leevalley.com My favorite.

*Tempura paints – the powdered kind that children use. Usually bright primary colors.

*Liquid Plastic Enamel Paint - I have also had good results with this. I am careful to use this for strictly decorative uses as pigmentation with paint results in a softer material. It also requires several days to fully harden up. Use only enough to achieve the desired color. The addition of paint makes it very easy to turn.

Application Methods:

For many jobs, epoxy can be applied simply with a spatula. However, when applying to a void or groove it is much easier to use a syringe. These can be purchased at farmer's outlets, drug stores or ask your veterinarian. With a popsicle stick it is not difficult to get the epoxy into the syringe tube and the application is cleaner and more accurate with this method. Voids are inevitable. I simply back-fill them after turning and before sanding.

Tips for Using Pigmented Epoxy:

* Seal gluing surfaces with plain epoxy first to prevent pigmentation from bleeding into the grain.

* If applying a decorative band of colored epoxy, keep the work chucked and complete all work, including sanding, on the epoxy first, then finish turning the wood. This will keep the wood grain free of pigment dust.

* Powdered pigments tend to make the epoxy very hard and therefore more difficult to turn.