

Table top applications

By J.R. Watson

Issues past

Here is an article we get a lot of requests for. It first appeared in 1998 in *Epoxyworks* 11.

If Mini-Pumps pump too slowly, you can mix the epoxy by volume. Refer to the hardener label for the correct volume mix ratio. When working with large volumes of mixed epoxy, keep in mind the shorter pot life and risk of exotherm. Use a slower hardener, preferably 207 Special Coating Hardener.

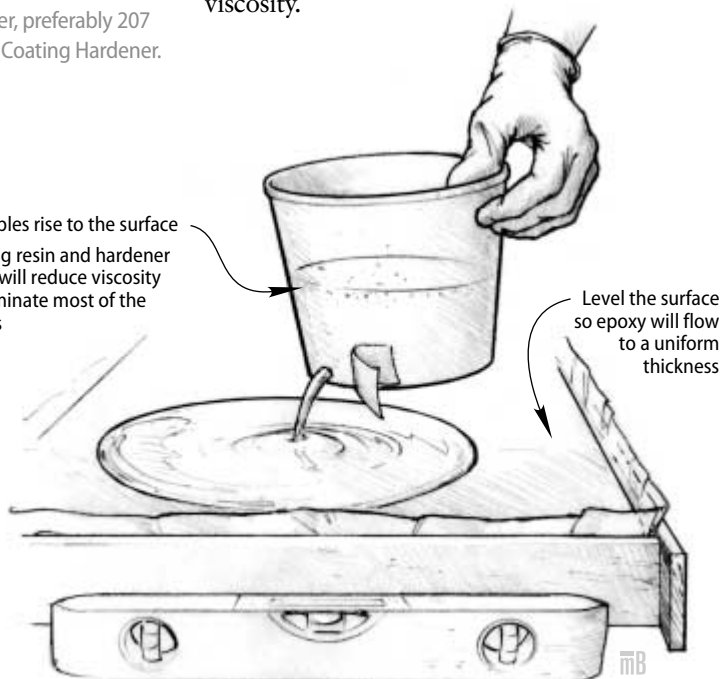
Pouring a thick coating of epoxy onto a table top can produce a unique effect. With a 1/4" thick coating, you can cast a variety of objects in the epoxy for decorative accents. Coins, fabrics, sticks of wood, memorabilia and photographs have been used in this decoupage application. Here are a few tricks to make things go more smoothly.

Photographs will darken when wetted with the epoxy. They should first be coated with a decoupage glue like Mod Podge™ to prevent curling and wetting with the epoxy. Porous materials like burlap trap a lot of air and are more susceptible to bubble related problems than are items like coins.

Estimating coverage

For a sealer coat, figure 40 square feet per pound of mixed material. For a typical "flow coat" over a sealed surface, about 1/8" thick, figure 0.75 pounds per square foot (a Group size A 105 Resin/207 Hardener weighs 3.11 lb). Use this to estimate how much to buy and to mix depending on the desired thickness and the area to be covered.

For best clear finish applications, use 207 Special Coating Hardener with 105 Resin. Warm the resin and hardener before dispensing to about 80°F to reduce viscosity.



Dam the epoxy

Dam the perimeter to prevent drainage. Duct tape around the bottom edge of the table top will prevent the epoxy from dripping. For coatings 1/4" thick, tack a piece of stock molding with 6 mil plastic under it around the table's perimeter. Be sure the table top is level!

Beating the bubbles

Bubbles trapped in the coating are usually not desirable. To avoid the bubbles from outgassing, it's best to seal the substrate before pouring the thicker coating. Allow the substrate temperature to stabilize. (Expanding air will be expelled from the material as its temperature rises.) First apply a thin coat of epoxy to the substrate. Then pour the thick coat on after the initial coating becomes tack free.

Pouring

Poke a 1/4" diameter hole in the corner of a mixing pot, such as our 805 poly mixing pot or a margarine tub. For a larger project, use a coffee can.

Place duct tape over the hole. Mix the resin and hardener thoroughly, and allow it to stand about one minute so the bubbles rise to surface. Peel back the tape covering the hole and allow de-aerated epoxy to flow onto the table surface (*left*). Pour close to surface so material does not splash or create air upon striking the surface. Stop the hole with tape when the container is nearly empty—so bubbly epoxy isn't poured onto surface.

If bubbles occur (most likely around objects and porous material) pass a hair dryer over the surface to temporarily reduce viscosity and allow the bubbles to rise and burst. The hair dryer also helps the epoxy to self level. Be careful not to overheat it.

It's always a good idea to practice a technique like this on a smaller scale before encapsulating valuable or one-of-a-kind objects.

Maintenance

When cured, wipe the surface with furniture wax for a lustrous finish. Be careful to use coasters with very hot beverages, as excessive heat can stain the coating. Scratches or flaws in thick coatings can be buffed out with buffing compound. For deeper scratches or minor flaws in the surface, wet sand with 600-grit followed by 1000-grit before buffing. ■