

Liquifusion® Instructions

Liquifusion® is a superior crystal clear reactive 1 to 1 polymer coating with ultra violet inhibitors. It sets to a thick, glossy and resilient coating at room temperatures between 70° - 80° in 24 hours and reaches full cure in 72 hours. You only need one application but you can do supplementary pours and additional finishes such as a semi-gloss, satin or matte lacquer, after each fully cured application (72 hours for full cure).

Liquifusion® is recommended for indoor use only.

To apply a flawless coating of Robin Evans' wondrous self-leveling Liquifusion® formula, simply mix thoroughly, according to instructions and pour, spray or brush on to your finished mosaic art or other art medium. Liquifusion® can be used to create a rich, thick finish over many materials such as; wood, metal, stained glass, dichroic glass, glass tiles, handmade papers, ceramics, porcelain, stones, gemstones, paint, seashells, beads, etc. The list goes on from there.

We have two versions, Regular or Bar & Tabletop Liquifusion®. Bar & Tabletop Liquifusion® cures 15 % harder than our Regular product. Liquifusion® is available in a variety of sizes to accommodate our customers many need.

You no longer have to use a torch to de-gas bubbles that form while mixing Liquifusion® (bubbles are a positive indication - they mean that you are on your way to a good mix). We recommend you check out our Liquifusion® Bubble Buster which takes care of releasing those remaining bubbles. All you do is spray a light mist and watch those bubbles bust.

Cautions

Use in a well-ventilated area by opening windows, running an exhaust fan or appropriate fume extracting system. Avoid inhalation, eye or skin contact. Wear protective clothing, gloves and eye protection. Read MSDS sheets before using Liquifusion® Resin, Hardener or Bubble Buster, which are available for download at www.liquifusion.net

KEEP OUT OF REACH OF CHILDREN!

Preparation

Make sure to clean your glass mosaic or other art thoroughly (wait at least 24 hours after grouting) to prepare for Liquifusion®. Do not apply Liquifusion® on top of sealed grout. If you are applying Liquifusion® on top of a previous coat of Liquifusion®, prepare the surface by wiping thoroughly with a lint-free white cloth and full-strength acetone or 0000 steel wool then wipe clean.

Proper Mixing

Follow our directions carefully to get a thorough and proper mixing of our two-part product. This is where the rubber meets the road so to speak, unless the resin and hardener are thoroughly and vigorously mixed together tacky spots may occur, so do use our ****Double Cup Method**. Use containers that have a flat bottom and flat sides so you can scrape the bottom and sides of your

containers to capture and thoroughly mix the two liquids. You can use a clean wooden paint stick to mix your product. Make sure to check that there are no loose splinters of wood that could drop into your clean mixture.

Liquifusion® is a one to one product. This means that you must mix EQUAL AMOUNTS of Resin and Hardener for the product to catalyze properly. If you calculate you'll need a total of 16 ounces to cover your project, then measure 8 ounces of resin and 8 ounces of hardener together.

It may be easier to properly mix Liquifusion® if you warm the Liquifusion® **RESIN** by placing the **resin** bottle in warm/hot (not scalding) tap water in your sink (*this also helps eliminate excessive bubbles*) and let the Liquifusion® **RESIN** warm until the Liquifusion® **RESIN** bottle feels warm to the touch and appears thinner (flows easily). This is especially important during colder months of the year.

We also recommend mixing smaller batches until you get used to thoroughly mixing Liquifusion®. For example, we've found we continue to prefer to mix 2 batches of 24 ounces (12 oz resin and 12 oz hardener) for a grand total of 48 ounces than to mix the entire 48 ounces (24 oz resin and 24 oz hardener) at once. You have time to mix each small batch – up to approximately a half hour (depending upon ideal room conditions of 70 degrees and under 50% humidity) after the original pour. Or, have someone do the mixing while you do the pouring to keep those batches smaller.

Storage

You will need to create a controlled storage situation to keep your Liquifusion® as fresh as possible. Always store your Liquifusion® in a cool, dark and dry environment. Keep the containers tightly closed when not in use. **DO NOT** store directly on a cold concrete floor, which will cause mixing problems. **DO NOT** expose unused portions to a constant light source, extreme heat or cold. **DO NOT** allow to freeze/thaw. **Avoid contact with skin and eyes. Practice good caution and personal cleanliness. Ideal environmental storage conditions are between 70 – 75 degrees, under 50% humidity and dark. These types of products are reactive to their environment and if stored properly may have a shelf life of approximately up to one year from day of manufacture. Shipping and storage conditions prior to your receipt of the product will also influence shelf life. Plan to purchase only what you intend to use within a 3-month period for ideal results.**

Coverage Chart*

8 OZ. KIT (CUP)	2 SQUARE FEET
16 OZ. KIT (PINT)	4 SQUARE FEET
32 OZ. KIT (QUART)	8 SQUARE FEET
64 OZ. KIT (1/2 GALLON)	16 SQUARE FEET
128 OZ. KIT (1 GALLON)	32 SQUARE FEET

*Coverage may be less per square foot if you use Robin's method of temporarily containing Liquifusion® for thicker pours.

Calculating Square Feet

To accurately calculate your square feet measure the length and width of your project. There are 144 square inches to one square foot. We will use an example of a glass mosaic tabletop that is 24"

square. 24" x 24" = 576 inches. 576 inches divided by 144 inches = 4 square feet. When we look at our chart above we see that a Liquifusion® Pint Kit will cover our example tabletop.

Experiment First

Very Important! Before you begin any Liquifusion® project on your own (until you get comfortable) we always recommend experimenting with something small first. Mix a small amount of Liquifusion® using the Double Cup Method** and pour or brush (use a disposable brush) it onto a piece of scrap wood or a coaster sized experimental project (your coaster sized project should use all the same materials you plan to use for your larger one) to make sure it will work for you. If you are planning to use materials that cannot be replaced, such as original mementos or photographs, use something similar to that item or for photographs; make color copies of the originals.

You can use Liquifusion® as a grout, glue or sealer. Experiment for you particular art medium. You can apply a thin coat of Liquifusion® to seal items such as handmade papers, porous woods, silk flowers, lace and more. Allow the thin sealer coat to cure overnight and then apply the thicker coat.

Getting Ready

Please note that in the colder temperatures because it is such a pure product, LIQUIFUSION® Resin sometimes becomes dense. If the product is too thick it may not mix properly and your project will not cure (remain tacky). It will help if you place the resin bottle in warm/hot (not scalding) tap water in your sink (*this also helps eliminate excessive bubbles*) and let the Liquifusion® Resin warm until the Liquifusion® resin feels warm to the touch and appears thinner (flows easily). The way to do this is simply lift the tightly capped bottle out of the sink water and tilt it from side to side. The warming of the resin makes the liquid thinner and much easier to mix. Once again, make sure you thoroughly mix both resin and hardener using our Double Cup Method** scraping the sides and bottom of the containers.

**Double Cup Method: mix precise measurements of resin and hardener in one pristinely clean disposable mixing container (preferably one with ounce markings, available from our Liquifusion® Merchants or hardware/home stores) - after one minute of vigorous mixing (long thorough sweeping strokes are best) - pour the product into your second spotless disposable mixing container and stir vigorously for another full minute. Use containers that have a flat bottom and flat sides so you can scrape the bottom and sides of your containers to capture and thoroughly mix the two liquids. When you have mixed thoroughly for a total of two minutes (one minute per cup), you will be ready to apply the Liquifusion® mixture.

Tools & Materials

- LIQUIFUSION®
(either version – tabletop or regular)
- (2) Plastic Disposable Mixing Containers (with ounce measurements)
- NIOSH approved dual-cartridge Respirator Mask. Filter needs to be OV/AG (organic vapor/acid gas).
- Small pieces of cardboard to shim art project so it's level
- Package of Paper Cups (12 or 16 oz, for creating a dust cover)
- LIQUIFUSION® Bubble Buster
- (1) Wooden Mixing stick - clean
- Bench Brush or Drafting Brush or Canned Air
- Large Cardboard Piece (for creating a dust cover)
- Several 3/4" wood pieces (to elevate project on)
- Artwork
- Lint Free Rags, Paper Towels, Glass Cleaner and Newspaper
- Disposable Gloves
- Large unused trash bag (for draping over cardboard cover)
- Hakko HJ3100 Fume Extractor (optional)
- Level (torpedo, 12" 18" etc – whatever size is appropriate for project)
- Timer
- Small plastic spreader or disposable brush (for guiding mixture)
- Newspaper (to cover your work area)
- Electric Sander (small, hand sized model is easiest to work with)

Prepare to Work

Check your room temperature (70 degrees is ideal), make sure you have proper ventilation and have created a DUST FREE environment. Dust will want to float into the mixture prior to it's curing, so make sure your workspace is clean.

Place 2 – 3 layers of newspaper on your work surface. Once Liquifusion® is applied it will cascade over the sides of your project if your project does not have a natural lip or if you don't create a temporary dam***. Be generous with several layers of newspaper. Lay your project on top of your 3/4 inch wood pieces. Make sure your wood pieces are placed about 3 – 4 inches in from the outer edges of your art project.

Liquifusion® is a superior self-leveling product, therefore your art project must be level.

Place a level on your art project and make sure it is level both ways. If not, shim with small cardboard pieces.

LIQUIFUSION® Application

1. Thoroughly clean Artistic Creation elevated on 3/4" wood pieces.

2. **Level & Shim**
3. **Mask and Gloves On** – Measure equal amounts of resin and hardener into your first clean plastic cup.
4. **Mix LIQUIFUSION®** (using the ****Double Cup Method** and our instructions above). If you are mixing properly you will get bubbles in your mixture. This is a good sign. Keep mixing until your full two minutes are up. Pour Now!
5. **Pour on** carefully making sure to get complete coverage. Use your plastic spreader or stiff piece of non-shredding cardboard to manipulate mixture. It will self-level so don't worry about moving it for several minutes to where you need it to go.
6. **Time 10 minutes**
7. **Bubble Buster** to remove bubbles (misting lightly approximately 6 – 8 inches above surface). Wait another few minutes then you can mist Bubble Buster again if needed and until Liquifusion® starts to "heat up" or "set". Or if you prefer sweep your torch with MAPP gas about 6 – 8 inches above your project. Do not keep the torch in one place – you must keep it moving. Note: Carbon dioxide is what breaks the bubbles and not heat. If you use a torch improperly you can scorch the mixture. Not a lot of Bubble Buster is needed and it lasts for many, many projects.
8. **Dust cover on** – carefully position your plastic cups around your project, keeping them 4 to 5 inches away from your project but on the newspapers. Place your large cardboard piece on top of the cups to protect the project from picking up dust before hard cure. Gently drape your large unused trash bag/s on top of the cardboard to create a drape around all four edges. Now you have a complete dust barrier.
9. **Wait one hour** before using a tongue depressor or clean paint stick to scrape bottom edges (this may eliminate excess drips and is optional). Re-cover with dust cover.
10. After 24 hours – you can remove the dust cover.
11. Wait another 48 hours before handling or shipping (depending on ideal room conditions for rate of curing – to be sure wait the full recommended 72 hour total)
12. Final clean up - if applicable sand edge drips with sander (be careful). Turn your fully cured project over and position it on something soft (an old quilt or thick Styrofoam covered with clean Kraft paper). Use your electric hand sander (try 120 grit or 80 grit sandpaper) to sand down edge drips. Just sand drips even. It's better to leave some even hard cured Liquifusion on the bottom of your art project. You don't want to chance getting too vigorous with your sander and popping off a piece of Liquifusion from the sides of your project.
13. Sign finished piece

A note about Hard Cure Times

Liquifusion® will hard cure faster than 72 hours in warmer room temperatures such as 80 or 90 degrees. It will also hard cure faster in the summer months if you live in a low humidity area.

Liquifusion® The Movie

*** For precise, detailed and authoritative instructions on Robin's Liquifusion® technique, consider picking up a copy of her VHS or DVD, Liquifusion® The Movie. In this 35 minute video, Robin takes you step-by-step, demonstrating how to create a temporary dam to contain your freshly poured Liquifusion® for a thicker result, properly mix Liquifusion®, mist Bubble Buster, control the finish on your artwork's outer edges and much more. It's like having Robin teach you her method in your own one-on-one class. Our Liquifusion® merchants carry Robin's video along with a full line of our Liquifusion® products.