

RESIN BASICS /TROUBLESHOOTING

There are many brands and types of resin the market, each offering their own benefits. The type purchased (Polyester, Epoxy, Polyurethane) will determine the cure time (time it takes to become solid) and working time (mixing and pouring).

It is important to use a resin that is made specifically for your needs, such as an **epoxy resin**, used for all the projects throughout this book. You will also want one that has low odour and zero VOC's (Volatile Organic Compound). Many brands of resin on the market, such as polyurethane, are intended for industrial use, (e.g. fibreglass boats), are toxic, have strong chemical smells and yellow quickly. Make sure your research before you buy.

For your safety, always work in a well-ventilated area, wear gloves and if necessary, and a certified approved mask against airborne organic vapours.

Resins are made up of a 2-part epoxy system, (1-part Resin base and 1-part Hardener) Depending on the brand, you will either mix and measure by weight or by volume.

NOTE:

- You may experience one bottle of your resin kit is yellow or yellows slightly once opened. This
 happens automatically over time and when the hardener is exposed to air. The chemical
 reaction causes it to yellow. This is normal and doesn't mean your resin is bad. However, you
 should avoid using resin that has been sitting unused for more than 12 months as resin does
 have a shelf life.
- All resins will yellow over time however todays science and technology have allowed brands to improve and delay this process by adding UV protection and HALS (Hindered Amine Light Stabilizers) to their products. HALS help to interrupt the chemical interaction and block the yellowing process.

NOTE: ALL artwork is prone to fading when hung in direct sunlight, regardless of medium used. Protect and hang your art away from harmful rays.

There is a slight learning curve with resin which everyone experiences no matter the type of resin used. The most commonly asked questions, issues, remedies and preventative steps are outlined here to help you.

ISSUE	CAUSES	REMEDY
Resin is not curing. Still sticky/gooey	 Improper measuring/mixing Too much colorant added (resin tint/alcohol ink) 	 Read and follow instructions accurately. Do not add more that 10% colourant/tint to resin mixture. Scrap off uncured resin. Wipe surface and recoat.
Tiny bubbles cured in resin	 Poured too thick a layer Didn't torch to release bubbles Didn't seal artwork prior to resin Mixed resin to quickly 	 Do not pour more than 1/8" layers Use a butane torch to help to eliminate bubbles Seal artwork first, especially raw wood

Tiny bubbles cured in resin	 Poured too thick a layer Didn't torch to release bubbles Didn't seal artwork prior to resin Mixed resin to quickly 	 Do not pour more than 1/8" layers Use a butane torch to help to eliminate bubbles Seal artwork first, especially raw wood Slowly mix resin
Dents/dimples	 Fluctuating temperatures Over torching Dust particles 	 Work in a consistent temperature of 71 - 75F Do not hold or torch repeatedly over the same area of the resin. Move quickly and evenly across the surface Cover artwork with a container while curing
Bare spots/repelled from sides	- The surface area was oily	 Handle artwork with gloves to avoid hands natural oils from transferring onto the sides and surface Sand with medium grit paper and recoat
Resin appears cloudy	- Water in resin	Even a few drops of water that make it into resin can cloud it. Keep away from water
Streaking/lines	 Manipulating past working time Resin has begun to cure while still spreading 	 Pour mixture out of container all at once Do not continue to scrap excess onto surface Leave resin alone when working time has been reached
Oily cured surface	 Film caused by amines in hardener while curing in cooler temperatures. 	 Use a cloth and gently wash with warm water and dish soap
Scratches/minor imperfections	- Accidental.	 Wait 24 hours and sand surface with medium grit sandpaper before recoat
Drips on underside of panel/canvas	 Resin running down the sides while curing. 	 Carefully warm with a heat gun to ease cured drips off with a knife Tape and mask the underside of your artwork
Unwanted tape/resin cured on sides	- Resin pouring over edge.	 Use an electric hand sander to remove hardened resin and for smooth finishes
Settled dust particles	- Leaving resin to cure uncovered.	 Use cardboard boxes or plastic containers to cover and protect during curing process

TIP: Don't be afraid to sand! Lightly sanding between cured layers gives the surface tooth and allows for good adhesion of the resin. Marks will not show when you reapply another coat of resin.

TIP: Use silicone tools and containers when using resin. Leave a popsicle stick an empty scraped out container. Pulling out the stick out the following day will bring with it the leftover cured resin film. You will be left with a clean reusable container

Heat Gun vs. Flame Torch - What's the difference?

Both a heat gun and a torch (butane/propane) can be used with resin to eliminate bubbles. Which one you choose is determined by the desired results. If you are using resin as a clear top coat finish on your art, you should opt for a torch. By gently moving the flame over the surface (barely kissing resin) you will release the bubbles rising to the surface without moving or blowing around the resin itself.

If your desired result is to add depth, colour blending, lacing and texture in your resin, then you should use a heat gun. This tool blows hot air across the surface and literally pushes the resin around the surface, the opposite of a butane flame torch.

Popular Resin Brands

Pebeo http://en.pebeo.com/Creat ve-leisure/Gedeo-Bio-Based-Resins/Bio-Based-Glazing-Resins
Art Resin www.artresin.com

Glasscast www.easycomposites.co.uk

ResinPro www.resinpro.it

StoneCoat www.stonecoatcountertops.com

Barnes Epoxy www.barnes.com.au

Just Resin www.justresin.com.au

Crystal Clear www.smooth-on.com
Artworks Resin www.artworksresin.ca
Resin Obsession www.resinobsession.com
EcoPoxy www.ecopoxy.com
MasterCastwww.resinworks.ca
CounterCulture www.counterculturediy.com