



RESIN GLORY



INSTRUCTIONS

DEEP POUR EPOXY RESIN

2:1

Resin Glory Deep Pour is specially designed to be used to create wood-resin tables and for large mould castings of artistic works such as flower preservations, lights and much more. Ultra-low exothermic reaction allows high-thickness castings **WITHOUT OVERHEATING** and **WITHOUT DEFORMATIONS**. Excellent UV resistance will keep your project crystal clear for long lasting.

Properties before Hardening

Item	Epoxy Resin A	Epoxy Resin B
Appearance	Liquid	Liquid
Color	Crystal Clear	Crystal Clear
Viscosity @25°C (mpa.s)	3000-5000 CPS	300-600 CPS
Mixing Ratio	2:1	
Hardness (Shored D)	81-85	
Solid Content	100%	
Working Time	60~180 mins@25°C	
Curing time	12-24 hrs@25°C; 8-12 hrs@40°C	
Full Cured Time	48 hrs@25°C	
Polished Time	48 hrs@25°C	
Shelf Life	12 Months	
Package	15 kgs/set Accept OEM&ODM	

1. SETUP

To start with, make sure that your work surface is clean, free from dust and is level. Cover your work surface, to avoid leaks or drips of the resin, as it can be difficult to remove after it hardens. Have all molds and required items for your project next to you.

Make sure that your working area is well ventilated and temperature around 21C (curing temperature may vary depend of your project size, please refer to guid below- temperature range 16-25C), wear respirator if ventilation is poor or working with large projects. ALWAYS wear gloves to avoid mess, and skin irritation. For best protection wear an apron and sleeves to protect your clothes or have clothes dedicated for resin work, which you would not be afraid to ruin. To avoid contact with eyes, wear protective eyewear.

Please note room humidity, when the relative humidity is higher than 70%, the surface of the cured mixture will absorb moisture in the air, and form a layer of white mist on the surface. So, when the relative humidity is higher than 70%, is not suitable for room temperature curing, suggest using the heat curing or have a dehumidifier. Recommended humidity 50-70%.

2. MEASURE

Before you start measuring, decide what you would like to do, how long it will take and how much resin you will need. Make sure that RESIN AND HARDENER ARE WARM if it was stored below 21C, please warm it up for smoother mixing and to avoid bubbles, as warmer resin has lower viscosity and it's easier to degas bubbles. For best results - warm up both parts, by submerging it into a bowl full of warm, NOT hot, water for 10-15min, and then mix it (dry the bottles and avoid any water drips). Please do not overheat as it can flash cure and remember that higher temperature reduces working time.

Then with gloves on and using kitchen scales, measure both parts accurately with ration 2:1, BY WEIGHT ONLY, Resin A is 2 Parts and Hardener B is 1 Part. Adding too much of either the resin or the hardener will change the chemical reaction and your resin will not cure properly. You can measure in one cup or two separates.

Measuring example: Let say for our project we need 300g of mixed resin. So, in this case we will pour 200g of resin A and 100g of hardener B.

3. MIXING

Correctly measured amounts of resin and hardener at room temperature, stir together, SLOWLY, CAREFULLY and THOROUGHLY for 3 - 5 minutes until all the streaks have gone. Please note, fast mixing creates more bubbles. Not stirring properly will result in a sticky soft resin that will never cure or have sticky spots after curing. Scrape the bottom and sides of your mixing cup as you stir to ensure the entire mixture blends and that there is no remaining unmixed resin/hardener stuck to the sides that may prevent a proper cure. You will see streaks, bubbles and cloudiness as you mix – this is a normal part of the chemical reaction and your resin will turn clear as it mixes. For best mixing it is recommended to pour mixed resin into a fresh cup and mix it again for 20-30sec. If there are some bubbles let it sit for 3 min to allow some bubbles to rise to the surface.

After it's mixed you have approx. 90min of working time.

4. POUR & SPREAD

Pour slowly and spread as you see fit. When you pour the resin out of the mixing cup, avoid scraping the sides in case there is any unmixed resin or hardener stuck to the sides.

Resin Glory deep pour is self-levelling, just make sure that your project is on a level work surface. For small project like night light, scull, bottle, sphere, ring holder you can pour up to 10cm/4in deep in one go, depending on the temperature and mass of your project. For a large mass project as an epoxy table, we suggest reducing pouring depth up to 3-5cm/1.2-2in at temp 16-19C. If you need deeper than that, please do it in a layer, to get the best result and to avoid overheating. Allow 6-8hour cure time between layers.

5. REMOVING BUBBLES

As this is low viscosity it shouldn't have many bubbles, if the above steps were followed, and because it cures slowly it has plenty of time to rise to top and leave your project crystal clear. But If bubbles appear on the surface, you can remove them with a torch or heat gun 6-8 inches from the surface and sweep in a slow motion across the top. Just do NOT use too much torch/heat gun or use after resin starts to cure, it can ruin your artwork, leave some marks/pits or burn your mold, it will be difficult to remove your piece. Just be gentle and sensible with heat. You can also use 99% alcohol spray, it's one of the best ways to

remove bubbles, just don't use a torch with it. If it's larger bubbles you can use a toothpick, knitting needle, to pop them out.

6. MASS & TEMPERATURE GUIDE

Please note that curing time depends on the temperature and your project mass. Please follow the guide in order to avoid overheating. For big mass projects please go on lower temperature setting or reduce layer depth.

IT IS IMPORTANT with any product for you to trial the resin before application on to the project. Not all art resins behave the same. After trialling, you might realise that the techniques implemented with alternative resins may have to be adjusted for this particular product.

Project Width	Pour depth	At 16-19C	At 20-22C	At 23-25C
Any	1 - 2cm	Long curing <u>Not recommended</u>	24-48h to touch 96h full cure	24-36h to touch 72 full cure
Any	Up to 3cm	24-48h to touch 96h full cure	24-36h to touch 72 full cure	<u>Not suitable</u>
Up to 10cm	4-5cm	36-48 to touch 72h full cure	24-36h to touch 72h full cure	24h to touch 72h full cure
More than 10cm	4- 5cm	24-36h to touch 72h full cure	<u>Not suitable</u>	<u>Not suitable</u>
Up to 8cm	Up to 10cm	24-36h to touch 72h full cure	24h to touch 72h full cure	<u>Not suitable</u>

Cover your art to protect it from dust and let it cure. In about 24-48 hours, your piece will be hard to the touch. After 72 hours it will be fully cured.

Please remember, although resin fully cures after 72h, but once it's finished (sanded and polished) we recommend letting it sit for next 2 weeks so that your project gains max scratch and heat resistance, before using.

Properties after Hardening

Hardness, shore D	81~85
Withstand voltage, KV/mm	22
Flexural strength, Kg/mm ²	28
Volume resistivity, Ohm ³	1x10 ¹⁵
Surface resistance, Ohmm ²	5X10 ¹⁵
Thermal conductivity, W/M.K	1.36
Induced electric loss, 1KHZ	0.42
Withstand high temperature, °C	80
Moisture absorption, %	<0.15
Compressive strength, Kg/ mm ²	8.4

7. CLEANING

After your piece is stored in a clean safe place, it's time to clean tools. If you use reusable tools, the best time to clean them is when the resin it's still fresh. Wipe your cups, sticks with paper towel to remove resin, in the end you can finish with baby wipes or alcohol wipes/spray. DO NOT clean in the sink, as it can block your drains. Please note that cured resin can be really difficult to remove from some surfaces, so clean any spillage while in the liquid form, use rubbing alcohol, mineral spirit or other mild solvents to clean up. If you use reusable cups or tools, you can clean resin after it dries, just peel off dried resin leftovers.

8. STORAGE

Ideal to store at the temperature of 21°C, in dry place, out of sunlight and avoid high humidity environments.

When opened, use it as soon as possible. It's very important not to leave containers open for a long time, every time when finishing measuring seal containers, as exposure to air can affect the quality of the product and do not mix lids, as this can damage your product.

The shelf life is one year unopened container and six months opened in the room temperature of 21°C.

9. SAFTY

Although Resin Glory is formulated to be non-toxic and low odour, please follow all guidelines set out above in regards to Personal Protection as it can cause allergies or skin irritations if not used as directed.

Avoid skin, eye contact, inhalation or ingestion.

1. In case of skin contact: remove contaminated clothing and wash the affected area with soap and water for 15 min.
2. In case of eye contact: remove contact lenses if necessary and flush with water repeatedly for 15 min and do not rub. Promptly seek medical attention.
3. In case of ingestion: promptly seek medical attention.

Keep out of reach of children and pets.

Since conditions of the use of this product are outside of our control, we cannot assume liability for results obtained or damage incurred due to misuse.

GOOD TO KNOW

What makes Resin Glory safe to use?

Resin Glory is formulated using the highest quality materials and therefore produces no VOCs or fumes. It is a clean system, meaning there are no solvents or non-reactive diluents—everything in it reacts so nothing is free to become airborne and cause health issues. It is also non-flammable in its liquid form. For all these reasons, it is therefore classified as a non-hazardous material and is shippable by air.

Resin Glory Epoxy Resin is Non-Toxic (when used as directed) and Safe for Home Use!

How to colour resin?

You can use a variety of materials to colour epoxy resin; however, each material has advantages and disadvantages you will want to be aware of. DO NOT USE water or oil-based pigment to colour resin.

By itself, Resin Glory deep pour is a colourless formula and it has very low viscosity and longer curing time so all colours tend to move more. If you use glitter it will sink to the bottom, so if you want an even appearance, you can add it when the resin starts to get thicker or do it in layers. Test your glitter before the main project.

Here are some colourants commonly used with epoxy resin, and what you should know about each one:

1. **Alcohol ink**

Alcohol ink is a very popular resin colorant that offers gorgeous, rich saturation. It is also the specific colourant needed to create resin petri dish art. Alcohol is of course flammable, so while Resin Glory is non-flammable on its own in its liquid state, this is not the case once alcohol ink is added to the mix. For that reason, a torch should not be used on resin that contains alcohol ink. As well, ink tends to move into the centre when starting the curing process in the mould, so don't be surprised, there are techniques to get even results.

2. **Mica Powder**

There are many colours to choose from, for best results use the high-quality mica powders. You can do crafts with one colour or blend a few colours together by mixing in separate pots and pouring in one mold and gently blending them, not mixing too much if you like to see few colours. As well you can get beautiful results by brushing mica powder into mould before pouring resin.

3. **Acrylic**

You can actually use acrylic paint with Resin Glory, but because acrylic is a plastic and has a matte finish, it tends to take away the glossiness of the resin. Generally, people who work with resin like the glossiness of it and will want to preserve that look or you will need to coat a finished piece.

How much colour should I add to Epoxy Resin?

No matter which colorant you choose, DO NOT EXCEED 5% colorant to the total volume of Resin Glory as this will affect the delicate balance needed for the chemical reaction to occur properly. If it's exceeded, your craft piece can become soft, sticky or lose heat resistance properties and make sure that your colourant is mixed well. Generally, you don't need very much colorant to saturate the entire transparent mixture.

What is Resin Glory heat resistance?

The maximum temperature that Resin Glory can tolerate is 185F or 85C, after it is fully cured. At temperatures as high as that, the thin cured pieces may become a little flexible but once they cool off, they will harden up once again. Typically, the heat generated from a hot mug will not damage the resin surface. But be aware that cured resin products it's not flame resistant, keep away from the flame sources.

Epoxy-Wood projects

Check the moisture content of each wood slab. To avoid warping and other moisture related issues, the moisture content of wood slabs should be 15% or less. Once the slabs are sufficiently dry, plane, level and

sand the slab pieces as necessary. Remove all loose bark or glue in place. If using an adhesive to attach the bark, allow it to completely dry or cure before proceeding. All edges which will be in contact with resin must be sealed to stop bubbles from escaping while filling with resin. Most hard and soft woods absorb resin readily and expel air as they do. This can create chimney-like bubbles in the resin and can be difficult if not impossible to stop. To seal, apply a small amount of this epoxy or use fast cure epoxy resin, to speed things up, to all edges with disposable brush. Wait 10h until it's ready, it should have a slight glossy appearance, if not repeat the process on those areas again.

Once your wood is ready you need to have a mould or create one of your required shapes where you can lay your wood and pour resin as planned. Please use non-sticky materials that you could remove from your project with no problems. Heavy polypropylene tape such as Tuck tape can be used to seal off cracks or small voids.

For mould you can use laminated chipboard or white melamine particleboard and depend of material to cover with a glossy release film, mold release, paste wax such as Trewax or heavy polypropylene tape such as Tuck tape to prevent sticking, seal edges with silicone, remove excess.

If you don't want that resin to run under your base you can use silicone, apply on the wood bottom around the fillable areas, the same thing you can do if you like to avoid overspill. In addition, we recommend you clamp slab pieces in place preventing them from shifting or glue it with a thin layer of epoxy.

MEASURING VOIDS: These irregular shaped areas can be difficult to measure accurately. One method is to fill small voids with dried rice, then measure the rice used in a measuring container. Another method is measuring the length, width and depth of the void (approximate area). Example -72" length x 8" width x 1.5" depth=864 sq inches. Divide this number by 231 to convert the area to gallons. For example, 864 sq inches/231=3.74 gallons.

Decide which design you want to create, mix resin, add colours and pour resin as you see fit, for resin tables we advise to pour up to 5cm/2in at the time at temperature 16-19C due to mass. Do it in layers if you need deeper than that or you want to create a specific effect.

How to Embed objects

Porous materials (corks, shells, coins, etc.) can release bubbles into the resin and will first need to be covered with a thin seal coat of epoxy. Make sure this seal coat has dried for at least 8-10 hours before embedding your objects. As well if it's too light it will float to the surface, but you can use clear craft glue to keep it in place, make sure glue is completely dry before pouring epoxy.

Note that paper, fabric and synthetic flowers or other natural materials can translucent or change colour under epoxy. Perform a spot test to see how the materials you plan to embed will react and if needed you can use sealing products to prevent colour change.

Flower Preservation

Make sure that your flowers are totally dried. You can dry them by hanging it up, drying in Silica Gel, pressing in a book.

Choose the mould and try the design before pouring resin to make sure that all flowers will fit how you imagine. Level your surface.

Depending on your design, you might need to do a base layer to glue your flowers, as if you fill at once flowers will rise to the surface, as they are lighter than resin. So, when you measure resin, decide how thick your layer will be, please follow the pouring tab above. After mixing, pour resin slowly, remove any

bubbles with a torch or toothpick and then lay your flowers as planned, you can spread some resin on top of your flowers to bond them for the next layer. When you finish the design, remove any unvented bubbles and monitor this over the first few hours. Please check that you follow curing guide below for correct temperature and mass ratio. Leave it to cure for 6-12h until your resin is like hard honey consistency, then you can add one more or final layer of resin, if you need more layers repeat these steps. You can add as many layers as you need or space you got and, in each layer, you can add more flowers or other design details to build a beautiful 3D look, just be careful with the final layer especially if it's your front look and you don't want that flowers poke out.

After the final layer, leave it to cure 24-48h and enjoy your stunning timeless project.

Flowers are porous material, so it tends to release air and create bubbles, therefore our low viscosity formula will easily let them to rise to the surface, just in some cases there is need help when bubbles stuck to the flowers, but you can sort this by lifting any unwanted bubbles and it will rise to the top, monitor this over the first few hours.

How to fix small imperfections, like pits, marks, top bubbles?

First, sand down the entire surface of your piece with coarse sandpaper (we use 80 grit sandpaper). Sanding will not only fix the imperfection, but will make a better bonding surface between the first and second layers of clear epoxy.

Note. Respirator must be worn at all times when you do sanding. It's a good option to add water on sanding paper, this way you will avoid the majority of dust.

It will look very scuffed in the short term, but don't worry, once you pour the second coat on top, all of those sanding marks will disappear.

Wipe off any sanding debris before pouring your next coat of well-measured, well-mixed Resin on top, then cover with a dust cover to make sure you avoid any of those imperfections a second time and you should be good to go!

How to fix soft sticky spots?

If, after a day of curing, you've noticed some soft sticky spots on the resin, it means either one of two things: either the delicate 2:1 balance of epoxy resin and hardener was off, or the material just wasn't mixed thoroughly.

Clear epoxy Resin that hasn't cured will stay sticky until steps are taken to fix it. You'll need to scrape off any of the unmixed material and re-apply a fresh coat of resin glory, and your piece will look as good as new!

How does temperature affect resin?

If you've put the epoxy resin in a warm water bath or if you're working in a warm environment, the working time will be decreased by about 10 minutes. The cure time may also be decreased. Recommended room working temperature is around 21C and curing temperature 16-25C depend of the project mass.

Visit our website for more information or to find product SDS
<https://www.resin-glory.com> ,
in case you need any help, please contact us at info@resin-glory.com