

# fill-it epoxy casting resin

resin<sup>8</sup>

## description

Resin8 fill-it epoxy resin is a solvent free, crystal clear epoxy casting resin for use in jewellery, sculpture and art.

This resin is specifically designed for deep casting, making it perfect for river tables, but it can also be used for making jewellery, paperweights, models and more! Self-levelling with low viscosity and a glass clear finish, this resin is perfect for your creative project. With a long open time (pot-life), fill-it epoxy resin is ideal for embedding articles. It is un-accelerated, meaning it creates less heat (exotherm) than other epoxy resins, and avoids shrinkage after curing.

Cast into silicone moulds with fill-it epoxy resin and use for filling gaps in wood and making river tables. You can even use alcohol inks with this water clear resin - just wait 6-10 hours after pouring and then drop inks in to achieve the popular petri effect.

## main uses

- Jewellery casting
- Paperweights
- River tables
- Embedding

## troubleshooting

Resin has crystallised in the bottle - Stand the resin bottle in a jug of hot water for 5 minutes to warm up and disperse any crystals. Wipe the bottle dry before pouring. This only happens when the resin is liquid. When properly catalysed and fully cured the resin retains its clarity permanently.  
Not set - Wrong mixing ratio or too cold.  
Trapped air bubbles - mixed too fast.  
Sticky, greasy surface - humidity levels too high in room.

## application

The mixed resin can be tinted with pigments or powders and can then be poured into a mould. The mould can be plastic or made of silicone rubber. Casting can be carried out by gravity or under vacuum. Temperature should be between 18 to 25°C, humidity level below 70%. A 2:1 mix will provide a hard casting, suitable for manufacture of fancy shapes and decorative items etc. Should a new mix be applied onto cured resin, the contact surface should always be sanded in order to enhance adhesion, but only after 5 days. Once the resin is mixed and poured into the mould gently pass warm air from a heat gun or hairdryer on slowest speed setting, this will assist in removal of any bubbles generated during mixing.

## physical & mechanical properties

Properties given for a temperature of 22°C:

- + Resin: Clear liquid, viscosity of 1,000 mPas
- + Hardener: Clear liquid, viscosity of 150 mPas
- + Mixture: Clear liquid, viscosity of 300 to 450 mPas
- + Mixing density: 1.1g/cc
- + Mix ratio: 2:1 by volume
- + Hardness: 95 Shore D
- + Elongation at break: 8%
- + Tensile strength: 66 MPa
- + Flexural strength: 105 MPa

The optimal mechanical properties (full cure) will be reached after 21 days at 20°C or 15 hours at 60°C

The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we supply.

© Resin8 Craft Supplies Limited 2021 | Withytree Farm, Broadway Road, Winchcombe, Gloucestershire, GL54 5NT | 01242 603624 | info@resin8.co.uk | www.resin8.co.uk



## key benefits

- **CRYSTAL CLEAR**  
UV stabilised, optically clear, excellent visual properties
- **MINIMAL BUBBLES**  
Designed for casting and laminating, unaccelerated, low viscosity
- **LONG WORKING TIME**  
2-10 hour pot life, easy to use with low exotherm
- **SOLVENT FREE**  
fill-it (slowcure) epoxy resin is a modern formulation of the safest epoxy chemicals available

## mixing ratio

by volume - resin : hardener - 2 : 1

mixing is CRITICAL and must be accurate. 2 parts resin for 1 part of hardener will provide a hard casting once cured. Pour the hardener into one pot and the resin into another. Transfer the mix to a second container and stir for at least 3 minutes. The combined liquids must be thoroughly mixed to completely remove any streaks, scraping the sides and base of the mixing pot. An entirely homogenous mix is essential in achieving optimal results. Ensure you measure and mix more than 20ml for accuracy. For larger applications, mix up to 12 litres in one go, and pour to a depth of 50mm maximum.

## health & safety

eat, drink and smoke AWAY from your work area  
wear nitrile gloves, or a suitable barrier cream  
eye protection is recommended  
wear a suitable respiratory mask when sanding  
keep hands away from face

if in contact with skin - wash immediately with plenty of water  
if in contact with eyes - rinse immediately

### seek medical advice

if swallowed - do NOT induce vomiting  
**seek medical advice immediately**

 wear nitrile gloves or a suitable barrier cream for epoxy resin, goggles and a respirator if sanding

 stir thoroughly for 3-4 minutes

 pot life for a 100ml mix at 22°C - 2 to 4 hours, 500ml mix at 22°C - 10 hours

 demould after 3-4 days (at 18°C) depending on volume

 shelf life 12 months in unopened containers

 totally clear and UV stabilised

 un-accelerated with excellent bubble release

 safe to be de-gassed with naked flame for 2 seconds

 excellent for use in silicone moulds