

1 to 1 epoxy all-purpose resin

resin⁸

description

Resin8 1 to 1 Epoxy Resin is IDEAL for making resin artwork AND jewellery. It is easy to use, easy to measure out, quick to set and clear as day! If you're looking for a clear epoxy resin for jewellery and art look no further. It is one of the fastest curing artwork epoxy resins on the market and as a coating resin will be touch dry within 3-4 hours.

Resin8 1 to 1 Epoxy Resin is our most popular resin! It's non-toxic (when used as directed) and can be coloured with pigments, mica powder, glitter and alcohol ink. Resin8 1 to 1 Epoxy Resin is also suitable for use as a food-safe coating but NOT as a food preparation/cutting surface. Use it in knife and chopping board handles, or under acrylic as a coaster. Use Resin8 1 to 1 Epoxy Resin in geode art, jewellery castings, pendant bezels and more!

main uses

- Artwork (geodes, sealing, pouring, coating)
- Jewellery making (doming, casting)
- Food-safe coating
- Cold enamelling

application

This resin is designed to be used as a clear coating but it can also be coloured with our any non-water based pigments and powders on our site - opaque, transparent, metallic, etc. Apply by brush, roller or pouring. Temperature should be between 18 to 25°C and humidity level below 70% (i.e. do not use in a room with drying laundry). A 1:1 mix will provide a hard, glossy finish. Make sure your resin piece is level. Pop any bubbles by hand using a cocktail stick, or use a heat gun or naked flame for a couple of seconds to aid bubble release. Avoid dimpling by holding the blowtorch or heat gun at least 30cm away. Use silicone dispersion media to create lacing and cellular effects and alcohol ink for the popular petri art effect (dropping).

physical & mechanical properties

Properties given for a temperature of 23°C and volume of 60ml:

- + Resin: Clear liquid, viscosity of 6,500 – 6,800 mPas
- + Hardener: Clear liquid, viscosity of 2,200 – 2,300 mPas
- + Mixture: Clear liquid, viscosity of 4,400 to 4,700 mPas
- + Mix ratio: 1:1 by volume, 100:90 by weight
- + Specific gravity: Resin: 1.11 – 1.15 g/cm³, Hardener: 0.94 – 0.96 g/cm³
- + Tensile strength: 40 MPa
- + Flexural strength: 65 MPa
- + Hardness: 24 hours at 25°C Shore D 75 – 78
- + Compressive strength at yield: 24 MPa
- + Elongation: 9%
- + Impact strength: 3.5 kJ/m²
- + Chemical resistance against water: good
- + Chemical resistance against diluted acids and alkalines: Fair
- + Chemical resistance against most solvents: Poor
- + Minimum application temperature: 10°C
- + Geltime: 1-2 hours
- + Settling time: 4-5 hours
- + Touch-dry: 5-6 hours
- + Curing time: 12-18 hours
- + Heat-resistance: suitable for applications up to 50°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.

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key benefits

- NON-TOXIC**
safe for home use when used as directed, odour-free
- USER-FRIENDLY**
Easy 1:1 mix ratio by volume, non-flammable
- HIGH GLOSS**
shiny, high build, self-levelling, excellent clarity
- SOLVENT FREE**
1 to 1 Epoxy is a modern formulation of the safest epoxy chemicals available

mixing ratio

by volume - resin : hardener - 1 : 1

by weight - resin : hardener - 100g : 90g

mixing is CRITICAL and must be accurate. The mixing ratio must be accurately followed. It is not possible to change the ratio. This would result in lower mechanical properties and the resin not drying properly. The mixture should be thoroughly stirred (mix for 3-4 mins) to ensure full homogeneity. Epoxy systems tend to heat up much faster in a pot than as a thin film. Therefore mix only the necessary amount usable within the given pot life. Ensure you measure and mix more than 20ml for accuracy (and less than 2 litres).

health & safety

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

if in contact with skin - wash immediately with plenty of water
if in contact with eyes - rinse immediately for 15 minutes
seek medical advice if irritation occurs
if swallowed - do NOT induce vomiting
seek medical advice

- 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 60ml mix at 23°C - 10-15 mins
- touch dry after 5-6 hours (at 23°C) depending on volume
- shelf life 12 months in unopened containers
- optically clear with UV inhibitors
- pop with a sharp object or pass warm air over the surface of the resin (e.g blowtorch)
- safe to be de-gassed with naked flame for 2 seconds
- excellent for artwork - coverage 1 m² per 0.5 litre mixed resin (0.5mm thick layer)