# doming epoxy resin

#### description

Resin8 1 Doming Epoxy Resin is the perfect resin for creating a finishing layer on pieces of jewellery. Crystal clear, this two part resin is measured by weight and cures overnight. It is strong and durable, has excellent resistance to yellowing, and can be used for coatings and shallow castings.



Give your jewellery a professional finish with a domed resin layer

#### main uses

Doming (creating a finishing layer)

Jewellery making (embedding, casting)

Coating

Small scale artwork

#### application

This resin is designed to be used as a clear doming layer but it can also be coloured with our any non-water based pigments and powders on our site - opaque, transparent, metallic, etc. Apply by hand. Temperature should be between 15 to 20°C and humidity level below 70% (i.e. do not use in a room with drying laundry). A 2:1 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.

# physical & mechanical properties

Properties given for a temperature of 25°C and volume of 200ml:

- + Resin: Colourless liquid, viscosity of 1,700 2,100 mPas
- + Hardener: Colourless liquid, viscosity of 200 300 mPAS
- + Mixture: Colourless liquid, viscosity of 600 900 mPAS
- + Mixing ratio by weight: 2 parts resin to 1 part hardener (100:50)
- + Working time at 25°C: 30-45 minutes
- + Setting time at 25°C: 24 hours
- + Touch dry: 12-18 hours
- + Fully cured hardness after 7 days: 80-85 Shore D
- + Minimum temperature to work in: 15°C
- + Tensile strength: <u>61-66 M</u>Pa
- + Flexural strength: 75-80 MPa
- + Elongation: 4-6%
- + Glass transition termperature: 60-65°C
- + Chemical resistance: Excellent resistance against water and chemicals. Excellent adhesion to a variety of substrates.



# key benefits

#### HIGH BUILD

creates a convex, glass clear magnifying layer over surfaces

#### **LONG POT LIFE**

at least 30 minutes working time at ambient temperature

#### **MULTI-PURPOSE**

excellent for doming, embedding, coating and shallow castings

## **UV STABLE**

high resistance to yellowing with in-built UV stabilizers

### mixing ratio

esin8

by weight - resin: hardener - 100:50

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 2 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 50ml for accuracy and less than 200ml to avoid exotherm.

#### 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 2 minutes



pot life for a 60ml mix at 25°C - 30 mins



touch dry after 12-18 hours (at 25°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

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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