

Ultra Clear, Bubble Free, Deep Casting Resin ***for River Tables, Embedments, and Potting.***

LuciClear Casting Resin is an easy to use low viscosity, slow curing epoxy system which enables users to make deep, ultra clear castings and embedments with minimal shrinkage without needing vacuum chambers, pressure pots or specialised equipment. The formulation incorporates ultra violet absorbers for superior UV resistance. It uses selected raw materials with low allergenic potential.

Features

- Deep bubble free castings in a single pour.
- Does not require flame torching to remove surface bubbles.
- Low temperature rise.
- Minimal shrinkage.
- Spectacular clarity.
- Air temps from 15°C to 30°C
- Australian Made
- Vacuum chamber is not needed to prevent bubbles being incorporated.
- Does not require use of a pressure pot.
- Minimal fumes.
- Resists UV
- No shelf life
- Australian Formulated
- Can be tinted and coloured easily.

Temperature Control

As with any epoxy system, the reaction between the resin and the hardener is exothermic. This is a very slow system, so it releases energy very slowly. In moderate size castings, the energy can escape sufficiently quickly to avoid excess heating. None the less, in large masses, considerable heating can occur.

This system features excellent bubble release. In order for this to happen prior to gel, it is necessary that the mix passes through 30°C well before gel occurs. With small mixes, this could involve warming the ingredients to 30°C prior to mixing. With large mixes, which will warm due to exothermic energy release, it is necessary to start with the ingredients at a lower temperature, which will result in them passing through 30°C but not reaching high temperatures in excess of 70°C.

With large to very large mixes, it may be necessary to conduct the cure in an air conditioned space. Large 35mm thick castings have been successfully conducted in a 22°C air conditioned room, which resulted in a peak temperature of 75°C.

Peak temperatures in excess of 75°C will result in noticeable yellowing and excess shrinkage. In extreme cases, the casting has shattered.

Colouring

A wide range of colourants are compatible with LuciClear Casting Resin. In general, anything which works satisfactorily in an epoxy system, a polyester system or an oil paint system will be satisfactory.

Boatcraft Epoxy Tints (In Black, White, Red, Yellow, Green, Blue). Very intense and very good light fastness. Can be diluted down (using LuciClear Resin) to produce a less intense colour.

Tint Powders, Glitters, etc. Generally work well. May need an intermediate dilution to get even dispersion. Epoxy Guru Tints come in 40 shades.

Acrylic Inks (note NOT ACRYLICS which contain water.) Liquitex Acrylic Ink works well and has 32 shades.

Artists Oil Paints (from Spotlight, Lincraft, Riot Art Supplies, Eckersley's etc). Much less intense but widely available.

Spirit based stains. e.g. Feast Watson Proof Tints. Earthy and Brown colours. May not be light fast.

Alcohol Dyes. e.g. Wide range of colours available. May not be light fast.

www.luciclear.com.au

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Properties

Resin		
Viscosity at 25°C	900 +/- 100	mPas ISO 3219
Specific Gravity	1.13 +/- 0.02	g/cm ³
Flash point	> 200	°C
Solids content	100	%
Hardener		
Viscosity at 25°C	91	mPas
Specific Gravity	0.98	g/m ³
Flash Point	218	°C
Solids Content	100	%
Mixture		
Mix Ratio	2 Resin: 1 Hardener	By Volume
Mix Ratio	100 Resin : 43 Hardener	By Weight
Initial Viscosity	600	mPas
Pot Life Ta 25°C	240	Minutes typical
Gel Time Ta 25°C	500	Minutes typical
Demould time Ta 25°C	2000	Minutes typical
S.G. Cured Product	1.1	Typical
Minimum Curing Temperature	15	°C
Hardness at 4 days Room Temp	82	Shore D Typical
Shrinkage (76°C peak temp)	0.8	% Typical
Shelf Life	2+	Years

Availability/Packaging

375ml, 750ml, 1.5Litre boxed kits include resin hardener mixing cups, mixing sticks, gloves and instructions

3Litre, 6 Litre, 12 Litre and 30 Litre kits with Resin and Hardener

Pumps for 3 litre and larger kits.

Bote-Cote pigments, Epoxy Guru mica flake pigments, Liquitex Acrylic Inks

Precautions/First Aid

Precautions

- Wear eye protection. This is important.
- Wear protective gloves. Ordinary latex gloves give acceptable protection.
- Do not mix large quantities (more than can be used in 10 to 15 minutes).

First Aid

- Ingestion **IF SWALLOWED:** Drink large quantity of water. Seek medical assistance.
- Eye Contact **IF IN EYES:** Rinse opened eye for several minutes under running water. Remove contact lenses if present and easy to do so. Seek medical assistance.
- Skin Contact **IF ON SKIN:** Remove with Citrus based hand cleaner with pumice followed by plenty of soap and water. If skin irritation occurs: Seek medical advice/attention. Take off contaminated clothing and wash before reuse.

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