

J-Cast 85 A+B

1. DESCRIPTION

J-Cast 85 A+B is a two-part polyurethane clear casting resin, when mixed at 100:100, cures to form a water clear 85 shore D resin.

2. ADVANTAGES

- Water Clear with excellent clarity
- Low viscosity
- Ideal for 10-50 mm sections
- Good UV stability
- Tack free in silicone mouldings
- 100:100 ratio
- Easily pigmented

3. APPLICATIONS

Suitable for the production of water clear castings of section thickness of 10-50 mm. The excellent clarity allows easy pigmentation to the required colour, either transparent or opaque.

4. CHARACTERISTICS

a) CONSTITUENTS:

	J-Cast 85 Part A (Polyol)	J-Cast 85 Part B (Isocyanate)
Appearance	Liquid	Liquid
Colour	Clear	Clear
Specific Gravity / gcm ⁻³ @20 °C	1.06	1.06
Viscosity / mPa.s	600	16

b) MIXING

J-Cast 85		Gel time (20g @ 20°C)	Demould/ hours (100g @ 20°C)	Full cure @ 20°C
Part A	Part B			
100 parts	100 parts	40-80 mins	3-4 hours	24-36 hours

Mix Part A thoroughly before sampling. (It should be clear, smooth and free of sediment).

Casting of thinner sections than 10 mm will require the mould to be warmed to 35°C - 45°C to assist the curing process. Thin sections will take longer to reach the optimum hardness.

Components should be weighed out using an electronic balance accurate to at least +/- 2%. Weigh out part A into a clean dry plastic container. After

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tearing the balance, weight out the part B on top of the part A and mix well using a clean plastic spatula. Pour into a container 2 - 3 times the volume of the mix, and degas before dispensing into the mould.

c) MOULDS AND RELEASE

Moulds made from material other than silicone rubber, should be sprayed lightly with either **J-Wax**, **Poly-109** or **Poly-90** release agents. Silicone rubber moulds will not require a release agent but the use of **Poly-90** will prolong mould life and ease the de-moulding of difficult castings. Mould temperature should be 15-20°C to prevent chilling of the polyurethane.

The clarity of the moulded part will depend on the surface of the mould. A glossy mould surface will reproduce a shiny moulding. The use of wax mould releases usually creates a matt mould surface unsuited to clear casting. However **J-Cast 85** may be polished once fully cured.

d) SHRINKAGE

In sections of 15 mm upward, **J-Cast 85** can exhibit a high degree of shrinkage due to the exotherm produces during curing. In some cases this may be overcome by pouring in several layers. This method often produces a visible line between each layer.

5. PACKING

Available in 2kg kits only.

6. HEALTH & SAFETY

(Refer to Health & Safety Data Sheet)

Handling and mixing of **J-Cast 85 A+B** require the following precautions:

- i.) Use adequate ventilation and do not breathe vapour or spray. Avoid build-up of the toxic vapours.
- ii.) Wear gloves & goggles.
- iii.) Do not eat, drink or smoke.
- iv.) Avoid swallowing, skin, or eye contact.
- v.) If contact does occur, wash with clean water immediately & in the case of eye contact, consult a doctor.

7. SHELF LIFE

J-Cast 85 A+B have a minimum shelf life of six months when stored in the original containers at temperatures between 18 and 25°C.

Note: If allowed to freeze **J-Cast 85 A+B** will be spoilt. **J-Cast 85 A+B** is moisture sensitive. Keep containers in a dry place. DO not leave open to the air for long periods.

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