



# Polycraft FastCast 100

## Unfilled Fast Setting Polyurethane Resin System

<b>1A : 1B</b>	<b>2.00 - 2.30 Min</b>	<b>20 Min</b>	<b>Off White</b>	<b>D70</b>	 <b>20-25°C</b>	<b>1kg by weight equals approx. 909ML in Volume</b>
Mix Ratio By Weight	Pot Life (23°C)	Demould Time (23°C)	Cured Colour	Hardness	Working Temperature	Approx. Density

### Technical Overview

Property	Component	Value
Material	A B	Polyol Isocyanate
Colour	A B	Off White Brown
Viscosity (mPas) @25°C	A B A&B Mix	70 60 50
Density @ 25°C g/cm3	A B A&B Mix	1.02 ± 0.05 1.14 ± 0.05 1.10 ± 0.05
Mix Ratio (By Weight)	A&B Mix	100A : 100B
Potlife (Min.) 200g Mix @23°C	A&B Mix	2.00 - 2.30
Demould Time (Min.) 200g Mix @23°C	A&B Mix	20

Property	Standard	Value
Density	ISO 1183 (g/cm3)	1.1
Hardness	ISO 868 (Shore D)	70
Elastic Modulus	ISO 178 (MPa)	1300
Flexural Strength	ISO 178 (MPa)	55
Tensile Strength	ISO 527 (MPa)	32
Elongation at break	ISO 527 (%)	7
Impact Resistance	ISO 179 (kJ/m2)	25
Heat Distortion Temp	ISO 75B (°C)	80
Linear Shrinkage	internal (%)	0.2

### Storage / Shelf-life

Polycraft FastCast 100 should be stored between 18°C and 25°C. Under these conditions the shelf-life in the original, unopened containers is six months from purchase. Care should be taken to avoid contact with moisture as this is a moisture sensitive product. Store in a dry place and reseal containers immediately after use. Shelf-life is reduced after opening and remaining product should be used as soon as possible. A dry gas blanket may be used to help extend the life of the material after opening. Ensure to close lids immediately after use each time.

Technical Advice provided by MB Fibreglass - Either verbal, in writing or by way of trials - is given in good faith but without warranty, where proprietary rights of third parties are involved this applies also. This does not release you from the obligation to test the products supplied by us to ascertain their suitability for the intended processes and uses. The application, use, handling and processing of the products are outside of our control and therefore entirely your own responsibility.

### Product Overview

Polycraft FastCast 100 is an unfilled fast setting polyurethane resin system. Exhibiting excellent flow-ability, short demould times, low shrinkage, good dimensional stability, detail reproduction and good machining qualities. Used for casting master and core models, negatives and general small mouldings. Used in a wide variety of industries from Art, Craft, Engineering, Film & TV, Pattern Making and more.

### Instructions for Use

#### Preparation

- Ensure both components are in the correct temperature range (18-25°C)
- Mould or item to filled must be clean and dry
- Ensure Component A is shaken prior to mixing
- Determine if release agent is required

#### Processing

- Measure quantities using digital scales.
- If filler is required mix the filler into component A or split filler between each component, once fillers are well combined, continue to mix both components together as normal.
- Pour resin from lowest point in mould
- Ensure to mix and pour into mould before the resin system reaches gel stage.

#### Pigmentation

This system will readily accept pigment. It is important to use polyurethane pigments or dyes designed specifically for polyurethanes. Please see our polyurethane pigment section via our website. When using a dye the natural colour of the resin will likely affect the final shade, experimentation is needed as in most cases.

#### Fillers

This system will accept a variety of mineral fillers and metal powders for cold casting effects etc.

#### Bulk Castings

Thicker castings are possible however overly large pours are likely to overheat which leads to issues such as excessive shrinkage. It is recommend to proceed with caution and test material before undertaking the primary application. Fillers such as the aluminium hydroxide and aluminium powder can be used to reduce the generation of exotherm allowing for bulk castings

### Health and Safety

Before use please read product labels, technical sheets and safety data sheets and ensure you have adequate understanding of the safety precautions and directions before using the materials.