



## Technical Data Sheet

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### **Polycraft FC-7450**

*High Quality Unfilled Casting Resin , Ideal for Backfilling.*

Polycraft FC-7450 is a two component polyurethane system which due to its cost makes it an ideal back fill resin.

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### **Properties**

- Very Liquid
- High Filling Grade
- Low Odour
- Good Strength
- Low Shrinkage
- Excellent price / performance proportion

### **Applications**

- Foundry models and core boxes
- Negatives of all types and auxiliary forms
- Jigs for holding and trimming
- Prototype Parts
- Checking cast of core box, casting forms and contours
- Economical Back Fill resin.

### **Mix Ratio**

Polycraft FC-7450 is mixed with an easy to measure 1:1 by weight ratio , 1 Part A : 1 Part B by weight.

### **Product Data**

Property	Units	FC-7450 A	FC-7450 B	Mix
Material	-	Formulated Polyol	Isocyanate	Polyurethane
Appearance	-	Cream Liquid	Pale Yellow Liquid	Cream Liquid
Viscosity (25°C)	mPa.s	-	-	70 - 90
Pot Life (20°C)	Minutes	-	-	5 - 7
Demould Time (20°C)	Hours	-	-	1 - 2



### Cured Data

Property	Units	FC-7450 ( Unfilled )
Hardness @ 20°C	Shore D	72 - 75
Compressive Strength	N/mm <sup>2</sup>	40 - 50
Tensile Strength	N/mm <sup>2</sup>	50 - 55
Flexural Strength	N/mm <sup>2</sup>	55 - 60
Flexural Modulus	N/mm <sup>2</sup>	1400 - 1500
Elongation at Break	%	6.0 - 6.5
Impact Strength	KJ/m <sup>2</sup>	12 - 15
Heat Distortion Temp. (HDT)	°C	55

### Method of Use

#### **Mould Preparation**

Ensure that the mould is clean and dry and if the mould is made from metal, wood or resin, use a release agent. For flexible moulds, use Polycraft GP-3481 silicone rubber. If the mould is wooden, ensure the wood is well sealed with varnish and/or wax based release agents.

#### **Mould Preparation**

Shake the Part A can thoroughly in order to homogenise the resin. For best results, ensure that the two components are at 20°C before mixing.

#### **Mixing Instructions**

When using unfilled, add the correct amount of Part B to the Part A and stir for 30 seconds. Pour carefully in one place into the mould in order to avoid air inclusion. If the resin is over mixed or stirred after pouring into the mould there is a possibility of oily surfaces on the casting.

#### **Curing**

The casting can generally be demoulded in 1 - 2 hours at room temperature. The precise demould time will vary with casting thickness, as thin section units will cure slower than thicker section units.

#### **Storage**

Polycraft FC-7450 A and B should be stored in original, unopened containers between 20 and 25°C. Like all polyurethanes, both components are moisture sensitive. Moisture absorption will cause excessive aeration in cast parts. KEEP THE PACKING TIGHTLY SEALED WHEN NOT IN USE.



**Notes.**

All data listed relates to typical values. This data should not be considered a product specification. Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS.