

FC 120 Polyurethane Fastcast

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FC 120 is a two-part castable polyurethane system which cures to form a 65 Shore D semi rigid plastic. This system offers a level of reactivity tailored to enable demould within 20 minutes at typical ambient temperature. Once cured, this system will offer excellent impact resistance and a level of toughness suited to the production of hollow castings. The low mixed viscosity of this system enables the reproduction of fine detail and minimises air bubble entrapment.

For general purpose castings and where excellent heat stability is required Mouldlife recommend the use of FC 60.

Advantages

- Easy to use 1/1 ratio by weight.
- Ambient temperature curing.
- Quick demould.
- Fine detail reproduction.
- Excellent impact resistance.
- Pigmentable
- Low Toxicity.
- Paintable when cured.

Applications

- Rotationally cast mouldings.
- Prototyping.

Product data

Property	Unit	FC 120 Polyol	FC 120 Isocyanate
Appearance	Visual	Cloudy liquid	Amber liquid
Density	g/cm ³	1.00	1.06

Mix ratio Parts by weight

FC 120 Polyol	100
FC 120 Isocyanate	100

Mixing / Processing

These products are low viscosity rapid curing materials that have been designed to be mixed by hand. For larger volumes or prototyping applications they can be processed through 2 component meter mixing machines.

Prior to use make sure that both the Polyol and Isocyanate are at room temperature, ideally about 20 – 23°C. Measure equal volumes of both components into separate containers then pour the Isocyanate into the Polyol container and mix for 1 minute, thoroughly scraping the sides and bottom of the container. After 1 minute pour the material into the mould as quickly as possible and allow it to cure.

Reseal the Polyol and Isocyanate containers immediately after use to prevent atmospheric moisture contamination which will cause foaming of the Polyurethane.

Typical Properties

Property	Volume	Unit	Result
Appearance		Visual	White
Usable life at 20°C	100 ml	Mins	2 – 3
Mixed Viscosity		cP	<120
Demoulding time		Minutes	20 - 30

Cured Properties

Test Method	Unit	Value
Density ISO 1183	g/cm ³	1.03
Hardness ISO 868	Shore oD	70 - 73
Flexural strength ISO 178	MPa	40
Tensile strength ISO 527	MPa	28 - 30
HDT ISO 75	°C	65 -
Elongation at Break	%	70 8 -
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Storage

The materials described in this instruction sheet should be stored at 15 - 28oC in a dry place and sealed containers, preferably those in which they are supplied.

Working Conditions

The product should be used, when in the temperature range 18-25oC.

Packaging

FC 120 Polyol and FC 120 Isocyanate are supplied in 25kg Containers

Handling precautions

For more detailed information please refer to the MSDS (Material Safety Data Sheet).

For further questions relating to processing and application, please contact our technical department.

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