



FC 60 Polyurethane Fastcast

FC 60 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 heat stability. The low mixed viscosity of this system enables the reproduction of fine detail and minimises air bubble entrapment.

For rotational castings and where exceptional ductility is required PS Composites recommends the use of FC 120.

Advantages

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

Applications

- Figures, decorative objects.
- Prototyping.

Product data

Property	Unit	FC 60 Polyol	FC 60 Isocyanate
Appearance	Visual	White	Amber liquid
Density	g/cm ³	1.08	1.10

Mix ratio	Parts by weight
FC 60 Polyol	100
FC 60 Isocyanate	100

Storage

The materials described in this instruction sheet should be stored at 15 - 28°C 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 18-25°C

Mixing Instructions

Prior to use it is very important to ensure that the polyol component is completely mixed. Some settlement may occur on storage although this can easily be rectified via gentle agitation. The isocyanate component does not require any pre-mixing treatment.

Application

FC 60 can be processed via hand or machine mixing methods although the user should note that the pot-life given will not allow sufficient time for vacuum degassing after mixing. This system has been developed to minimise air bubble entrapment although care should be taken when mixing the polyol and isocyanate components together. Material processing temperature of 20-30°C should be adhered to at all times.

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
Viscosity		cP	<80
Usable life at 20°C	100 ml	Mins	2 – 2.5
Demoulding time		Minutes	15 - 20

Cured Properties

Test	Method	Unit	Value
Density	ISO 1183	g/cm ³	1.1
Hardness	ISO 868	Shore ^o D	65
Flexural strength	ISO 178	MPa	35 - 40
Tensile strength	ISO 527	MPa	30 - 35
HDT	ISO 75	°C	70 - 75
Elongation at Break		%	10 - 14

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