

Product Name

EASYCAST® CLEAR

80 Shore D Clear Polyurethane Casting System

Product Description

Easycast® Clear is an easy to use low viscosity, water clear polyurethane resin. It is ideal for small parts such as lenses, model windows, prototypes and clear injection moulded like parts. Easycast® Clear can produce parts that are near bubble free without the use of vacuum degassing. Finished parts once cured properly are extremely durable. Care should be taken to use Platinum Based/Addition Cure Silicone for the moulds. Tin Cure Silicone will result in defective casts. Always support the cast piece while post-curing. Ideally all pieces manufactured from Easycast Clear should be post-cured to ensure a tack free surface and thorough cure. This should be taken into account when purchasing.

Typical Applications

Commonly used for model windows, lenses, intricate prototypes, SFX & theatre props.

Physical Properties

Hardness		Shore D	80±2
Specific Gravity, cured		[g/cc]	1.07
Colour			Water Clear
Flexural Strength		[psi]	8475
Elongation		[%]	6.4
Flexural Modulus		[psi]	250,890
Heat Deflection	Post cured @ 66°C for 5-12 hours	[psi]	270,450
		[°C]	57
Heat Deflection	Post cured @ 66°C for 5-12 hours	[°C]	82
Shrinkage, linear	unfilled	[in/in]	0.01 unfilled

Handling Properties

Mix Ratio	By Weight	Part A	100 pbw
	Preferred method	Part B	90 pbw
Mix Ratio	By Volume	Part A	100 pbv
		Part B	100 pbv
Viscosity	cps @ 25°C	Mixed	250
Work Time	100g mass @ 25°C		9 minutes
Gel Time	100g mass @ 25°C		11-12 minutes
Demould Time	@ 25°C		30+ minutes (note 1)
Cure Schedule	5 days ambient; or demould followed with post cure of 12-14 hours @ 60°C is recommended to promote maximum physical properties		

Storage

Store at room temperature in a dry area.

Note 1

EASYCAST® Clear generally cures to a demouldable state in about 30 minutes; however, thin sections or certain part configurations may require more in-mould cure time. Sections that are less than 3mm may require an hour or more before demould.

Note 2

Both components should be mixed before each use to ensure uniformity of the materials. Opened containers of material should be purged with F720 Dry Air Blanket prior to replacing lids or caps, to prevent moisture contamination from humid air.

Issue Date

5th July 2017

Revision Number

7

Disclaimer

The data presented in this leaflet are in accordance with the present state of our knowledge, and does not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the product for a particular purpose.