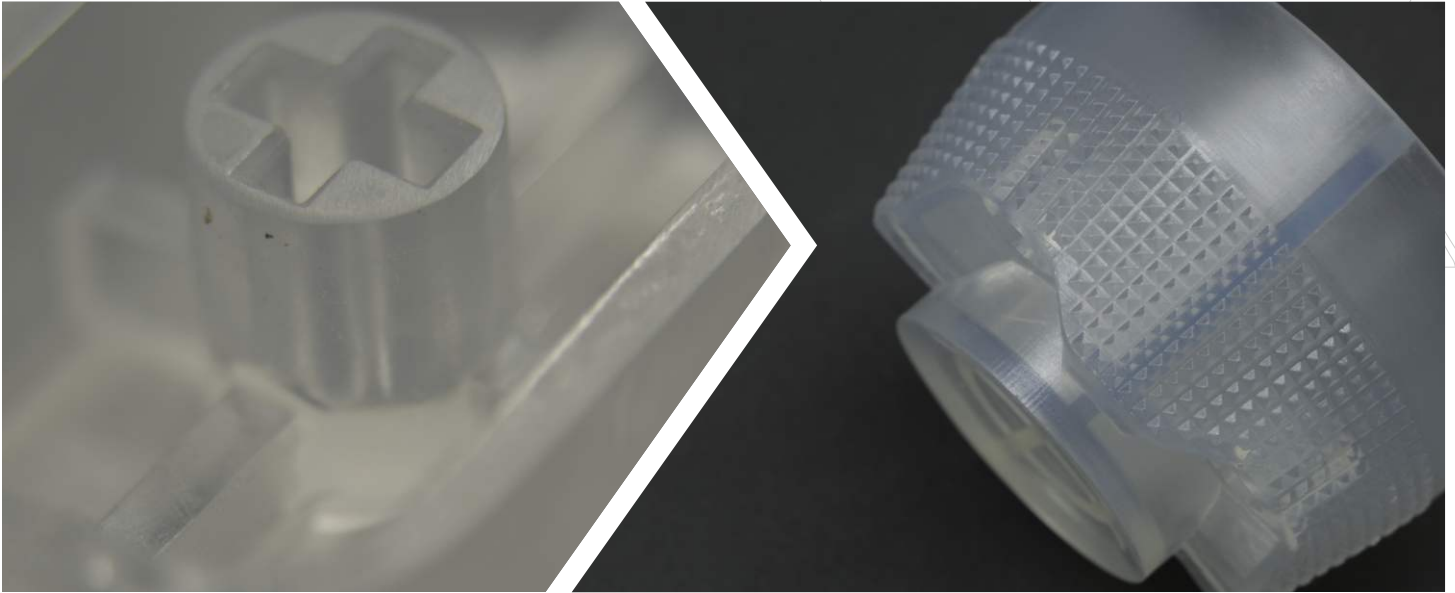


PC-Equivalent Plastic



Generic Data :

Technical Name	Accura 60
Process	Stereolithography (SLA)
Layer Thickness	100 μm
Accuracy	(+/-)150 μm
Maximum Build Size	250x250x250 mm

PC-Equivalent Plastic material is a photo-cured resin. It simulates properties and appearance of polycarbonate material. It has a good ability to resist humidity and maintain dimensional accuracy.

PC-Equivalent Plastic is a translucent (60-70% transparency) material. It is suitable for applications that require clear parts that need finished, production look. Since parts are fabricated using Stereolithography (SLA) technology, there is support structure generation during fabrication. Despite support structures, PC-Equivalent Plastic comes with a smooth surface finish, and little burrs (if any) left during the support structure removal can be polished to give the part a superior surface finish.

Characteristics

- + Strong and Rigid
- + Great feature resolution and dimensional accuracy
- + Smooth surface finish
- Brittle in nature
- Unsuitable for snap-fits and live hinges

Applications

- ✓ Translucent parts for clear display models
- ✓ Proof of concept prototypes
- ✓ Automotive designing and styling components, bottles etc.
- ✓ Master patterns for Vacuum casting

Material Properties	Value	Unit	Standard Test Method
Density (Solid)	1.21	g/cm ³	@25°C
Density (Liquid)	1.13	g/cm ³	@25°C
Apperance	Clear	-	-
Viscosity	150-180	cps	@30°C
Mechanical Properties			
Tensile Modulus	2690-3100	MPa	ASTM D 638
Ultimate Tensile Strength	58-68	MPa	ASTM D 638
Elongation at Break	5-13	%	ASTM D 638
Flexural Modulus	2700-3000	MPa	ASTM D 790
Flexural Strength	87-101	MPa	ASTM D 790
Impact Strength	15-25	J/m	ASTM D 256
Shore Hardness	86	Scale D	-
Thermal Properties			
Glass Transition(Tg) Temperature	58	°C	DMA, E''
Coefficient of Thermal Expansion (CTE)			
TMA (T<Tg, 0-40 °C)	71-131	µm/m°C	ASTM E 831-93
TMA (T<Tg, 75-140 °C)	153	µm/m°C	
Heat Deflection Temp. under load			
@1.8 MPa	48-50	°C	ASTM D 648
@0.45 MPa	53-55	°C	