

Clarity is not the only advantage of this SLA material; this revolutionary material produces parts with outstanding water resistance and high dimensional stability. These SLA parts can be sanded, primed, painted, used as pattern masters for urethane casting, or as final presentation pieces. Parts created using SLA clear are near colorless and look more like true, clear engineered thermoplastic, making it ideal for lens housings or prototypes where lighting applications need to be tested.



Liquid Material		
Measurement	Condition	Value
Appearance		Clear
Liquid Density	25°C (77°F)	1.13 g/cm <sup>3</sup>
Solid Density	25°C (77°F)	1.21 g/cm <sup>3</sup>
Viscosity	30°C (86 °F)	150 - 180 cps
Penetration Depth (Dp)*		6.3 mils
Critical Exposure (Ec)*		7.6 mJ/cm <sup>2</sup>

Post-Cured Material		
Measurement	Condition	US
Tensile Strength	ASTM D 638	58 - 68 MPa (8410 - 9860 PSI)
Tensile Modulus	ASTM D 638	2690 - 3100 MPa (390 - 450 KSI)
Elongation at Break (%)	ASTM D 638	5 - 13%
Flexural Strength	ASTM D 790	87 - 101 MPa (12620 - 14650 PSI)
Flexural Modulus	ASTM D 790	2700 - 3000 MPa (392 - 435 KSI)
Impact Strength (Notched Izod)	ASTM D 256	15 - 25 J/m (0.3 - 0.5 ft-lb/in)
Heat Deflection Temperature @66 PSI	ASTM D 648	53 - 55 °C (127 - 131 °F)
Heat Deflection Temperature @264 PSI	ASTM D 648	48 - 50 °C (118 - 122 °F)
Hardness, Shore D	-	86
Co-efficient of Thermal Expansion	ASTM 831-93 - TMA (T<Tg, 0-40°C)	71 µm/m-°C
Co-efficient of Thermal Expansion	ASTM 831-93 - TMA (T<Tg, 75-	153 µm/m-°C
Glass Transition (Tg)	DMA, E''	58°C (136°F)

Mechanical Properties	Test Method	English	Metric
Tolerances	-	+/- .005 1st in.; +/- .001 every in. after	+/- .127 1st cm; +/- .025 every cm after

\* Dp/Ec values are the same on all systems.



## Clear

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### Applications

- Tough functional prototypes
- Automotive design components
- Consumer electronics (cell phones etc.)
- Concept and marketing models
- Medical instruments, devices and labware
- Clear display models
- Lighting components (lenses etc.)
- Fluid flow and visualization models
- Master patterns for urethane castings
- Transparent assemblies
- QuickCast™ patterns for investment casting

### Features

- Durable and stiff
- High clarity
- Achieve the look and feel of polycarbonate
- View internal features and passages
- Thermal Resistance over 60° C
- Realize extended part life
- Humidity resistant parts
- Suitable for assemblies and functional testing

### About GROWit

GROWit™ is a privately held additive manufacturing company located in Irvine, California, dedicated to improving design through engineering and rapid prototyping. We strive to be at the cutting edge, bringing both knowledge and resources directly to customers. With our team of engineers, we help guide customers to the process that best suits their specific application, without holding a bias to a specific platform or technology.

Why do we call ourselves GROWit? Due to the layer-by-layer nature of rapid prototyping, a part often looks like it is growing within the machine – just like a plant grows from the ground. Rather than using the terms “building” or “fabricating”, the term “growing” is commonly used within the industry; thus the origin of our name, GROWit.

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