

Xtreme has a fairly high impact resistance, which makes it ideal for functional testing and produces accurate enough detail for prototypes that are used for fit, form or presentation. These SLA parts can be sanded, primed, painted and used as final show pieces. This durable material also works well when creating snap fits or assemblies that require tougher than normal loads.



Liquid Material		
Measurement	Condition	Value
Appearance		Gray
Liquid Density	25°C (77°F)	1.13 g/cm ³
Solid Density	25°C (77°F)	1.19 g/cm ³
Viscosity	30°C (86 °F)	250 - 300 cps
Penetration Depth (Dp)*		4.1 mils
Critical Exposure (Ec)*		11.7 mJ/cm ²

Post-Cured Material			
Measurement	Condition	Metric	US
Tensile Strength	ASTM D 638	38 - 44 Mpa	5510 - 6380 PSI
Tensile Modulus	ASTM D 638	1790 - 1980 Mpa	260 - 287 KSI
Elongation at Break (%)	ASTM D 638	14 - 22%	14 - 22%
Flexural Strength	ASTM D 790	52 - 71 Mpa	7540 - 10300 PSI
Flexural Modulus	ASTM D 790	1520 - 2070 Mpa	220 - 300 KSI
Impact Strength (Notched Izod)	ASTM D 256	35 - 52 J/m	0.66 - 0.98 ft-lb/in
Heat Deflection Temperature @66 PSI	ASTM D 648	62°C	144°F
Heat Deflection Temperature @264 PSI	ASTM D 648	54°C	129°F
Hardness, Shore D	-	86	86
Glass Transition (Tg)	DMA, E''	52°C	126°F

* Dp/Ec values are the same on all solid-state laser SLA® systems.

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



Applications

- Form, fit and function prototypes
- Durable Assemblies
 - Snap fit assemblies
 - Tough enclosures
 - Consumer electronic components
- Replace CNC machining of Polypropylene and ABS
- Master patterns for RTV/Silicone molding

Features

- Look and feel of a durable molded plastic
- Outstanding durability and impact resistance
- Thermal Resistance over 60° C
- Easy to use low viscosity formulation
- Fully developed and tested build styles
- Increased application opportunities
- Suitable for assemblies and functional testing
- Prototypes withstand modest temperatures without distortion

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.