



# SC 1000

## STEREOLITHOGRAPHY MATERIAL SPECIFICATIONS

### Highlights

- Custom Stratasys Direct Manufacturing formulation - best value SLA resin
- Low deformation due to shrink
- Strong, durable and water resistant
- Transparent natural yellow-green color can be tinted or painted
- MRI imaging clarity

### Applications

- Excellent for Investment Casting
- Durable SLA prototypes
- Quick prototype lenses and clear containers

## TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
<b>Color/Appearance</b>	Visual	Transparent Yellow/Green	Transparent Yellow/Green
<b>Density (as cured)</b>	Measured	0.042 lb/in <sup>3</sup>	1.16 g/cm <sup>3</sup>
<b>Shore D Hardness</b>	ASTM D2240	83 D	83 D
<b>Deformation Due to Shrink</b>	SDM	0.30%	0.30%
<b>Tensile Strength</b>	ASTM D638	7,758 psi	53 MPa
<b>Tensile Modulus</b>	ASTM D638	387,000 psi	2,668 MPa
<b>Elongation at Break</b>	ASTM D638	4 - 8%	4 - 8%
<b>Elongation at Yield (%)</b>	ASTM D638	-	-
<b>Flexural Strength</b>	ASTM D638	12,010 psi	83 MPa
<b>Flexural Modulus</b>	ASTM D790	280,000 psi	1,930 MPa
<b>Impact Strength (Notched Izod)</b>	ASTM D256	0.35 ft-lb/in	18.69 J/m
<b>Heat Deflection Temperature @ 264 psi</b>	ASTM D648	122°F	50°C
<b>Heat Deflection Temperature @ 66 psi</b>	ASTM D648	127°F	53°C
<b>Coefficient of Thermal Expansion, 0 - 30°C</b>	ASTM E831-93	57.1 µin/in-°F	102.7 µm/m-°C
<b>Coefficient of Thermal Expansion, 90 - 150°C</b>	ASTM E831-93	96.9 µin/in-°F	174.5 µm/m-°C

The information presented represents typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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