

# SLA MATERIAL SPECIFICATIONS

## SC 1000



### Highlights

- Custom Solid Concepts' formulation - best value SLA resin
- Low deformation due to shrink
- Water resistant
- Strong and durable
- Transparent natural yellow-green color can be tinted or painted
- MRI imaging clarity

### Applications

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

## TYPICAL PHYSICAL PROPERTIES

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

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change with out notice.