

SLA MATERIAL SPECIFICATIONS

SC 4500



Highlights

- Highly accurate SLA material
- Excellent sidewall quality which minimizes post finishing requirements
- Lowest deformation due to shrink
- Paintable
- Custom Solid Concepts formulation

Applications

- Master patterns
- General purpose prototyping
- Excellent for form-fit models

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	English	Metric
Color/Appearance	Visual	White	White
Density (as cured)	Measured	0.042 lb/in ³	1.16 g/cm ³
Shore D Hardness	ASTM D2240	80 D	80 D
Deformation Due to Shrink	SCI	0.21%	0.21%
Tensile Strength	ASTM D638	5,262 psi	36 MPa
Tensile Modulus	ASTM D638	293,000 psi	2,020 MPa
Elongation at Break	ASTM D638	4 - 7%	4 - 7%
Elongation at Yield (%)	ASTM D638	-	-
Flexural Strength	ASTM D638	9,210 psi	63 MPa
Flexural Modulus	ASTM D790	280,000 psi	1,930 MPa
Impact Strength (Notched Izod)	ASTM D256	0.42 ft-lb/in	22.43 J/m
Heat Deflection Temperature @ 264 psi	ASTM D648	107°F	42°C
Heat Deflection Temperature @ 66 psi	ASTM D648	107°F	42°C
Coefficient of Thermal Expansion, 0 - 30°C	ASTM E831-93	93.3 µin/in-°F	167.9 µm/m-°C
Coefficient of Thermal Expansion, 90 - 150°C	ASTM E831-93	84.0 µin/in-°F	151.2 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.