



SC 1000P

STEREOLITHOGRAPHY MATERIAL SPECIFICATIONS

Highlights

SC 1000P is an improved investment casting pattern material that was custom formulated to take advantage of the latest, high throughput Stereolithography equipment. SC 1000P continues to offer the best in class performance characteristics such as low deformation due to shrink, strength, durability, water resistance, and MRI image clarity. SC 1000P is transparent with a natural yellow-green color that can be tinted or painted.

Applications

- Excellent for investment casting patterns
- Ideal for large, lightweight models utilizing ID-Light™/ SL

TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Transparent Yellow/Green	Transparent Yellow/Green
Density (as cured)	Measured	0.042 lb/in ³	1.16 g/cm ³
Shore D Hardness	ASTM D2240	83 D	83 D
Deformation Due to Shrink	SDM	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 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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