

# SOMOS 9021 – SPECIFICATIONS



This stereolithography material is a clear amber resin that produces very high durability polypropylene-like parts. It is an accurate material with wide process latitude, and it produces robust, white models with excellent side wall features. It also has high elongation at break, and it is particularly suitable for snap-fit.

LIQUID MATERIAL	
Appearance	Clear Amber
Density	~1.13 g/cm <sup>3</sup> @ 25°C
Viscosity	~450 cps @ 30°C
@82°F	430 cps
@86°F	350 cps
Penetration depth (Dp)	6.6 mils
Critical exposure (Ec)	9.6 mJ/cm <sup>2</sup>
Part building layer thickness*	0.10 mm

\*Dependent upon part geometry and build parameters

\*\* Values dependent upon SLA system and build parameters.

POST-CURED MATERIAL **		
	90-MINUTE UVPOST-CURE	90-MINUTE UV + 2 HOURS @176°F THERMALPOST-CURE
Hardness (Shore D)	80 - 82	81 Shore D
Flexural modulus	190 - 210 ksi	210-230 ksi
Flexural strength	6.0 - 6.7 ksi	7,500-8,100 psi
Tensile strength	4.4 - 4.7 ksi	5,000-5,700 psi
Tensile modulus ASTM D-638	200-275 ksi	220-280 ksi
Elongation at Yield	15 - 21%	10-16%
Izod Impact (Notched)	0.9 - 1.0 ft-lb/in	0.4-0.6 ft.- lb./in.
Deflection Temperature	126 - 142°F	136-140°F
Young's Modulus	178 - 212 ksi	
Glass transition, Tg DMA, E" peak	131°F	136°F
Coefficient of thermal expansion TMA (T<Tg)	-	-
Density	1.19 g/cm <sup>3</sup>	-