

SL 7870 WC – SPECIFICATIONS



This is a clear, low viscosity stereolithography resin with excellent accuracy. It offers a large working envelope of physical properties, as well as a unique combination of high elongation and impact strength which allows the building of durable parts. It requires less part finishing time and particularly suitable for masters for the investment casting parts.

LIQUID MATERIAL	
Appearance	Clear
Density @77°F	1.13 g/cm ³
Viscosity	
@82°F	210 cps
@86°F	180 cps
Penetration depth (Dp)	7.2 mils
Critical exposure (Ec)	10.6 mJ/cm ²
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 ASTM D-2240	86 Shore D	87 Shore D
Flexural modulus ASTM D-790	286-333 ksi	289-338 ksi
Flexural strength ASTM D-790	9,400-10,300 psi	9,400-11,000 psi
Tensile modulus ASTM D-638	278-291 ksi	268-292 ksi
Tensile strength ASTM D-638	5,470-6,050 psi	5,620-6,050 psi
Elongation at break ASTM D-638	10-22%	10-23%
Impact strength, Notched Izod ASTM D-256	0.85-1.15 ft.-lb./in.	0.81-1.13 ft.-lb./in.
Heat deflection temperature ASTM D-648 @66 psi	118°F	120°F
Glass transition, Tg DMA, E" peak	133°F	135°F
Coefficient of thermal expansion TMA (T<Tg)	-	-
Density	-	-