

Flex - Specifications

Description

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 @77°F	1.15 g/cm ³
Viscosity	
@82°F	430 cps
@86°F	350 cps
Penetration depth (Dp)	6.6 mils
Critical exposure (Ec)	9.6 mJ/cm ²
Part building layer thickness*	0.10 mm

* Dependent upon part geometry and build parameters.

Flex

Post-cured Material**

	90-minute UV post-cure	90-minute UV + 2 hours @176°F thermal post-cure
Hardness ASTM D-2240	79 Shore D	81 Shore D
Flexural modulus ASTM D-790	200-225 ksi	210-230 ksi
Flexural strength ASTM D-790	7,300-8,000 psi	7,500-8,100 psi
Tensile modulus ASTM D-638	200-275 ksi	220-280 ksi
Tensile strength ASTM D-638	5,000-5,700 psi	5,000-5,700 psi
Elongation at break ASTM D-638	12-21%	10-16%
Impact strength, Notched Izod ASTM D-256	0.5-0.7 ft.-lb./in.	0.4-0.6 ft.-lb./in.
Heat deflection temperature ASTM D-648 @66 psi	118-122°F	136-140°F
Glass transition, Tg DMA, E'' peak	131°F	136°F
Coefficient of thermal expansion TMA (T<Tg)	-	-
Density	1.19 g/cm ³	-

** Values dependent upon SLA system and build parameters.

