

ABS-like - Specifications

Description

This stereolithography material is an opaque white, low viscosity resin that produces accurate and durable parts with ABS-like performance and appearance. It produces robust, white models and prototypes with a high gloss fine surface finish and detail. It is particularly suitable for master patterns, concept models, functional prototypes, and general parts. Parts exhibit durability over time beyond 6 months.

Liquid Material

Appearance	White liquid
Density @77°F	1.13 g/cm ³
Viscosity	
@82°F	240 cps
@86°F	210 cps
Penetration depth (Dp)	5.6 mils
Critical exposure (Ec)	9.9 mJ/cm ²
Part building layer thickness*	0.10 mm

* Dependent upon part geometry and build parameters.

ABS-like

Post-cured Material**

	90-minute UV post-cure	90-minute UV + 2 hours @176°F thermal post-cure
Hardness ASTM D-2240	86 Shore D	87 Shore D
Flexural modulus ASTM D-790	275-348 ksi	304-348 ksi
Flexural strength ASTM D-790	8,500-10,000 psi	9,000-10,000 psi
Tensile modulus ASTM D-638	260-348 ksi	290-348 ksi
Tensile strength ASTM D-638	5,200-7,400 psi	5,700-7,400 psi
Elongation at break ASTM D-638	10-20%	10-14%
Impact strength, Notched Izod ASTM D-256	0.83-0.91 ft.-lb./in.	0.83-0.93 ft.-lb./in.
Heat deflection temperature ASTM D-648 @66 psi	124°F	122°F
Glass transition, Tg DMA, E'' peak	144°F	144°F
Coefficient of thermal expansion TMA (T<Tg)	96x10 ⁻⁶ /°C	99x10 ⁻⁶ /°C
Density	1.16 g/cm ³	-

** Values dependent upon SLA system and build parameters.

