

# SLA Materials

## YG H-3001

### Product Description

YG H-3001 is a stereolithography resin with high temperature resistance and high precision, and the printed workpiece is a special gray color. It is used in the stereolithography method of SLA. YG H-3001 can be widely used in the production of models and parts for industrial prototypes, automobiles, medical care, shoe molds, household appliances, mobile phones, home automation, building materials, and consumer electronic products.

### Typical Features

High precision: Compared with ordinary products on the market, the shrinkage ratio will be reduced by 30%.

### Physical Properties — Liquid Material

Appearance	White
Proportion	1.1 g/cm <sup>3</sup> at 25°C
Viscosity	580cps at 28°C
DP	0.10mm
EC	9.8 mJ /cm <sup>3</sup>
Building Layer Thickness	0.1mm

### Mechanical Properties of Post-Cured Material

Measurement	Test Method	Value
Hardness (Shore D)	ASTM D2240	85D
Flexural Modulus	ASTM D790	2900 - 3220
Flexural Strength	ASTM D790	64 - 69
Tensile Modulus	ASTM D638	1900 - 2090
Tensile Strength	ASTM D638	40 - 44
Elongation at Break	ASTM D638	13 - 20%
Impact Strength, notched Izod, J/m	ASTM D256	34.4
Heat Deflection Temperature, °C	ASTM D648@66PSI	99.6°C

## SLA Materials

# Lasty-702

### Product Description

Lasty-702 is an ABS like SL resin which has accurate and durable features. It is designed for solid state SLA platforms. Lasty-702 can be applied in master patterns, concept models, general parts and functional prototypes in the field of automotive, medical and consumer electronics industries. Parts built from Lasty-702 stay durable for over 6.5 months.

### Typical Features

- Liquid resin's medium viscosity, so easy recoating, easy clean parts and machines
- Improved strength retained, improved dimensions retention of parts in humid condition
- Need minimal part finishing
- Long shelf life in machine

### Typical Benefits

- Need less part finishing time,easier post-curing
- Builds accurate and high tough parts with an improved dimensional stability
- High quality controls for vacuum casting parts
- Low shrink and good resistance to yellowing
- Magnificent yellow color
- Outstanding machinable SLA material

### Physical Properties — Liquid Material

Appearance	White
Density	1.11 - 1.15 g/cm <sup>3</sup> at 25°C
Viscosity	510- 590 cps at 25°C
DP	0.135 - 0.158 mm
EC	8.1 - 8.9 mJ/cm <sup>2</sup>
Building Layer Thickness	0.05 - 0.12 mm

SLA Materials

# Lasty-702

## Mechanical Properties of Post-Cured Material

Measurement	Test Method	Value
90-minute UV post-cure		
Hardness (Shore D)	ASTM D2240	78 - 88
Flexural Modulus	ASTM D790	2722 - 2792
Flexural Strength	ASTM D790	69 - 76
Tensile Modulus	ASTM D638	2649 - 2731
Tensile Strength	ASTM D638	41 - 58
Elongation at Break	ASTM D638	7 - 11%
Poisson's Ratio	ASTM D638	0.4 - 0.44
Impact Strength, notched Izod, J/m	ASTM D256	29 - 34
Heat Deflection Temperature, °C	ASTM D648@66PSI	58 - 69
Glass Transition, T <sub>g</sub>	DMA, E''peak	62 - 75
Coefficient of Thermal Expansion	TMA (T<T <sub>g</sub> )	90 - 103*E-6
Density		1.12 - 1.18
Dielectric Constant 60Hz	ASTM D150-98	4.2 - 5.0
Dielectric Constant 1kHz	ASTM D150-98	3.3 - 4.2
Dielectric Constant 1MHz	ASTM D150-98	3.2 - 4.0
Dielectric Strength	ASTM D1549-9a	12.8 - 16.1

## SLA Materials

# GH100

### Product Description

GH 100 is a red translucent high temperature resistant resin. It has stable dimensions and good rigidity.

### Mechanical Properties

Measurement	Test Method	Value
Tensile Modulus	ASTM D648	3235
Tensile Strength	ASTM D638	42.7
Elongation at Break	ASTM D638	1.5%
Flexural Modulus	ASTM D790	3165
Shore Hardness	ASTM D2240	83D
Thermal Deformation	ASTM D648	150°C