

# SH8900-H TECHNICAL DATA SHEET

## PRODUCT DESCRIPTION

SH8900-H is an ABS like SL resin which has accurate and durable features. It is designed for solid state SLA platforms. SH8900-H can be applied in master patterns, concept models, general parts and functional prototypes in the field of automotive, medical and consumer electronics industries. The parts durability building with SH8900-H is 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
- Building 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 white color
- Outstanding machinable SLA material

**PHYSICAL PROPERTIES – LIQUID MATERIAL**

<b>Appearance</b>	White
<b>Density</b>	1.11~1.15g/cm <sup>3</sup> @ 25 °C
<b>Viscosity</b>	405~500 cps @ 25 °C
<b>Dp</b>	0.135~0.152 mm
<b>Ec</b>	8.9~9.5 mJ/cm <sup>2</sup>
<b>Building layer thickness</b>	0.05~0.12mm

**MECHANICAL PROPERTIES OF POST-CURED MATERIAL**

MEASUREMENT	TEST METHOD	VALUE
<b>90-minute UV post-cure 90</b>		
<b>Hardness, Shore D</b>	ASTM D 2240	<b>77~88</b>
<b>Flexural modulus, Mpa</b>	ASTM D 790	<b>2,682-2,778</b>
<b>Flexural strength, Mpa</b>	ASTM D 790	<b>70- 74</b>
<b>Tensile modulus, MPa</b>	ASTM D 638	<b>2,599-2,715</b>
<b>Tensile strength, MPa</b>	ASTM D 638	<b>40-58</b>
<b>Elongation at break</b>	ASTM D 638	<b>12 -19%</b>
<b>Poisson`s Ratio</b>	ASTM D 638	<b>0.4-0.44</b>
<b>Impact strength notched Izod, J/m</b>	ASTM D 256	<b>35 - 45</b>
<b>Heat deflection temperature, °C</b>	ASTM D 648 @66PSI	<b>55~68</b>
<b>Glass transition,Tg , °C</b>	DMA, E” peak	<b>60~75</b>
<b>Coefficient of thermal expansion, /°C</b>	TMA(T<Tg)	<b>90~102*E-6</b>
<b>Density, g/cm<sup>3</sup></b>		<b>1.12~1.18</b>
<b>Dielectric Constant, 60 Hz</b>	ASTM D 150-98	<b>4.1~5.0</b>
<b>Dielectric Constant, 1 kHz</b>	ASTM D 150-98	<b>3.2~4.2</b>
<b>Dielectric Constant, 1 MHz</b>	ASTM D 150-98	<b>3.2~4.1</b>
<b>Dielectric Strength, kV/mm</b>	ASTM D 1549-97a	<b>12.7~16.2</b>