## **ZR300**

## TECHNICAL DATA SHEET

## White, durable, accurate SLA resin

#### PRODUCT DESCRIPTION

ZR300 is a SLA resin which has high elongation and excellent flexibility that can be produced rigidity, tough, water-resistant and low shrinkage parts.

#### **TYPICAL FEATURES**

- Good dimension stability and maintains strength even in humid conditions
- ABS-like good surface parts with high elongation and excellent flexibility
- Liquid resin has low viscosity with high photospeed, so easy recoating, easy clean parts and machines
- Good green strength requires minimal finishing
- The SLA resin can build accurate, durable parts in ABS-like pearl white color, because the liquid resin is colorless clear and the cured resin becomes pearl white in this process, so the production are distinctly recognizable during the build

#### TYPICAL APPLICATION

- ZR300 simulates ABS material, it can be used for many applications of the automotive, medical and consumer electronics industries.
- Designed for use on solid state SLA platforms
- It can provide a number of conceptual models working envelope and useful prototype where snap-fit property is necessary.
- Durable, white, water-resistant, low shrinkage resin for stereolithography for SLA system.

# **Physical Properties – Liquid Material**

Appearance	White	
Density	1.13 g/cm³ @ 25 °C	
Viscosity	310 cps @ 28 °C, 265 cps @ 30 °C	
Dp	0.12 mm	
Ec	15 mJ/cm <sup>2</sup>	
Building layer thickness	0.1mm	

## **Mechanical Properties of Post-Cured Material**

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MEASUREMENT	TEST METHOD	VALUE	
		90-minute UV post-cure	
Hardness, Shore D	ASTM D 2240	86	
Flexural modulus, Mpa	ASTM D 790	1700-2200	
Flexural strength, Mpa	ASTM D 790	64-81	
Tensile modulus, MPa	ASTM D 638	1600-2200	
Tensile strength, MPa	ASTM D 638	37-45	
Elongation at break	ASTM D 638	5 -8%	
Impact strength,notched lzod, J/m	ASTM D 256	35-60	
Heat deflection temperature, °C	ASTM D 648 @66PSI	60	
Glass transition,Tg , °C	DMA, E" peak	68	
Coefficient of thermal expension,, /°C	TMA(T <tg)< td=""><td>100*E-6</td></tg)<>	100*E-6	
Density, g/cm <sup>3</sup>		1.16	

### STORAGE INFORMATION

Cold storage in a dry and backlighting location, can extend the service life  ${\mbox{\tiny o}}$