

## S1003 Standard Resin

Technical Data Sheet

S1003 is a high-toughness SLA general-purpose resin that is not brittle when printing small models. At the same time, the resin has high precision and high dimensional stability, which can be suitable for various application scenarios. S1003 is suitable for a variety of SLA printers in the 355nm wavelength.



### MATERIAL STATUS

Characteristics	High toughness
	Dimensional stability
	High precision

Applications	Industrial prototypes
	Garage Kits

Appearance	White
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TYPICAL PROPERTIES	TEST METHOD	VALUE
Viscosity	ASTM D792	260-410
Density ,g/cm <sup>3</sup>	ASTM D792	1.10-1.16
Tensile Modulus,MPa	ASTM D638M	2500-2700
Tensile Strength,MPa	ASTM D638M	46-56
Elongation At Break,%	ASTM D638M	8-14
Flexural Modulus,MPa	ASTM D790M	2600-2800
Flexural Strength,MPa	ASTM D790M	68-80
Izod Notch Impact Strength,J/m	ASTM D256	29-44
Heat Deflection Temperature,°C@0.46MPa	ASTM D648	43-54
Hardness,Shore D	ASTM D2240	79-88
Water Absorption,%	ASTM D570-98	0.38

#### UnionTech Lite600 Recommended printing parameters

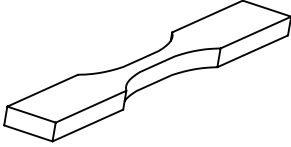
Support	Speed ratio	4-5
Profile	Speed ratio	8-10
Fill	Speed ratio	14-16

#### STORAGE AND SHELF LIFE

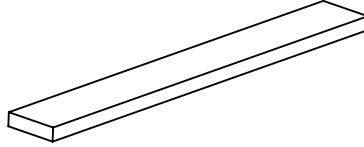
This product is sensitive to light, heat and moisture. When the product is unopened, it should be stored in a cool, ventilated and dry place away from direct sunlight. After the product is opened, it is recommended to store it in an environment with a temperature of 18 ~ 28°C and a humidity of less than 40%, away from light and heat sources. Unopened photosensitive resin material has a shelf life of 12 months.



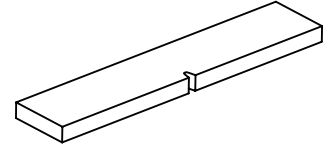
## MECHANICAL PROPERTIES



Tensile testing specimen ASTM D638



Flexural testing specimen ASTM D790



IZOD Impact Strength ASTM D638

## NOTICE

The above data is based on our extensive experiments, and the results are reliable. However, due to the diversity of practical applications, the application conditions are not beyond our control, so users need to test before use to confirm whether this product is suitable. Users can contact our technical service department if they encounter any problems during use, and we will try our best to help you as much as possible.

