

High Temp Resin

Technical Data Sheet

"Good temperature resistance, can be heated for a long time at 120°C or boiled at 100°C. With high hardness, high strength and high rigidity, high precision, fully cured model has excellent mechanical properties and temperature resistance. Can be used for high temperature dental mold, to meet the needs of dental model assembly and manufacturing of fine, high temperature and low deformation."

Material Status	Mass Production		
Characteristics	<ul style="list-style-type: none"> • Heat resistance • High precision 	<ul style="list-style-type: none"> • High hardness • High strength 	<ul style="list-style-type: none"> • High rigidity
Applications	<ul style="list-style-type: none"> • Mechanical • Dental 	<ul style="list-style-type: none"> • Automobile 	
Appearance	<ul style="list-style-type: none"> • Multiple Colors 		
Form	<ul style="list-style-type: none"> • Resins 		
Processing method	<ul style="list-style-type: none"> • (surface exposure molding) LCD 		

	Testing method	Typical value	
Physical Properties			
Density	GB/T 4472	1.09-1.10	g/cm ³
Viscosity	GB/T 22235	180-220	mPa•s
Hardness	ASTM D2240	82-84	Shore D
Mechanical Properties			
Tensile Strength	ASTM D638	70-85	MPa
Elongation at Break	ASTM D638	35-40	%
Flexural Strength	ASTM D790	95-105	MPa
IZOD Impact Strength	ASTM D638	N/A	J/m
Thermal Properties			
Heat distortion Temperature	GB/T 1634	100.5	°C

Recommended printing parameters

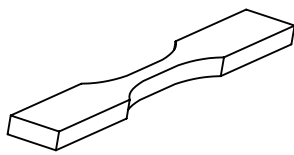
Settings	Machine Type		
	Low Light Intensity	Medium Light Intensity	High Light Intensity (Monochrome LCDScreen)
Representative Machine	AnyCubic Photon	eSUN LCD 3.0 Nova Bene 4 Creality LD-002R	Anycubic MONO X ELEGOO Saturn Phrozen Sonic Mini
Exposure Time/s	8-10	5-6	Not recommended
Bottom Layer Count		3-5	
Bottom Exposure Time	40-60	30-40	Not recommended
Lifting Distance/mm	5.5&6-inch screen: 5-6 or Higher		8.9&13.3-inch screen: 8-12 or Higher
Lift Speed/mm•min ⁻¹	90-150	90-120	Not recommended
Retract Speed/mm•min ⁻¹		150-200	

1. The above parameters are for reference only. The performance of the cured material will be affected by factors such as equipment, environment, parameter settings, post-processing methods, detection methods, etc., which will cause big differences. Please contact us if necessary; 2. Shake the resin well before use; please recycle the resin in time after printing; avoid prolonged soaking of the molded parts in the cleaning agent; 3. It is not recommended to add other ingredients or mix them to the resin to avoid molding failure or other problems; 4. The resin should be stored in a cool, dark place, and sealed with an opaque container; 5. The photopolymer resin is made of chemicals, which has a certain odor and skin irritation. Pay attention to protection during transportation and use. If the resin accidentally touches your skin or eyes, please rinse with plenty of water, and the skin can be cleaned with detergent, decontamination powder, etc.; if the allergic reaction is severe or even enters the mouth or nasal cavity, please seek medical attention immediately; 6. The model should be printed at a room temperature of 25-35 degrees. IF it is winter, it is recommended to turn on the air conditioner for printing.

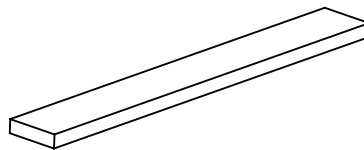
Matters needing attention

1. Shake well before printing 2. After printing, it should be fully cured (more than 10min), and then put in the oven at 150°C for 30min. The support can be removed after the post-processing 3. The wall thickness of the heat-resistant parts can be as thick as possible to achieve the heat-resistant performance, and the heat treatment time in the oven should not be too long "

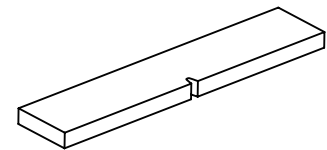
Mechanical Properties



Tensile testing specimen ASTM D638



Flexural testing specimen ASTM D790



IZOD Impact Strength ASTM D638

The physical properties, mechanical properties, and thermal properties of the resin are obtained based on the printing spline test.

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