

eResin-PLA

Technical Data Sheet

Based on eSUN self-produced PLA polyol synthesised, with good toughness, low odor, and smooth surface of printed parts. EN71-3 toy standard certified, safer to use; can be drilled without cracking; low odor, more comfortable to use.

Material Status	Mass Production
Characteristics	<ul style="list-style-type: none"> • High toughness • Low odor
Applications	<ul style="list-style-type: none"> • Education • Garnish
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	1.07-1.10 g/cm ³
Viscosity	GB/T 22235	100-270 mPa•s
Hardness	ASTM D2240	75-82 Shore D
Mechanical Properties		
Tensile Strength	ASTM D638	24-55 MPa
Elongation at Break	ASTM D638	24-37 %
Flexural Strength	ASTM D790	25-61 MPa
IZOD Impact Strength	ASTM D638	27-40 J/m
Thermal Properties		
Heat distortion Temperature	GB/T 1634	N/A °C

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Recommended printing parameters

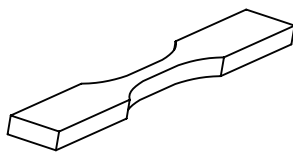
Settings	Machine Type		
	Low Light Intensity	Medium Light Intensity	High Light Intensity (Monochrome LCDScreen)
Representative Machine	AnyCubic Photon	eSUN LCD 3.0 Nova Bene 4 Creality LD-002R	Anycubic MONO X ELEGOO Saturn Phrozen Sonic Mini
Exposure Time/s	8-10	5-6	Not recommended
Bottom Layer Count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

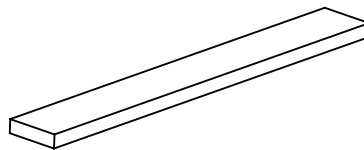
Matters needing attention

Shake well before printing

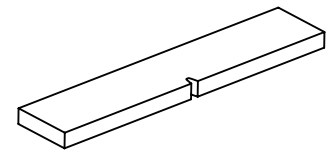
Mechanical Properties



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.

Notice

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