

eResin-PLA Pro

Technical Data Sheet

Based on eSUN self-produced PLA polyol synthesised, Compatible with color screen, mono screen, large and small size printers, good toughness, low odor, and smooth print surface. The molding precision is high, with high resolution, the surface of the printed product is smooth, and the printing details are clearly visible. It can be suitable for printing a variety of figures and dental model.

Material Status	Mass Production		
Characteristics	<ul style="list-style-type: none"> • High strength • High toughness • High precision 	<ul style="list-style-type: none"> • High resolution • Smooth print surface • Wide compatibility 	
Applications	<ul style="list-style-type: none"> • Figure • Education 	<ul style="list-style-type: none"> • Dentistry • Mechanical 	<ul style="list-style-type: none"> • Decoration
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	200-300	mPa•s
Hardness	ASTM D2240	78-80	Shore D
Mechanical Properties			
Tensile Strength	ASTM D638	37-48	MPa
Elongation at Break	ASTM D638	25-28	%
Flexural Strength	ASTM D790	36-49	MPa
IZOD Impact Strength	ASTM D638	32-36	J/m
Thermal Properties			
Heat distortion Temperature	GB/T 1634	N/A	°C

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China

Tel +86 755 86581960

fax +86 755 26031982

Email: bright@brightcn.net

www.esun3d.net

Recommended printing parameters

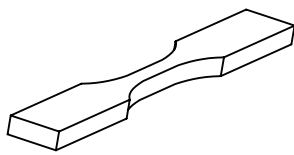
Settings	Machine Type		
	Low Light Intensity	Medium Light Intensity	High Light Intensity (Monochrome LCDScreen)
Representative Machine	AnyCubic Photon	eSUN LCD 3.0 Nova Bene 4 Creality LD-002R	Anycubic MONO X ELEGOO Saturn Phrozen Sonic Mini
Exposure Time/s	13-14	6-7	2-4
Bottom Layer Count		3-5	
Bottom Exposure Time	≥60	≥60	≥30
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	50-90
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.

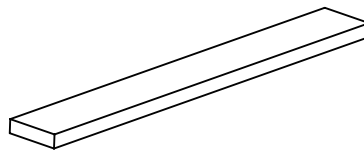
Matters needing attention

Shake well before printing

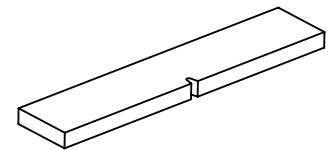
Mechanical Properties



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

All information supplied by or on behalf of eSUN in relation to this product, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but the product is sold “as is” . eSUN assumes no liability and makes no representations or warranties, express or implied, of merchantability, fitness for a particular purpose, or of any other nature with respect to information or the product to which information refers and nothing herein waives any of the seller's conditions of sale.

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China

Tel +86 755 86581960

fax +86 755 26031982

Email: bright@brightcn.net

www.esun3d.net