

# PW100 PLA Water Washable Resin

Technical Data Sheet

Combining the advantages of eSUN self-produced PLA polyol, a bio based water washing resin for ordinary consumers contains bio based components, Compatible with color screen, mono screen, large and small size printers, good tough-ness, low odor, and smooth print surface.Can be washed with water, saving step for alcohol cleaning, greatly shortening the post-processing time, improving printing efficiency and cost-effective.

Material Status	Mass Production
Characteristics	<ul style="list-style-type: none"> <li>• Washable</li> <li>• Low viscosity</li> <li>• High precision</li> </ul> <ul style="list-style-type: none"> <li>• Balanced strength, toughness and rigidity</li> </ul>
Applications	<ul style="list-style-type: none"> <li>• Education</li> <li>• Garnish</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>• Multiple Colors</li> </ul>
Form	<ul style="list-style-type: none"> <li>• Resins</li> </ul>
Processing method	<ul style="list-style-type: none"> <li>• (surface exposure molding) LCD</li> </ul>

	Testing method	Typical value
<b>Physical Properties</b>		
Density	GB/T 4472	1.096 g/cm <sup>3</sup>
Viscosity	GB/T 22235	255-269 mPa•s
Hardness	ASTM D2240	80-81 Shore D
<b>Mechanical Properties</b>		
Tensile Strength	ASTM D638	37-50 MPa
Elongation at Break	ASTM D638	21-25 %
Flexural Strength	ASTM D790	42-58 MPa
IZOD Impact Strength	ASTM D638	22-25 J/m
<b>Thermal Properties</b>		
Heat distortion Temperature	GB/T 1634	N/A °C

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### Recommended printing parameters

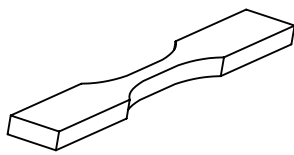
Representative Machine	Exposure Time/s	Bottom Exposure Time/s	Bottom Layer Count	Lifting Distance/mm	Lift Speed/mm·min <sup>-1</sup>	Retract Speed/mm·min <sup>-1</sup>
ELEGOO Saturn	3.5	40	5	7	70	210
ELEGOO Mars 2 Pro	3.5	40	5	5	80	210
ANYCUBIC Photon Mono X	1.8	20	6	8	180	240
ANYCUBIC Photon Mono 4K	3.7	42	6	6	240	360
ANYCUBIC Photon Mono SE	3.1	36	6	6	240	240
VOXELAB Proxima 6.0	3.5	40	6	5	60	150
VOXELAB Proxima 8.9	3.4	42	5	8	60	150
PHROZEN Sonic Mighty 4K	3.5	40	6	8	60	150
NOVA3D whale2	3.2	37	5	4	120	120
CREALITY HALOT ONE	3.7	43	10	6	60	60
CREALITY LD006	2.3	25	5	7	70	150
AnyCubic Ultra	4	45	4	5	120	120
ELEGOO Mars 3	3.5	40	5	5	60	210

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.

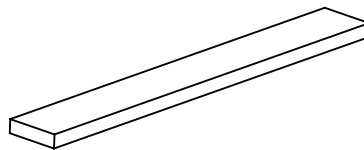
### Matters needing attention

1. Shake well before printing; 2. The water washable resin should not be washed for a long time. It can be tens of seconds to one minute. After washing, please use a hair dryer to dry it in time. When storing, be careful not to place it in a humid and high temperature environment.

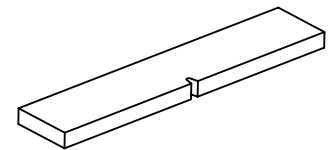
### Mechanical Properties



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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