

# ePLA-Matte Dual

Technical Data Sheet

ePLA-Matte Dual is an outstanding ePLA printing material with a matte surface finish. Its unique one-line dual-color design showcases the layering of colors while maintaining the separation of colors, making the model's appearance rich yet clear. The surface is delicate, with no obvious layer lines, easy to use, and does not require sealed printing. It also has a low shrinkage rate, which makes it less likely to warp or crack, making it an ideal choice for printing large-sized models. It is easy to remove from the model's surface, has high line strength, and is not prone to brittleness, ensuring the continuity and stability of long printing times and avoiding the trouble of nozzle clogging. These characteristics make ePLA-Matte Dual very suitable for the verification of early concept models and the production of rapid prototypes.

Material Status	Mass Production
Characteristics	<ul style="list-style-type: none"> <li>Green environmental protection</li> <li>Cost-effective</li> <li>One line dual color</li> <li>Support easy to peel off</li> <li>Excellent printability</li> <li>High-speed printing</li> <li>Matte surface effect</li> <li>Low density</li> <li>Not easy to break</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Decoration</li> <li>Cosplay</li> </ul>
Form	<ul style="list-style-type: none"> <li>Filament</li> </ul>
Processing method	<ul style="list-style-type: none"> <li>3D Print, FDM Print</li> </ul>

	Testing method	Typical value
<b>Physical Properties</b>		
Density	GB/T 1033	1.174 g/cm <sup>3</sup>
Melt Flow Index	GB/T 3682	2.1 (190°C/2.16kg)
<b>Mechanical Properties</b>		
Tensile Strength	GB/T 1040	13.58 MPa
Elongation at Break	GB/T 1040	39 %
Flexural Strength	GB/T 9341	56.72 MPa
Flexural Modulus	GB/T 9341	2786.4 MPa
IZOD Impact Strength	GB/T 1843	3.41 (kJ/m <sup>2</sup> )
<b>Thermal Properties</b>		
Heat distortion Temperature	GB/T 1634	54 (°C,0.45MPa)
Continuous Service Temperature	IEC 60216	N/A
Maximum (short term) Use Temperature		N/A
<b>Electrical Properties</b>		
Insulation Resistance	DIN IEC 60167	N/A
Surface Resistance	DIN IEC 60093	N/A

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

Extruder Temperature	215-230°C
Build Platform Temperature	45-60°C
Fan Speed	100%
Printing Speed	40 - 300mm/s

Based on 0.4 mm nozzle and Simplify 3D v.4.1.2. Printing conditions may vary with different nozzle diameters

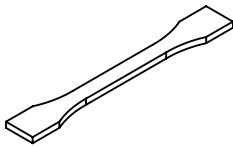
### Drying Recommendations

N/A

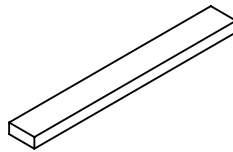
### Notes

The ePLA-Matte filament is softer than others, and the extruder's tension adjustment shall not be too tight, so as not to affect the printing.

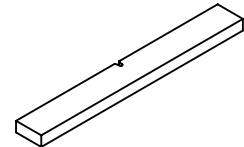
### Mechanical Properties



Tensile testing specimen GB/T 1040



Flexural testing specimen GB/T 9341



Impact testing specimen GB/T 1043

The physical properties, mechanical properties, thermal properties, and electrical properties of the filament are obtained based on the injection molding spline test.

Print test condition:

Extruder Temperature	215-230°C
Build Platform Temperature	45°C
Outline/Perimeter Shells	4
Top/Bottom Layers	4
Infill Percentage	20%
Fan speed	100%
Printing speed	40mm/s

Based on 0.4 mm nozzle and Simplify 3D v.4.1.2.

### 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.