PLA-Silk Magic

Technical Data Sheet

The model has a dreamy and gorgeous two-color appearance, different color performance can be observed at different angles, rotating the model more dynamic sense of the two-color gradient brought about by the appearance of rich silk luster texture, the surface is smooth and does not show the layer of lines; support compared to other materials, easier to peel off from the surface of the model, the surface of the contact surface is smooth and even; the product is based on the modification of the PLA material from the characteristics of PLA easy to print.

Material Status	Mass Production
Characteristics	• Dreamy and gorgeous two-color appearance • Smooth surface. • Easy to print as PLA. • High toughness.
Applications	• Toys • Decoration
Form	• Filament
Processing method	• 3D Print, FDM Print

	testing method	Typical value	
Physical Properties			
Density	GB/T 1033	1.256	g/cm³
Melt Flow Index	GB/T 3682	4.8	190℃/2.16kg
Mechanical Properties			
Tensile Strength	GB/T 1040	52	MPa
Elongation at Break	GB/T 1040	14.4	%
Flexural Strength	GB/T 9341	65	MPa
Flexural Modulus	GB/T 9341	1447	MPa
IZOD Impact Strength	GB/T 1843	5.86	kJ/m²
Thermal Properties			
Heat distortion Temperature	GB/T 1634	54.7	℃
Continuous Service Temperature	IEC 60216	N/A	
Maximum (short term) Use Temperature		N/A	
Electrical Properties			
Insulation Resistance	DIN IEC 60167	N/A	
Surface Resistance	DIN IEC 60093	N/A	

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Recommended printing parameters

Extruder Temperature	190- 230℃
Build Platform Temperature	45-60℃
Fan Speed	100%
Printing Speed	40 - 100mm/s

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

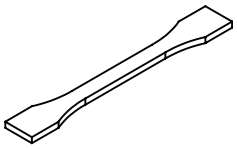
Drying Recommendations

N/A

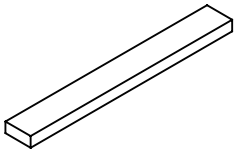
Precautions:

Reducing overhang angle structure in the model or the speed in printing to keep the cooling.

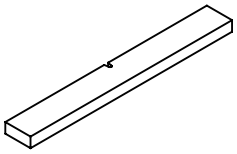
Mechanical Properties



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 line are obtained based on the injection molding spline test.

Print test condition :

Extruder Temperature	190-230℃
Build Platform Temperature	45℃
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

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