

RoHS
Compliant



Description

The product is modified based on PLA material, easy to print, in addition, it improves the toughness and layer adherence. PLA+ is an environmentally friendly material, which is easy to print and has smooth surface. Good strength, rigidity, toughness balance, strong impact resistance, very suitable for functional parts printing; Approved by FDA, safer to use; Can be used for conceptual model, rapid prototyping.

Features

- Good toughness
- Strong impact resistance
- High speed printing
- Smooth printed surface
- Easy to print
- Hard to break
- Filament form
- Processing method - 3D Print, FDM Print

Applications

- Prototyping
- COSPLAY
- Decoration
- Other mechanical parts

	Testing Method	Typical Value
Physical Properties		
Density	GB/T 1033	1.23 g/cm ³
Melt Flow Index	GB/T 3682	5 (190°C/2.16kg)
Mechanical Properties		
Tensile Strength	GB/T 1040	63 MPa
Elongation at Break	GB/T 1040	20%
Flexural Strength	GB/T 9341	74 MPa
Flexural Modulus	GB/T 9341	1973 MPa
IZOD Impact Strength	GB/T 1843	9 kJ/m ²
Thermal Properties		
Heat distortion Temperature	GB/T 1634	53°C
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

Recommended printing parameters

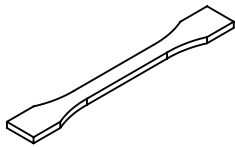
Extruder Temperature : 210°C to 230°C
Build Platform Temperature : 45°C to 60°C
Fan Speed : 100%
Printing Speed : 40mm/s to 100mm/s

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

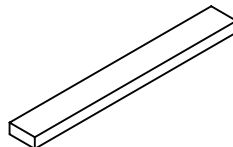
Drying Recommendations

N/A

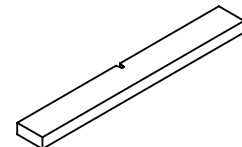
Mechanical Properties



Tensile testing specimen GB/T 1040



Flexural testing specimen G B/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°C to 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.

Part Number Table

Description	Color	Part Number
3D Printer Filament, CMYK, 1.75mm, 1Kg	White	MP014129
	Cyan	MP014130
	Yellow	MP014131
	Magenta	MP014132

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