

PLA-Rock

Technical Data Sheet

PLA rock uses a matte formula, with a dull and frosted surface texture, inspired by the texture of rocks. It employs a two-tone gradient to mimic the layered textures of rock strata, with color transitions that are full of interest. It has high line strength and is not prone to brittleness, ensuring the continuity and stability of long-term printing, and avoiding the trouble of nozzle clogging.

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

	Testing method	Typical value
Physical Properties		
Density	GB/T 1033	1.25 g/cm ³
Melt Flow Index	GB/T 3682	8.5 (190°C/2.16kg)
Mechanical Properties		
Tensile Strength	GB/T 1040	18.08 MPa
Elongation at Break	GB/T 1040	2.05 %
Flexural Strength	GB/T 9341	55.8 MPa
Flexural Modulus	GB/T 9341	2705.1 MPa
IZOD Impact Strength	GB/T 1843	4.43 (kJ/m ²)
Thermal Properties		
Heat distortion Temperature	GB/T 1634	52.3 (°C,0.45MPa)
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	210-230°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

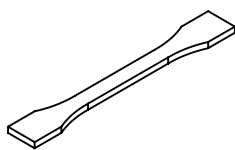
Drying Recommendations

N/A

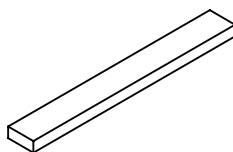
Notes

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.

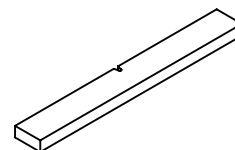
Mechanical Properties



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	210-230°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

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