



Landu Filament

Technical Data Sheet V1.0

PLA Silk

• Basic Info

Landu PLA Silk is a silk-like PLA, which is modified from PLA material.

Easy to print, and the surface of the model is smooth without layering, with a silk-like luster and texture.

• Specifications

Subjects	Data
Diameter	1.75 mm
Net Filament Weight	1 kg
Filament Length	330m
Tolerance	±0.02mm

• Recommended Printing Settings

Subjects	Data
Nozzle Temperature	200 – 220 (°C)
Bed Type	Cool Plate, High Temperature Plate or Textured PEI Plate
Build surface material	BuildTak®, Glass, Blue Tape
Build Surface Treatment	Glue
Build Plate Temperature	45 - 60 (°C)
Cooling fan	Turn ON
Printing speed	50-100 (mm/s)
Retraction speed	20 - 40 mm/s
Environmental temperature	Room temperature
Max Overhang Angle	55 °
Support Material	Support for PLA

• Properties

Landu has tested the differing aspects in the performance of PLA+ material, including physical and chemical properties. Typical values are listed as followed:

Physical Properties		
Subjects	Testing Methods	Data
Density	ISO 1183	1.32 g/cm ³
Melt Index	210°C, 2.16kg	20.5 ± 1.2g/10min
Glass Transition Temperature	DSC,10°C/min	58°C
Crystallization Temperature	DSC,10°C/min	N / A
Saturated Water Absorption Rate	25 °C, 55% RH	0.53%

Mechanical Properties		
Subjects	Testing Methods	Data
Tensile Strength	GB/T 1040	27 ± 4 Mpa
Breaking Elongation Rate	GB/T 1040	3.5 ± 0.6 %
Bending Modulus	GB/T 9341	2370 ± 150 Mpa
Bending Strength	GB/T 9341	66 ± 4Mpa
Impact Strength	GB/T 1843	24.5 ± 1.7 kJ/m ²
Heat distortion Temperature	GB/T 1634	53°C

Other Physical and Chemical Properties	
Subjects	Data
Odor	Odorless
Composition	Polylactic acid
Skin Hazards	Not available
Chemical Stability	Stable under normal storage and handling conditions
Solubility	Soluble in water
Resistance to Acid	Not resistant
Resistance to Alkali	Not resistant
Resistance to Organic Solvent	Not resistant to some organic solvents
Resistance to Oil and Grease	Resistant to most kinds of oil and grease
Flammability	Flammable
Combustion Products	Water, carbon oxides, etc
Odor of Combustion Products	Odorless

- **Disclaimer**

The performance values are tested by standard samples at Landu, and the values are for design reference and comparison only. Actual 3D printing model performance is related to many other factors, including printers, printing conditions, printing models, printing parameters, etc.

In the process of using Landu 3D printing filaments, users are responsible for the legality, safety, and performance indicators of printing. Landu is not responsible for the use of materials and scenarios and is not responsible for any damage that occurs in the process of using our filaments.