Bambu Filament

Technical Data Sheet V1.0

Support for PLA

• Basic Info

Bambu Support for PLA is a specifically designed breakaway support to work in conjunction with almost any kind of PLA. It supports the build material in printing objects with features like bridges or overhangs and needs to be printed in Bambu Lab AMS (Automatic Material System) or printers with dual extruder. Bambu Support for PLA bonds weakly with PLA by acting as an interface, making it easy to peel away cleanly by hand or tools and requires no further post-processing. Its ease of use and compatibility makes support removal significantly easier and less frustrating.

• Specifications

Subjects	Data
Diameter	1.75 mm
Net Filament Weight	0.5 kg
Spool Material	ABS (Temperature resistance 70 °C)
Spool Size	Diameter: 200 mm; Height: 67 mm

• Recommended Printing Settings

Subjects	Data
Drying Settings before Printing	55 °C, 8 hours
Printing and Storage Humidity	< 20% RH (Sealed with desiccant)
Nozzle Temperature	220 - 230 °C
Bed Type	Cool Plate, High Temperature Plate or Textured PEI Plate
Bed Surface Preparation	PVP Glue
Bed Temperature	35 - 45 °C
Cooling Fan	100%
Printing Speed	< 200 mm/s
Retraction Length	0.6 - 1.0 mm
Retraction Speed	20 - 40 mm/s

Chamber Temperature	25 - 45 °C

• Properties

Bambu Lab has tested some performances of Support for PLA material, mainly including physical and chemical properties. And since this material is only used to print supporting structures, not any complete print, the mechanical properties are not important and not supplied here. Typical values are listed as followed:

Physical Properties		
Subjects	Testing Methods	Data
Density	ISO 1183	1.22 g/cm³
Melt Index	210 °C, 2.16 kg	6.4 ± 1.2 g/10 min
Melting Temperature	DSC, 10 °C/min	190 °C
Glass Transition Temperature	DSC, 10 °C/min	N / A
Crystallization Temperature	DSC, 10 °C/min	N / A
Vicar Softening Temperature	ISO 306, GB/T 1633	N / A
Heat Deflection Temperature	ISO 75 1.8 MPa	N / A
Heat Deflection Temperature	ISO 75 0.45 MPa	N / A
Saturated Water Absorption Rate	25 °C, 55% RH	0.88%

Mechanical Properties（Dry state）		
Subjects	Testing Methods	Data
Young's Modulus (X-Y)	ISO 527, GB/T 1040	N / A
Young's Modulus (Z)	ISO 527, GB/T 1040	N / A
Tensile Strength (X-Y)	ISO 527, GB/T 1040	N / A
Tensile Strength (Z)	ISO 527, GB/T 1040	N / A
Breaking Elongation Rate (X-Y)	ISO 527, GB/T 1040	N / A
Breaking Elongation Rate (Z)	ISO 527, GB/T 1040	N / A
Bending Modulus (X-Y)	ISO 178, GB/T 9341	N / A
Bending Modulus (Z)	ISO 178, GB/T 9341	N / A
Bending Strength (X-Y)	ISO 178, GB/T 9341	N / A
Bending Strength (Z)	ISO 178, GB/T 9341	N / A
Impact Strength (X-Y)	ISO 179, GB/T 1043	N / A
Impact Strength (Z)	ISO 179, GB/T 1043	N / A

Other Physical and Chemical Properties	
Subjects	Data
Odor	Odorless
Composition	Polylactic acid
Skin Hazards	No hazard
Chemical Stability	Stable under normal storage and handling conditions
Solubility	Insoluble 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 and self-extinguishing in the air
Combustion Products	Water, carbon oxides
Odor of Combustion Products	Odorless

• Disclaimer

The performance values are tested by standard samples at Bambu Lab, 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 Bambu Lab 3D printing filaments, users are responsible for the legality, safety, and performance indicators of printing. Bambu Lab 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.