PETG Matte

Bambu PETG Matte is a matte PETG filament designed for users seeking a balance of aesthetics and practicality. It combines high strength and toughness, excellent layer adhesion, and easy printing with a distinctive soft matte finish, making it an ideal choice for applications where both appearance and performance matter.

• Recommended Printing Settings

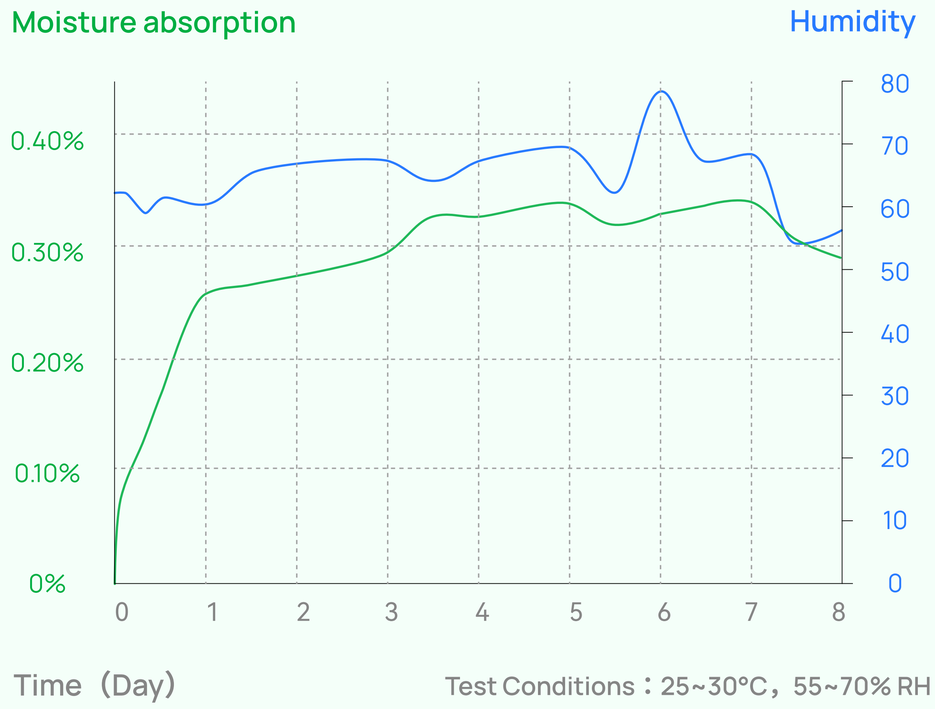
Subjects	Data
Drying Settings before Printing	Blast Drying Oven: 65 °C, 8 h X Series & P Series & H2 Series Printer Heatbed: 80 °C, 12 h AMS 2 Pro & AMS HT: Filament inserted state: 60°C, 12h; Filament non-inserted state: 65°C, 8h
Printers Compatibility	All Bambu 3D printers
AMS Compatibility	AMS, AMS 2 PRO, AMS HT, AMS Lite
Printing and Keeping Container's Humidity	< 20% RH (Sealed, with desiccant)
Nozzle Size	0.2, 0.4, 0.6, 0.8 mm
Nozzle Temperature	230 - 260 °C
Build Plate Type	Textured PEI Plate / Smooth PEI Plate/Cool Plate Supertack
Bed Temperature	65 - 75 °C
Cooling Fan	Turn on
Printing Speed	< 250 mm/s
Retraction Length	0.4 - 0.8 mm
Retraction Speed	30 - 60 mm/s
Chamber Temperature	35 - 50 °C
Max Overhang Angle	~ 70 °
Max Bridging Length	~ 30 mm
Support	Support for PLA/PETG
Glue	Recommended (Glue Stick/Liquid Glue)

*Maximum exposure time for filaments in ambient air before noticeable degradation in print quality occurs. After this period, a full re-drying is recommended. The actual interval may vary depending on the storage temperature and humidity.

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

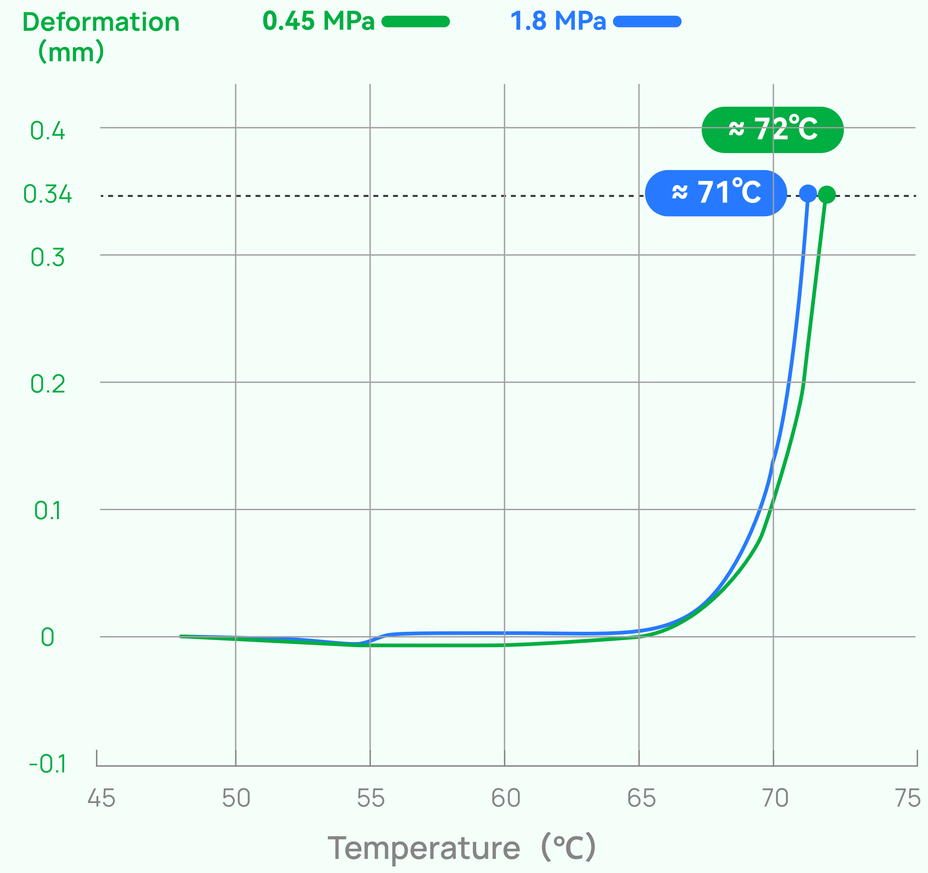
• Physical Properties

Subjects	Testing Methods	Data
Density	ISO 1183	1.37 g/cm³
Melt Index	235 °C, 2.16 kg	13.9 ± 1.5 g/10 min
Saturated Water Absorption Rate	25 °C, 55% RH	0.29%



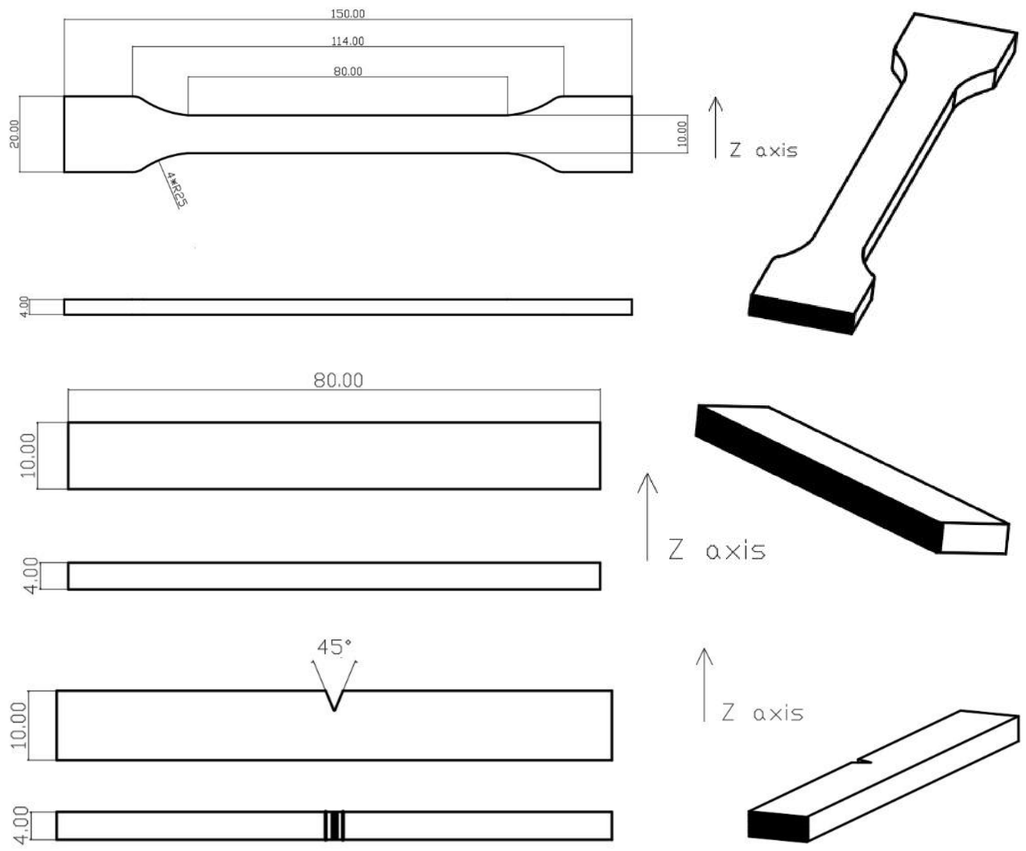
• Thermal Properties

Subjects	Testing Methods	Data
Melting Temperature	DSC, 10 °C/min	160 °C
Glass Transition Temperature	DSC, 10 °C/min	71 °C
Crystallization Temperature	DSC, 10 °C/min	/
Vicat Softening Temperature	ISO 306, GB/T 1633	75.7 °C
Heat Deflection Temperature	ISO 75 1.8 MPa	71.2 °C
Heat Deflection Temperature	ISO 75 0.45 MPa	72.3 °C



• Mechanical Properties

Subjects	Testing Methods	Data
Young's Modulus (X-Y)	ISO 527, GB/T 1040	3349 ± 130 MPa
Young's Modulus (Z)	ISO 527, GB/T 1040	3174 ± 50 MPa
Tensile Strength (X-Y)	ISO 527, GB/T 1040	42.9 ± 1 MPa
Tensile Strength (Z)	ISO 527, GB/T 1040	30.1 ± 1 MPa
Breaking Elongation Rate (X-Y)	ISO 527, GB/T 1040	13.8 ± 2.6 %
Breaking Elongation Rate (Z)	ISO 527, GB/T 1040	6.5 ± 0.5 %
Bending Modulus (X-Y)	ISO 178, GB/T 9341	1995 ± 20 MPa
Bending Modulus (Z)	ISO 178, GB/T 9341	1750 ± 46 MPa
Bending Strength (X-Y)	ISO 178, GB/T 9341	65 ± 2.5 MPa
Bending Strength (Z)	ISO 178, GB/T 9341	47 ± 2.3 MPa
Impact Strength (X-Y)	ISO 179, GB/T 1043	32.6 ± 4.1 kJ/m²
Impact Strength (Z)	ISO 179, GB/T 1043	10.0 ± 1.5 kJ/m²



Note: The consumables used for testing are PETG Matte Violet, which were baked in a forced-air drying oven at 60°C for 8 hours before printing. The printing equipment is the Tuozhu H2D model, using a 0.4 mm hardened steel nozzle, with the nozzle temperature set at 245°C, the hot bed temperature at 70°C, the printing speed at 221 mm/s, and the fill rate at 100%. If annealing treatment is required for the printed parts, it is recommended to control the annealing temperature between 60 and 70°C, and the annealing duration between 6 and 12 hours. It should be noted that some models may deform or warp after annealing, and the actual annealing effect is affected by factors such as annealing temperature, holding time, model size, structural complexity, and fill settings. When drying consumables or annealing models, it is recommended to use equipment with uniform temperature distribution and large volume (such as a forced-air oven), and ensure that the model or material tray is kept away from the heat source to avoid local overheating. Do not use a microwave oven or kitchen oven for processing to prevent damage to the filaments, material trays, or printed parts.

• Other Physical and Chemical Properties

Subjects	Data
Color and State	solid
Odor	Odorless
Composition	PETG
Skin Hazards	No hazard
Chemical Stability	Stable under normal storage and handling conditions
Solubility	Insoluble in water

Subjects	Data
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
Odor of Combustion Products	plasticky smell