PLA Palette CMYKW

• Recommended Printing Settings

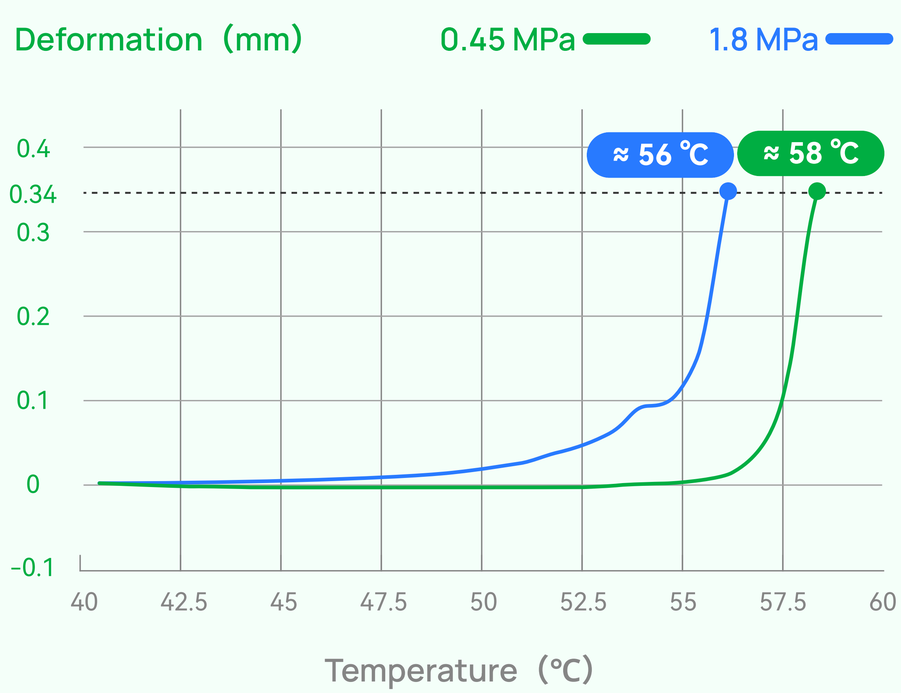
Subjects	Data
Drying Settings before Printing	Blast Drying Oven: 50 °C, 8 h X Series & P Series & H2 Series Printer Heatbed: 60 - 70 °C，12 h AMS 2 Pro & AMS HT: Filament inserted state: 45 °C, 12 h; Filament non-inserted state: 55 °C, 8 h
Printers Compatibility	All Bambu 3D printers
AMS Compatibility	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	190 - 230 °C
Build Plate Type	Textured PEI Plate / Smooth PEI Plate/Cool Plate Supertack
Bed Temperature	35 - 65 °C
Cooling Fan	Turn on
Printing Speed	< 300 mm/s
Retraction Length	0.4 - 0.8 mm
Retraction Speed	20 - 40 mm/s
Chamber Temperature	25 - 45 °C
Max Overhang Angle	~ 55 °
Max Bridging Length	~ 30 mm
Support	Support for PLA
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 Palette material, including physical, mechanical, and chemical properties. Typical values are listed as followed:

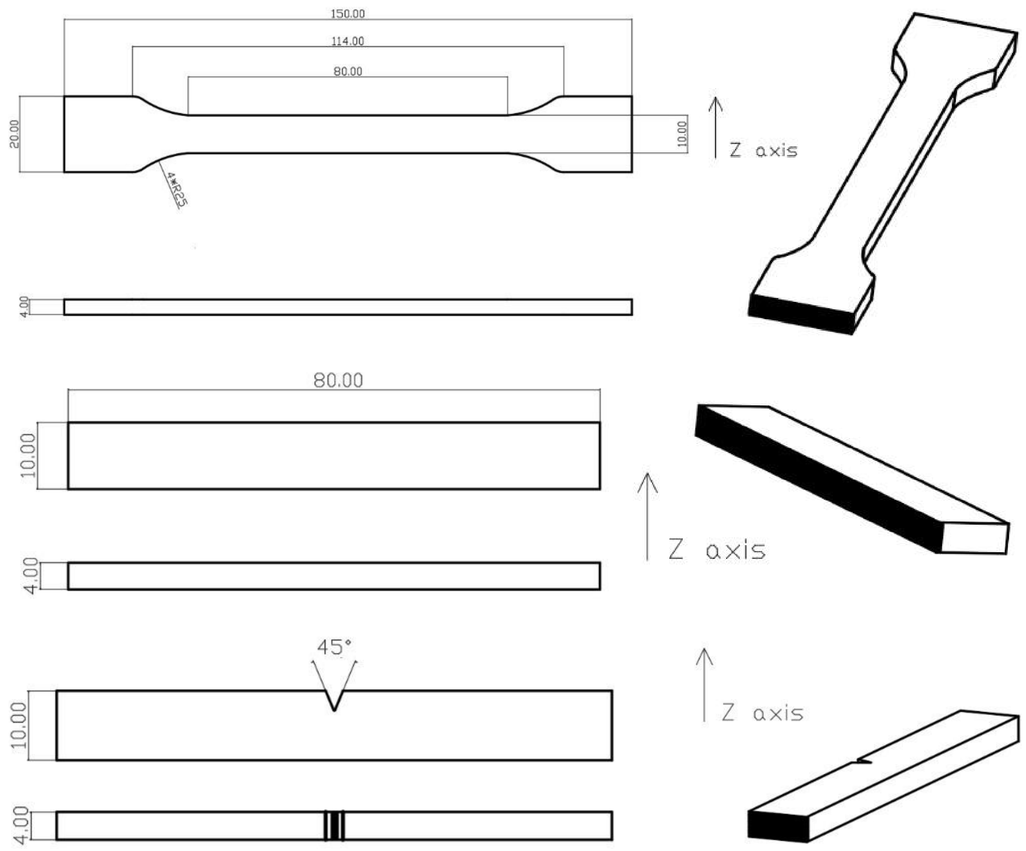
• Thermal Properties

Subjects	Testing Methods	Data
Melting Temperature	DSC, 10 °C/min	160 °C
Glass Transition Temperature	DSC, 10 °C/min	60 °C
Crystallization Temperature	DSC, 10 °C/min	/
Vicat Softening Temperature	ISO 306, GB/T 1633	60 ℃
Heat Deflection Temperature	ISO 75 1.8 MPa	56 ℃
Heat Deflection Temperature	ISO 75 0.45 MPa	58 ℃



• Mechanical Properties

Subjects	Testing Methods	Data
Young's Modulus (X-Y)	ISO 527, GB/T 1040	2920 ± 180 MPa
Young's Modulus (Z)	ISO 527, GB/T 1040	2570 ± 160 MPa
Tensile Strength (X-Y)	ISO 527, GB/T 1040	47 ± 1.5 MPa
Tensile Strength (Z)	ISO 527, GB/T 1040	24 ± 1.5 MPa
Breaking Elongation Rate (X-Y)	ISO 527, GB/T 1040	11.0 ± 0.5 %
Breaking Elongation Rate (Z)	ISO 527, GB/T 1040	6.8 ± 1.8 %
Bending Modulus (X-Y)	ISO 178, GB/T 9341	3043 ± 30 MPa
Bending Modulus (Z)	ISO 178, GB/T 9341	2636 ± 30 MPa
Bending Strength (X-Y)	ISO 178, GB/T 9341	73 ± 3 MPa
Bending Strength (Z)	ISO 178, GB/T 9341	51 ± 3 MPa
Impact Strength (X-Y)	ISO 179, GB/T 1043	18.3 ± 3 kJ/m²
Impact Strength (Z)	ISO 179, GB/T 1043	10.2 ± 1.5 kJ/m²



Note: The consumable used for testing is yellow PLA Palette, which was baked in a forced-air drying oven at 60°C for 8 hours before printing. The printing equipment used is the Bambu Lab H2D model, equipped with a 0.4 mm hardened steel nozzle, with the nozzle temperature set to 220°C, the build plate temperature to 55°C, the printing speed to 184 mm/s, and the infill density to 100%. If annealing of the printed part is required, it is recommended to control the annealing temperature within 50–60°C for a duration of 6–12 hours. Please note that some models may experience deformation or warping after annealing, and the actual annealing effect is affected by factors such as annealing temperature, holding time, model size, structural complexity, and infill 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 spool is kept away from the heat source to avoid local overheating. Do not use a microwave oven or kitchen oven for such processing, as this may damage the filament, spool, or printed part.

• Other Physical and Chemical Properties

Subjects	Data
Color and State	Red, yellow, etc., solid
Odor	Odorless
Composition	Polylactic acid
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	slightly acrid smell