

Version: 3.0

Product Name:

Anycubic PLA+

Anycubic PLA+ is an eco-friendly filament known for its high toughness, impressive impact resistance, and excellent elongation at break. It offers outstanding resistance to wear and deformation when printing moving components. The PLA+ filament ensures high printing success rates due to its uniform diameter and minimal risk of nozzle clogging.

Physical Properties

Property	Testing Method	Unit	Typical Value
Density/ (g/cm³)	ISO 1183,at 23°C	g/cm³	1.21
Melt Index/ (g/10min)	ISO 1133	g/10min	6.2±0.32
Moisture Content	ISO 787-2	%	0.23

Mechanical Properties

Property	Testing Method	Unit	Typical Value
Tensile Strength / MPa (X-Y)	100 527	MDa	45±5
Tensile Strength / MPa (Z)	ISO 527	MPa	23.8±0.4
Young's Modulus / MPa (X-Y)	ICO F27	МРа	2790±250
Young's Modulus / MPa (Z)	ISO 527		/
Elongation at Break / % (X-Y)	ICO F27	%	12±1
Elongation at Break / % (Z)	ISO 527		/
Bending Strength / MPa (X-Y)	ISO 178	MPa	82±8
Bending Strength / MPa (Z)	150 176		1
Bending Modulus / MPa (X-Y)	ISO 178	МРа	3980±360
Bending Modulus / MPa (Z)	130 176		1
Izod Impact Strength (kJ/m²) (X-Y)	ICO 170	kJ/m²	28±1
Izod Impact Strength (kJ/m²) (Z)	ISO 179		1

^{*}All data are based on printed test samples. '(X-Y)' and '(Z)' indicate different testing orientations (refer to the direction schematic).



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Thermal Performance

Property	Testing Method	Unit	Typical Value
Glass Transition Temperature	ISO 11357-1, 10℃/min	$^{\circ}$	54.2
Melting Temperature	ISO 11357-1, 10℃/min	${\mathbb C}$	162
Crystallization Temperature	ISO 11357-1, 10℃/min	${\mathbb C}$	108
Vicat Softening Temperature (VST)	ISO 306, 10N	$^{\circ}\!\mathbb{C}$	52
Heat Deflection Temperature (HDT)	ISO 75-2, 1.8 MPa	$^{\circ}$	/
Heat Deflection Temperature (HDT)	ISO 75-2, 0.45MPa	$^{\circ}\! \mathbb{C}$	50

Recommended Printing Parameters

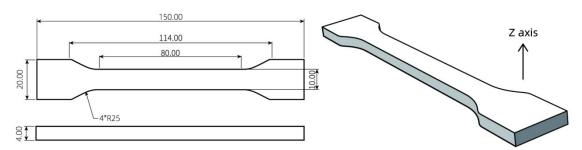
*Based on a 0.4mm nozzle, printing conditions may vary with different nozzle diameters

Parameter	Recommended Value	
Nozzle Temperature	190-230	
Bed Temperature	55-65	
Dry Environment	45-50℃,6-8h	
Printing Speed	50-200	
Extrusion Multiplier	0.96	
Max Volumetric Flow Rate	12	
Fan Speed	100%	
Cooling Time	8	
Minimum printing Speed	20	
Raft Separation Distance	0.8	
Retraction Speed	30	

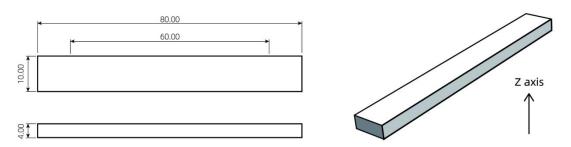


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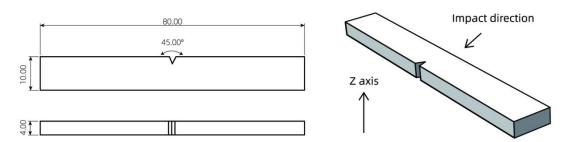
TENSILE TESTING SPECIMEN



IMPACT TESTING SPECIMEN



IMPACT TESTING SPECIMEN



Disclaimer:

The values shown in this chart are for comparison purposes only and are not appropriate for design specifications or quality assurance. Variations may arise due to printing conditions. The end-use performance of printed parts depends on materials, design, environmental conditions, and printing conditions. Please note that product specifications are subject to change without notice.

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