

Product Name:

Anycubic PLA Metal

Anycubic PLA Metal is a metal-like aesthetic filament that offers realistic metal surface luster. With a refined formula that enhances toughness and printing performance, it is ideal for printing machine-, armor-, and metallic-style models.

Physical Properties

Property	Testing Method	Unit	Typical Value
Density/ (g/cm ³)	ISO 1183,at 23°C	g/cm³	1.2
Melt Index/ (g/10min)	ISO 1133	g/10min	21.6±0.65
Moisture Content	ISO 787-2	%	0.26

Mechanical Properties

Property	Testing Method	Unit	Typical Value
Tensile Strength / MPa (X-Y)	ISO 527	MPa	34±4
Tensile Strength / MPa (Z)	130 327		25±2
Young's Modulus / MPa (X-Y)	ISO 527	MPa	1900±100
Young's Modulus / MPa (Z)	150 527		/
Elongation at Break / % (X-Y)		%	11±1
Elongation at Break / % (Z)	ISO 527		/
Bending Strength / MPa (X-Y)	ISO 178	MPa	61±3
Bending Strength / MPa (Z)	130 178		/
Bending Modulus / MPa (X-Y)	ISO 178	МРа	2100±100
Bending Modulus / MPa (Z)	150 178		/
Izod Impact Strength (kJ/m²) (X-Y)		kJ/m²	52±3
Izod Impact Strength (kJ/m²) (Z)	ISO 179		/

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



Thermal Performance

Property	Testing Method	Unit	Typical Value
Glass Transition Temperature	ISO 11357-1, 10℃/min	°C	63.5
Melting Temperature	ISO 11357-1, 10℃/min	°C	160
Crystallization Temperature	ISO 11357-1, 10℃/min	°C	116
Vicat Softening Temperature (VST)	ISO 306, 10N	°C	62
Heat Deflection Temperature (HDT)	ISO 75-2, 1.8 MPa	°C	/
Heat Deflection Temperature (HDT)	ISO 75-2, 0.45MPa	°C	58

Recommended Printing Parameters

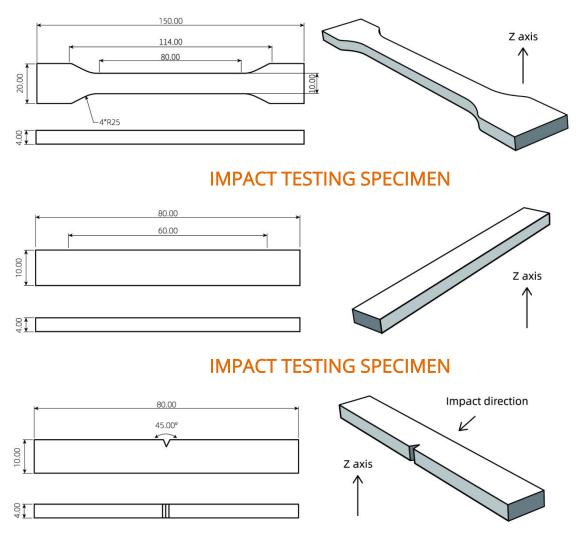
*Based on a 0.4mm nozzle, printing conditions may vary with different nozzle diameters

Parameter	Recommended Value	
Nozzle Temperature	200-230	
Bed Temperature	50-60	
Dry Environment	55-65℃,6-8h	
Printing Speed	40-250	
Extrusion Multiplier	0.96	
Max Volumetric Flow Rate	7.2	
Fan Speed	100	
Cooling Time	10	
Minimum printing Speed	20	
Raft Separation Distance	0.5	
Retraction Speed	30	



Version: 3.0

TENSILE 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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