

Product Name:

Anycubic TPU

Anycubic TPU is a soft, elastic, and flexible filament with an average hardness of 95A. It provides exceptional elasticity and durability, allowing it to bend freely without breaking. It is resistant to wear, oil, and aging, ensuring that printed parts maintain their vivid colors and performance over time.

Physical Properties

Property	Testing Method	Unit	Typical Value
Density/ (g/cm ³)	ISO 1183,at 23°C	g/cm ³	1.23
Melt Index/ (g/10min)	ISO 1133	g/10min	25
Moisture Content	ISO 787-2	%	0.38

Mechanical Properties

Property	Testing Method	Unit	Typical Value
Tensile Strength / MPa (X-Y)	ISO 527	MPa	34.4
Tensile Strength / MPa (Z)			18.5
Young's Modulus / MPa (X-Y)	ISO 527	MPa	50.2
Young's Modulus / MPa (Z)			/
Elongation at Break / % (X-Y)	ISO 527	%	697
Elongation at Break / % (Z)			/
Bending Strength / MPa (X-Y)	ISO 178	MPa	4.26
Bending Strength / MPa (Z)			/
Bending Modulus / MPa (X-Y)	ISO 178	MPa	87.6
Bending Modulus / MPa (Z)			/
Izod Impact Strength (kJ/m ²) (X-Y)	ISO 179	kJ/m ²	NA
Izod Impact Strength (kJ/m ²) (Z)			/

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

Thermal Performance

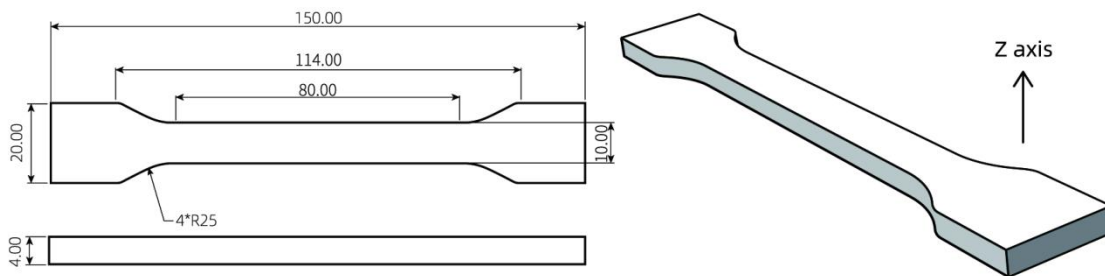
Property	Testing Method	Unit	Typical Value
Glass Transition Temperature	ISO 11357-1, 10°C/min	°C	/
Melting Temperature	ISO 11357-1, 10°C/min	°C	145.1
Crystallization Temperature	ISO 11357-1, 10°C/min	°C	/
Vicat Softening Temperature (VST)	ISO 306, 10N	°C	/
Heat Deflection Temperature (HDT)	ISO 75-2, 1.8 MPa	°C	/
Heat Deflection Temperature (HDT)	ISO 75-2, 0.45MPa	°C	52

Recommended Printing Parameters

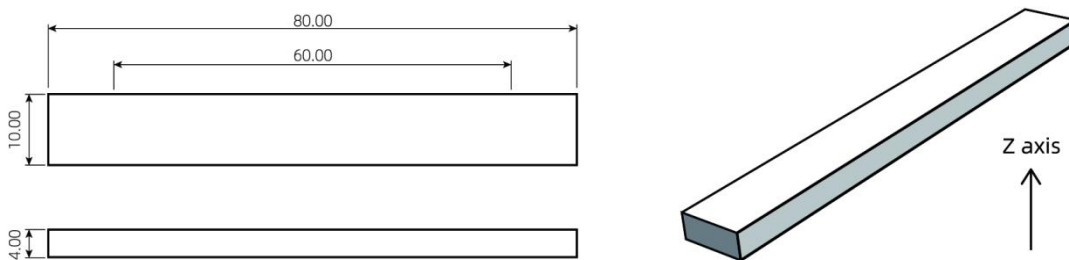
*Based on a 0.4mm nozzle, printing conditions may vary with different nozzle diameters

Parameter	Recommended Value
Nozzle Temperature	195-230
Bed Temperature	50-60
Dry Environment	70°C-80°C, 8h-12h
Printing Speed	50-150
Extrusion Multiplier	1
Max Volumetric Flow Rate	3.2
Fan Speed	100%
Cooling Time	8
Minimum printing Speed	20
Raft Separation Distance	1
Retraction Speed	30

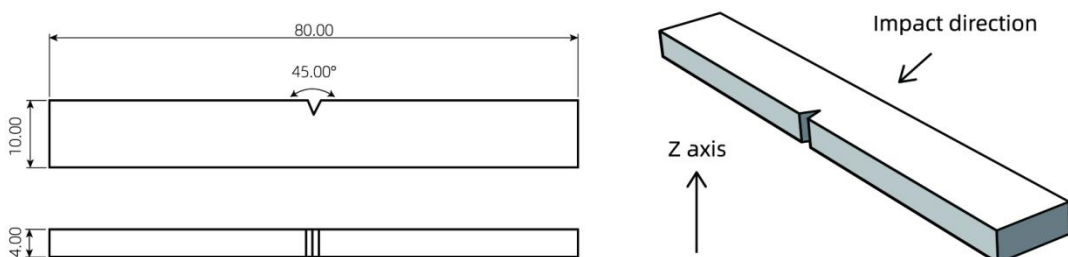
TENSILE TESTING SPECIMEN



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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