

## Product Name:

# Anycubic ASA

Anycubic ASA is a weather- and temperature-resistant filament, featuring high-impact resistance as well as rain and UV resistance, making it suitable for outdoor environments.

## Physical Properties

Property	Testing Method	Unit	Typical Value
Density/ (g/cm <sup>3</sup> )	ISO 1183,at 23°C	g/cm <sup>3</sup>	1.07
Melt Index/ (g/10min)	ISO 1133	g/10min	18.6±1.57
Moisture Content	ISO 787-2	%	0.27

## Mechanical Properties

Property	Testing Method	Unit	Typical Value
Tensile Strength / MPa (X-Y)	ISO 527	MPa	41
Tensile Strength / MPa (Z)			24
Young's Modulus / MPa (X-Y)	ISO 527	MPa	2220
Young's Modulus / MPa (Z)			/
Elongation at Break / % (X-Y)	ISO 527	%	15
Elongation at Break / % (Z)			/
Bending Strength / MPa (X-Y)	ISO 178	MPa	62
Bending Strength / MPa (Z)			/
Bending Modulus / MPa (X-Y)	ISO 178	MPa	1845
Bending Modulus / MPa (Z)			/
Izod Impact Strength (kJ/m <sup>2</sup> ) (X-Y)	ISO 179	kJ/m <sup>2</sup>	36
Izod Impact Strength (kJ/m <sup>2</sup> ) (Z)			/

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

### Thermal Performance

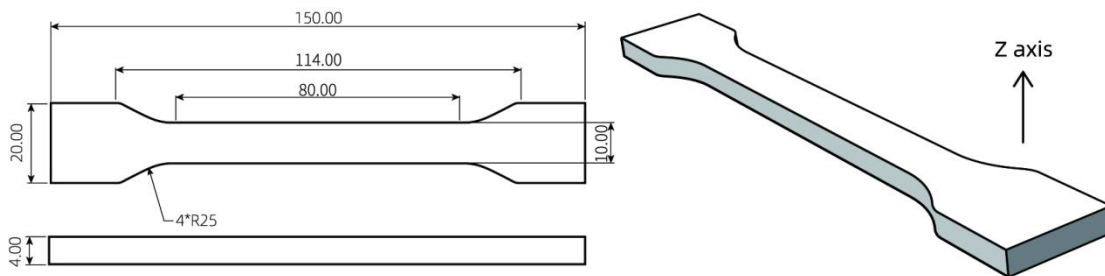
Property	Testing Method	Unit	Typical Value
Glass Transition Temperature	ISO 11357-1, 10°C/min	°C	103
Melting Temperature	ISO 11357-1, 10°C/min	°C	/
Crystallization Temperature	ISO 11357-1, 10°C/min	°C	/
Vicat Softening Temperature (VST)	ISO 306, 10N	°C	95
Heat Deflection Temperature (HDT)	ISO 75-2, 1.8 MPa	°C	/
Heat Deflection Temperature (HDT)	ISO 75-2, 0.45MPa	°C	90

### Recommended Printing Parameters

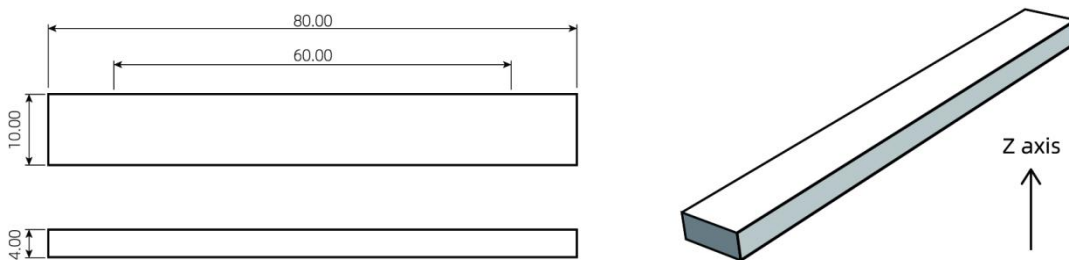
\*Based on a 0.4mm nozzle, printing conditions may vary with different nozzle diameters

Parameter	Recommended Value
Nozzle Temperature	255-275
Bed Temperature	80-100
Dry Environment	70-80°C, 8-12h
Printing Speed	50-100
Extrusion Multiplier	0.96
Max Volumetric Flow Rate	12
Fan Speed	80%
Cooling Time	3
Minimum printing Speed	20
Raft Separation Distance	0.8
Retraction Speed	40

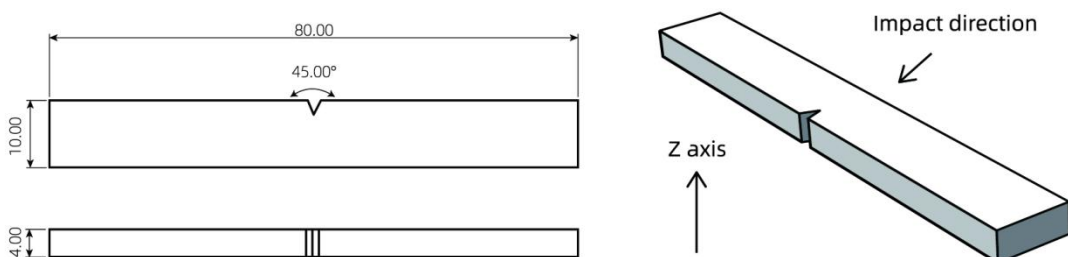
### TENSILE TESTING SPECIMEN



### FLEXURAL 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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