ANYCUBIC
3D PRINTER FILAMENT

Version: 3.0

## Product Name:

# Anycubic PLA High Speed

Anycubic PLA High Speed filament has excellent fluidity and heat dissipation. It cools rapidly during printing, allowing for a consistent speed of 450mm/s. For simple batch models, the maximum speed can reach up to 600mm/s.

## Physical Properties

| Property | Testing Method | Unit | Typical Value |
|---|---|---|---|
| Density/（g/cm³） | ISO 1183,at 23°C | g/cm³ | 1.19 |
| Melt Index/ ( g/10min) | ISO 1133 | g/10min | 13.2±0.21 |
| Moisture Content | ISO 787-2 | % | 0.26 |

## Mechanical Properties

| Property | Testing Method | Unit | Typical Value |
|---|---|---|---|
| Tensile Strength / MPa (X-Y) | ISO 527 | MPa | 45±5 |
| Tensile Strength / MPa (Z) | | | 22.1±0.6 |
| Young's Modulus / MPa (X-Y) | ISO 527 | MPa | 2750±260 |
| Young's Modulus / MPa (Z) | | | / |
| Elongation at Break / % (X-Y) | ISO 527 | % | 9±1 |
| Elongation at Break / % (Z) | | | / |
| Bending Strength / MPa (X-Y) | ISO 178 | MPa | 82±8 |
| Bending Strength / MPa (Z) | | | / |
| Bending Modulus / MPa (X-Y) | ISO 178 | MPa | 3905±300 |
| Bending Modulus / MPa (Z) | | | / |
| Izod Impact Strength (kJ/m²) (X-Y) | ISO 179 | kJ/m² | 21±1 |
| Izod Impact Strength (kJ/m²) (Z) | | | / |

*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 | ℃ | 55.1 |
| Melting Temperature | ISO 11357-1, 10℃/min | ℃ | 157 |
| Crystallization Temperature | ISO 11357-1, 10℃/min | ℃ | 109 |
| Vicat Softening Temperature (VST) | ISO 306, 10N | ℃ | 54.1 |
| Heat Deflection Temperature (HDT) | ISO 75-2, 1.8 MPa | ℃ | / |
| Heat Deflection Temperature (HDT) | ISO 75-2, 0.45MPa | ℃ | 52 |

## Recommended Printing Parameters

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

| Parameter | Recommended Value |
|---|---|
| Nozzle Temperature | 190-260 |
| Bed Temperature | 55-65 |
| Dry Environment | 45-50℃，6-8h |
| Printing Speed | 190-210℃, 50-150mm/s<br>210-230°C, 150-300mm/s<br>230-260°C, 300-600mm/s |
| Extrusion Multiplier | 0.96 |
| Max Volumetric Flow Rate | 18 |
| Fan Speed | 100% |
| Cooling Time | 7 |
| Minimum printing Speed | 20 |
| Raft Separation Distance | 0.8 |
| Retraction Speed | 40 |

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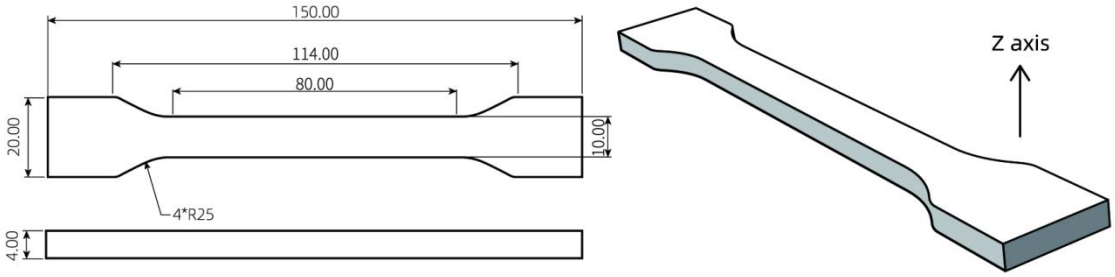
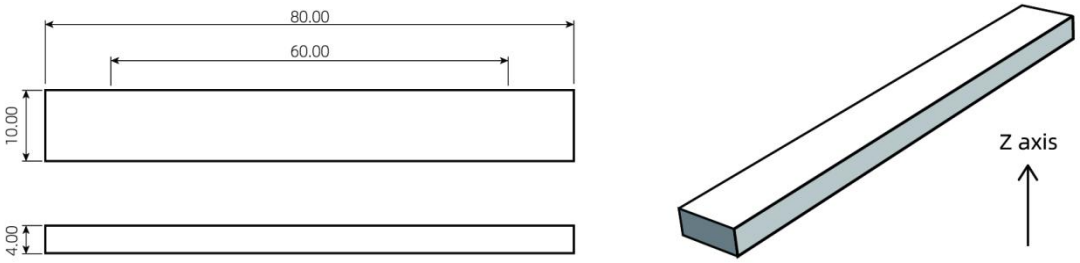
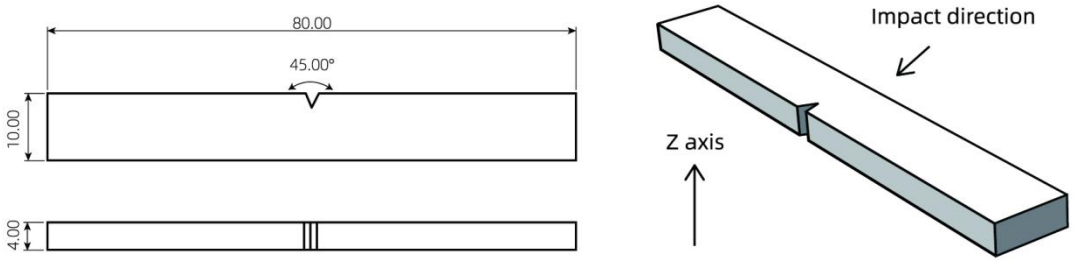
## TENSILE TESTING SPECIMEN




## 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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