

PA (Nylon) 3D PRINTING FILAMENT

PA (Nylon) Printing Parameters		
Nozzle Temperature	220c – 260c	
Bed Temperature	80c – 110c	
Print Surface	Most print surfaces ie. Glass, Meta Flex etc	
Model Cooling Fan	20% - 50%	
Layer Height	0.12mm – 0.3mm	
Print Speed	40mm/s – 60mm/s	
Idle Speed	60mm/s – 120mm/s	
Printing Environment Temperature	Room Temperature – 40c	
Retraction Distance	3mm – 5mm	
Retraction Speed	30mm/s – 50mm/s	
Support Materials	Itself, PVA	

PA (Nylon) Technical Specifications		
Physical Properties	Test	
Density	ISO 1183	1.01g/cm3 – 1.06g/cm3
MFR (250c/2.16kg)	ISO 1133	2g/10min – 5g/10min
Moisture Absorption	ISO 62	3.2%
Mechanical Properties		
Tensile Strength	ISO 527	55Mpa – 58Mpa
Elongation at Break	ISO 527	32% - 36%
Flexural Modulus	ISO 527	1350Mpa – 1450Mpa
Flexural Strength	ISO 178	84Mpa – 87Mpa
Impact Strength	ISO 179	8.5KJ/m2 – 87KJ/m2
Thermodynamic Properties		
HDT @ 0.455MPa (66psi)	ISO 75	85c
Weights and Dimensions		
Spool Dimensions	Outside Diameter: 200mm Width: 65mm Internal Hub: 52mm	
Spool Weight (without filament)	150g	
Spool Weight (with filament)	1.15kg	
Package Dimension (LxWxH)	210mm x 210mm x 75mm	
Package Weight	1.3kg	

Storage and Drying:

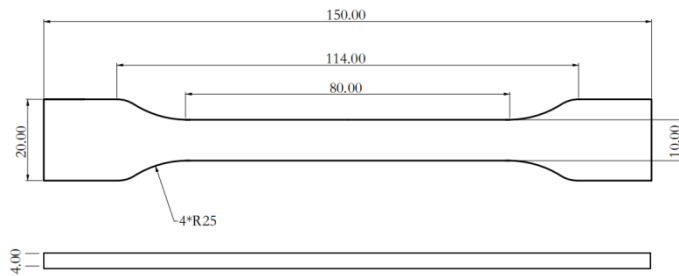
To prevent moisture absorption, it is recommended to keep your filament in a cool, dark, dry area, preferable sealed in an airtight bag.

Filament can be dried with various methods including a dedicated filament drying machine, food dehydrator, oven, or even your printer if it's fully enclosed. For PA (Nylon) filament we recommend a drying temperature of 80c for a minimum of 12 hours.

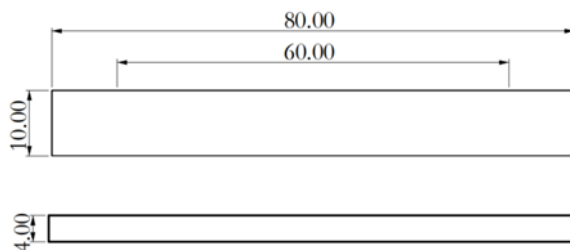
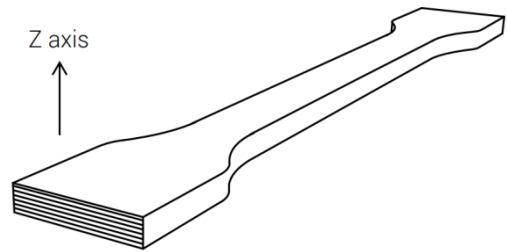
Technical Data Sheet



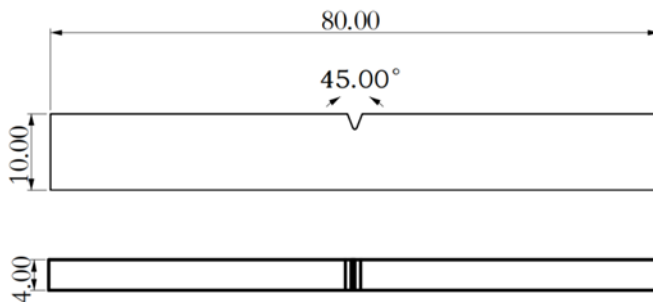
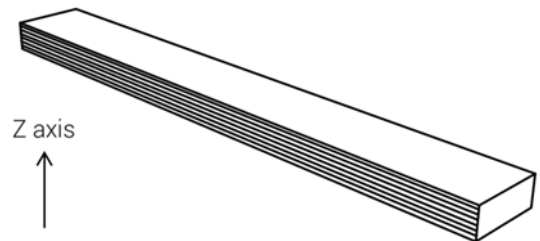
Test Sample Printing Conditions	
3D Printer	Flashforge Guider IIs
Nozzle Diameter	0.4mm
Nozzle Temperature	240c
Printing Speed	50mm/s
Layer Height	1.2mm
Infill	100%



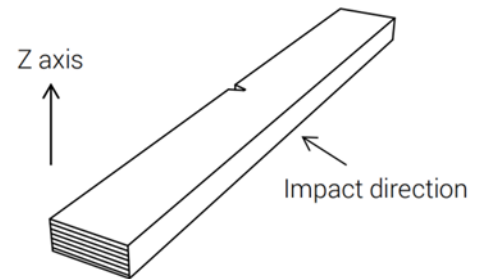
Tensile testing specimen; ASTM D638 (ISO 527, GB/T 1040)



Flexural testing specimen; ASTM D790 (ISO 178, GB/T 9341)



Impact testing specimen; ASTM D256 (ISO 179, GB/T 1043)



Disclaimer:

Since conditions of use and applicable laws may vary from country to country, it is the user's responsibility to determine the suitability of the product and product information in this document. The user must also ensure that their workplace and handling of the product comply with applicable laws and other government regulations. 3D META assumes no responsibility or liability for the information in this document, nor does it provide any warranty. All implied warranties of merchantability or fitness for a particular purpose under this document are expressly excluded.