

Technical Data Sheet (TDS)

PETG-GF

ERYONE PETG-GF filament is an enhanced PETG material that offers excellent flow properties and ease of printing, along with low odor and outstanding chemical resistance. Parts printed with this material are not only strong and durable but also exhibit excellent dimensional stability, featuring a fine matte and frosted texture on the surface. It is particularly suitable for manufacturing structural components or outdoor models that require high impact resistance and durability against drops. It is important to note that this material contains 10% glass fiber.

Part I: Suggests Printing Parameters

Parameter	Set up
Nozzle temperature	250-280 °C
Bed temperature	60-70°C
Bed material	glass, PEI, spring steel plate
Bottom printing temperature	250°C-280°C
Sealed printing	closed printing
Printing speed	30-150mm/s
Drying conditions	60°C-70°C, 4-8H

Part II: Physical Properties of Materials

Property	Testing Method	Unit	Typical Value
Density(g/cm ³ at 21.5 ° C)	ASTM D792 (ISO 1183, GB/T 1033)	g/cm ³	1.33
Heat distortion temperature(° C)	ASTM D648 1.8MPa 0.45MPa	°C	80
Glass transition temperature (° C)	DSC, 10 ° C/min	°C	75
Melt Index(g/10 min)	220 ° C, 10kg 240 ° C, 2.16 kg	g/10min	10

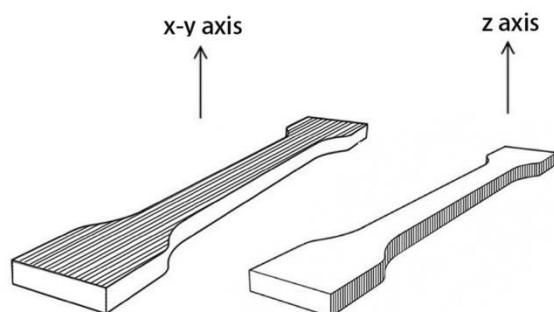
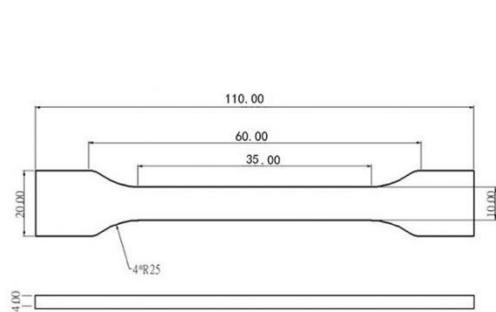
Part III: Mechanical Properties of Printed Samples

Property	Test conditions	Test standards	unit	Typical Value
Tensile strength X-Y	50mm/min	GB/T 1040.4	MPa	53.6
Elastic modulus X-Y	50mm/min	GB/T 1040.1-2006	MPa	2334.5
Elongation at break X-Y	50mm/min	GB/T 1040.4	%	1.9
Tensile strength X-Z	50mm/min	GB/T 1843	MPa	25.1
Elastic modulus X-Z	50mm/min	GB/T 1040.1-2006	MPa	2109.7
Elongation at break X-Z	50mm/min	GB/T 1040.4	%	1.7
Bending strength	2mm/min	GB/T 9341	MPa	78.5
Bending modulus	2mm/min	GB/T 9341	MPa	3027.5
Charpy Impact strength	2.75J	GB/T 1843	kJ/m2	3.9

Note: All splines are printed under the following conditions: printing temperature=250 ° C, printing speed=80mm/s, base plate 60 ° C, filling=100%, nozzle diameter=0.4mm

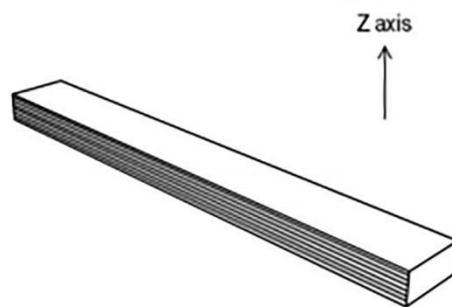
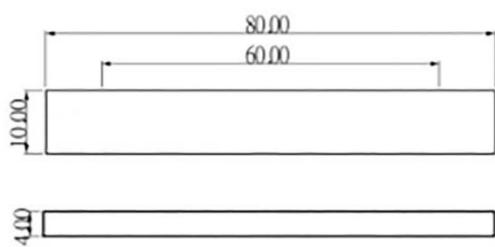
TENSILE TESTING SPECIMEN

ISO 527,GB/T 1040



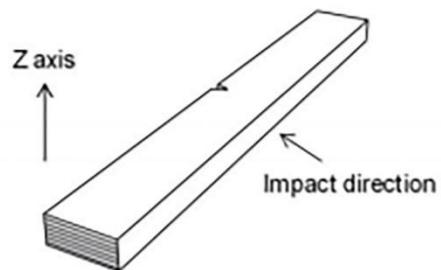
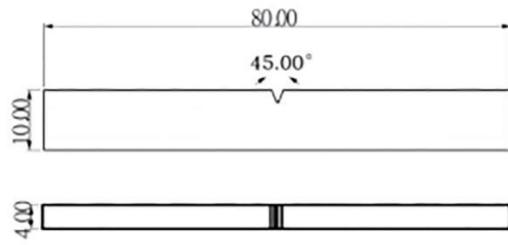
FLEXURAL TESTING SPECIMEN

ISO 178,GB/T 9341



IMPACT TESTING SPECIMEN

ISO 179,GB/T 1043



Disclaimers

The values given in this data table are for reference and comparison only. They should not be used for design specifications or quality control. The actual value may vary depending on the printing conditions. The final performance of printed components depends not only on the material, but also on the component design, environmental conditions, printing conditions, and so on. Product specifications are subject to change without prior notice.