# High Speed High Flow PETG Filament



# **Technical Data Sheet**

#### **Product Description**

ZYLtech High Speed High Flow PETG filament is made of eco-friendly glycol-modified polyethylene terephthalate, offering a wide range of colors, strong chemical resistance, high optical transparency, low odor, and zero VOCs. This version features a significantly higher flow rate up to 50 mm<sup>3</sup>/s. It delivers a high glossy surface finish across various temperatures and print speeds. It enhances print finish uniformity and maintains mechanical performance comparable to standard PETG, making it ideal for a wide range of 3D printing applications.

Each spool is manufactured using premium virgin PETG resin sourced directly from a highly reputable resin manufacturer. Our stringent quality assurance ensures that every spool is traceable to its specific batch, maintaining the highest standards of material integrity and consistency.

Produced in our state-of-the-art Houston extrusion facility, ZYLtech PETG filament undergoes meticulous testing for quality and performance. By combining top-quality, U.S.-sourced raw materials with advanced formulation, we ensure reliable results with every spool, providing customers with the confidence they need for their 3D printing projects.

#### **Filament Specifications**

Parameter	Value
Filament Diameter	1.75 mm
O. D. Tolerance	± 0.01 (95% Probability)
	± 0.02 (100% Probability)
Ovality	< 0.02 mm
Net Filament Weight	1 kg

### **Spool Specifications**

Parameter	Value
Spool Diameter	198 mm
Spool Height	60 mm
Hole Diameter	58 mm

Spool Material	ABS
Spool Heat deflection temperature	90°C (with forced-air circulation)
Spool Weight	150 g

## **Recommended Printer Setting**

Parameter	Value
Bed Temperature	65 – 80 °C for PEI build plate
Nozzle Temperature	220 – 270 °C
Chamber Temperature	20 – 50 °C (Open chamber preferred)
Print Speed	up to 1,000 mm/s
Maximum Flow Rate	35 – 50 mm <sup>3</sup> /s
Part Cooling Fan	0 – 80%
Drying Recommendation	50 – 60 °C 24Hr in filament dryer

#### **Typical Properties**

Physical Property	Value	Test Method
Density	1.29 g/cm <sup>3</sup>	ISO 1183
Thermal Property	Value	Test Method
Metling Temperature	220 – 250 °C	ISO 11357
Heat Deflection Temperature,		
0.45 MPA, Unannealed	67 °C	ISO 75
1.8 MPA	61 °C	
Mechanical Property	Value	Test Method
Mechanical Property Young's Modulus	<b>Value</b> 1800 – 2050 MPa	Test Method ISO 527
Young's Modulus	1800 – 2050 MPa	ISO 527
Young's Modulus Tensile Strength at Break (Annealed)	1800 – 2050 MPa 62-65 MPa	ISO 527 ISO 527
Young's Modulus Tensile Strength at Break (Annealed) Tensile Strength at Break (Unannealed)	1800 – 2050 MPa 62-65 MPa 45-48 MPa	ISO 527 ISO 527 ISO 527

#### **Disclaimer:**

The information included in this document is for reference purposes only. Testing results may vary between colors and batches. Printing conditions also greatly affect the testing results. It is the user's responsibility to determine whether the filament and the information in this document are appropriate for any specific application. Zyltech Engineering LLC assumes no obligation or liability for the information in this document.

For additional information, please contact Zyltech Engineering LLC customer support email csr@zyltech.com.