ASA GF Filament

Technical Data Sheet

Product Description

ZYLtech Glass Fiber Filled ASA (ASA-GF) filament is engineered for demanding outdoor and structural applications. This material integrates superior weatherability, UV stability, and chemical resistance of ASA with enhanced impact and heat resistance imparted by glass fibers. It consistently delivers reliable, high-performance results, making it suitable for both professional and advanced hobbyist use.

Each spool is manufactured using premium virgin ASA 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 ASA GF 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	150-160 g

Recommended Printer Setting

Parameter	Value
Nozzle requirement	Hardened nozzle 0.6mm or larger
Bed temperature	90 – 110 °C for PEI build plate
Nozzle temperature	240 – 280 °C
Chamber temperature	40 – 60 °C
Print speed	Up to 200 mm/s
Maximum flow rate	Up to 20 mm^3/s
Part cooling fan	Minimal
Drying recommendation	65 – 70 °C 24Hr in filament dryer

Typical Properties

Physical Property	Value	Test Method
Density	1.07 g/cm^3	ISO 1183
Thermal Property	**Value**	**Test Method**
Metling Temperature	210 – 220 °C	ISO 11357
Heat deflection Temperature, 1.8 MPA, Unannealed	97 – 99 °C	ISO 75
Mechanical Property	**Value**	**Test Method**
Young's Modulus	2540 – 2890 MPa	ISO 527
Tensile Strength at Break	33 – 36 MPa	ISO 527
Breaking Elongation	3.4 %	ISO 527
Flexural Modulus	2130-2480 MPa	ISO 178
Izod Impact Strength, Notched (23 °C)	6.9 KJ/m^2	ISO 180

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.