



Technical Data Sheet

Polyethylene terephthalate glycol (PETG) Everyday Filament

General Information

Polyethylene terephthalate glycol (PETG) filament is an environmentally conscious alternative to PETG, a common 3D printing material. This filament allows you to print components with excellent impact strength, like ABS, and high 3D printing speeds, similar to PLA. This filament will give your prints nearly zero warpage and strong layer bonds. Due to its good mechanical properties, PETG is often used for printing functional parts and prototypes that require higher strength and flexibility compared to PLA. PETG is ideal for creating protective components like phone cases, protective gear, and parts for sporting goods due to its impact resistance and durability. It has a good water and moisture barrier, making it suitable for printing objects that will be exposed to water, such as water bottles, liquid containers, and parts for marine applications.

Features & Benefits

- 100% virgin material
- High printing speed
- Excellent impact strength
- High optical clarity
- Low odor
- High flexibility
- Unmatched layer adhesion

Available in Standard Colors

See website for available colors

Available Sizes:

See website for details

Quality

At ABC3D, our filaments are manufactured using laser macrometer, ensuring lowest tolerance for the 3D printing industry. Each box contains identical materials, size, and color. All filaments are vacuum sealed with desiccants for optimal moisture protection, ensuring top-quality prints. Rest assured, our products are carefully crafted to deliver consistent excellence in every print.

Storage

Store between 17 to 28 °C in a dry area, away from sunlight. Keep sealed in an airtight container, away from humidity.

Physical Properties*	Standard	Unit	Value
Density	ASTM D1505	g/cm ³	1.23±0.02
Mechanical Properties*	Standard	Unit	Value
Tensile modulus	ASTM D638-14	MPa	1906±15
Tensile elongation	ASTM D638-14	%	25.3±8.7
Tensile strength	ASTM D638-14	MPa	62.3±3
Zero-shear viscosity	ASTM D4440-15	Pa.s	3.3×10 ³
Electrical Properties*	Standard	Unit	Value
Electrical resistivity	ASTM D257	Ω.cm	>10 ⁶

* All the physical, mechanical and electrical data belong to compression molded samples.

Print Settings	Unit	Value
Nozzle temperature	°C	230-250
Heated bed temperature	°C	50-70
Print speed	mm/s	30-70
Extrusion width	mm	0.45
Volume flow rate	mm ³ /s	2-3

Disclaimer

The technical data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data should not be used to establish specifications limits or used alone as the basis of design. The data provided is not intended to substitute any testing that may be required to determine fitness for any specific use.