Technical Data Sheet



Polyethylene terephthalate glycol (PETG) Carbon
Nanotube Matrix (CNT) Antistatic Grade Conductive
Filament

General Information

Conductive polyethylene terephthalate glycol (PETG)/CNT Antistatic filament is 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. Fixtures for soldering stations, testing equipment, or automated handling can be 3D printed with these filaments, offering ESD protection. Also, cleanrooms in the semiconductor and medical industries require strict contamination control. Antistatic PETG/CNT prevents the electrostatic attraction of dust and particles while being chemically resistant for easy cleaning.

Features & Benefits

- High printing speed
- Excellent impact strength
- Low odor
- High flexibility
- Unmatched layer adhesion

Available in Black Only

Available Sizes

See website for details

Quality

All ABC3D filaments are produced using a laser macrometer, ensuring lowest tolerance for the 3D printing industry. Each box contains the same material, 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	1.24±0.02
Mechanical Properties*	Standard	Unit	Value
Tensile modulus	ASTM D638-14	MPa	2030±28
Tensile elongation	ASTM D638-14	%	27.5±4.2
Tensile strength	ASTM D638-14	MPa	64.7±3.7
Zero-shear viscosity	ASTM D4440-15	Pa.s	4.4×10 ³
Electrical Properties*	Standard	Unit	Value
Electrical resistivity	ASTM D257	Ω.cm	4.2×10 ¹⁰

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

Print Settings	Unit	Value
Nozzle temperature	°C	240-260
Heated bed temperature	°C	50-70
Print speed	mm/s	30-70
Extrusion width	mm	0.45
Volume flow rate	mm³/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.

