

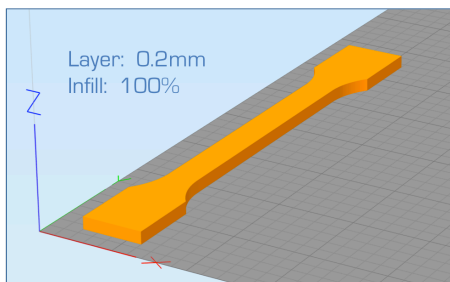


CarbonX™ Carbon Fiber Reinforced ABS 3D Filament

CarbonX™ Carbon Fiber Reinforced ABS (acrylonitrile butadiene styrene terpolymer) is a high-performance carbon fiber reinforced 3D printing filament. This grade was formulated utilizing high-modulus carbon fiber and premium ABS – making it ideal for applications that require superior stiffness, improved dimensional stability and greater thermal resistance than traditional unfilled materials. Suitable for use in practically all consumer-grade FDM/FFF printers that have a heated print bed. Made by 3DXTECH® in the USA.

The reported technical data was generated from printed ISO test specimen. The general print parameters utilized are noted below.

- Desktop FDM/FFF Printer
- Nozzle: 0.4mm A2 hardened
- Layer height: 0.2mm
- Infill: 100%
- Extrusion temp: 230°C
- Bed temp: 110°C
- Bed prep: ABS/Acetone Gel
- Print speed: 50 mm/sec



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.

General Property	Unit	Standard	Typical Value
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Density	g/cc	ISO 1183	1.11
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Mechanical Property	Unit	Standard	Typical Value
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Tensile Strength	MPa	ISO 527	44
Tensile Modulus	MPa	ISO 527	4018
Tensile Elongation, Break	%	ISO 527	1.8
Flexural Modulus	MPa	ISO 178	5260
Flexural Strength	MPa	ISO 178	76

Thermal Property	Unit	Standard	Typical Value
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Glass Transition Temperature (Tg)	°C	DSC	105
Heat Distortion Temperature (HDT) @ 0.45MPa	°C	ISO 75	102.5

Electrical Property	Unit	Standard	Typical Value
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Surface Resistivity	Ohm/sq	IEC 60093	>10 ¹⁰
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Printing Recommendation	Typical Range
Extruder Temperature	220 - 240°C
Bed Temperature	100 - 110°C
Print Speed	50 - 70 mm/sec