



3D Printing Filament

TECHNICAL DATA SHEET - Carbon Fiber Nylon

Commercial name: PRO Series Carbon Fiber Nylon
Raw material: Carbon fiber reinforced polyamide
Designation: 3D printing applications
Manufacturer: MatterHackers

Material Specifications

PROPERTY	VALUE	TEST METHOD - ISO
Density (gcm-3)	1.01	ASTM D792
Heat Deflection	167°C	ASTM D648 at 66 psi
Flexural Peak Stress (psi)	12,400	ASTM D790
Flexural Modulus (psi)	385,000	ASTM D790
Tensile Strength at Yield (psi)	9,625	ASTM D638, Type IV
Tensile Elongation (%)	8.1	ASTM D638, Type IV
Notched Izod Impact (Jm-1)	100	ASTM D256

Filament Specifications

PROPERTY	VALUE
Nozzle temperature	240-260°C
Heated bed temperature	70°C
Speed	30-150 mm/s
Infill	As needed, up to 100 %
Layer height	0.2 mm
Cooling fan	On