

CARBON FIBRE REINFORCED PET

PET-CF Filament

1.75 mm · 1 kg spool · ± 0.05 mm tolerance

PET with 10 % carbon fibre for very stiff, heat resistant parts with low moisture uptake and a matte finish.

✓ HDT 205 °C

✓ Very high stiffness

✓ Low moisture uptake

✓ Hardened steel nozzle required

Recommended Print Settings

Nozzle temperature	260–290 °C 280 °C recommended
Bed temperature	70–100 °C 90 °C recommended
Print speed	40–150 mm/s 80 mm/s recommended
Support material	Self supported

 Use a hardened steel nozzle. Dry thoroughly before printing.

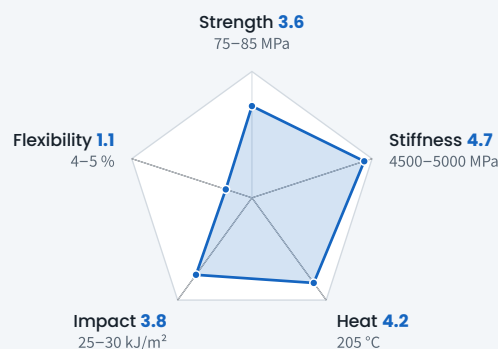
Filament Specifications

Material	PET with 10 % carbon fibre
Diameter	1.75 mm
Diameter tolerance	± 0.05 mm
Net filament weight	1 kg

Spool & Packaging

Empty spool weight	150 g
Spool with filament	1.15 kg
Spool outer diameter	200 mm
Hub diameter	52 mm
Spool width	65 mm
Shipping weight	1.3 kg
Box dimensions	210 × 220 × 75 mm

Property Profile



Scores from 1 to 5 relative to the OzFDM filament range, based on the typical values in this sheet (stiffness and impact on a log scale).

Storage & Handling

Drying

100 °C for a minimum of 5 hours in a filament dryer or food dehydrator.

Storage

Airtight bag or container with desiccant in a cool, dark and dry area to prevent moisture absorption. For optimal long term storage we recommend drying the filament prior to sealing the filament spool in a vacuum bag with desiccant.

Mechanical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Tensile strength	ISO 527	75–85 MPa
Elongation at break	ISO 527	4–5 %
Tensile modulus	ISO 527	4500–5000 MPa
Flexural strength	ISO 178	140–150 MPa
Impact strength	ISO 180	25–30 kJ/m²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.3–1.31 g/cm³
Melt flow rate	ISO 1133	3–6 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	<0.3 %

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	205 °C

Available Colours 1



Carbon Fibre
Black

Swatches are indicative only. Colours vary between screens and with print settings.

NOTES

Values shown are typical results measured on test specimens and are provided for guidance only. They are not guaranteed specifications and should not be used as design limits. Printed part properties vary with printer, settings, print orientation and part geometry. Test your parts for suitability before use in critical applications.