

CARBON FIBRE REINFORCED PLA

PLA-CF Filament

1.75 mm · 1 kg spool · ±0.05 mm tolerance

Carbon fibre reinforced PLA for rigid, dimensionally accurate parts with a matte finish, while keeping the easy printing of PLA.

- ✓ Carbon fibre reinforced
- ✓ Matte finish hides layer lines
- ✓ Easy PLA printing
- ✓ Hardened steel nozzle required

Recommended Print Settings

Nozzle temperature	200–230 °C 210 °C recommended
Bed temperature	30–60 °C 50 °C recommended
Print speed	40–60 mm/s 50 mm/s recommended
Support material	PVA, PETG (as support interface)

Use a hardened steel nozzle.

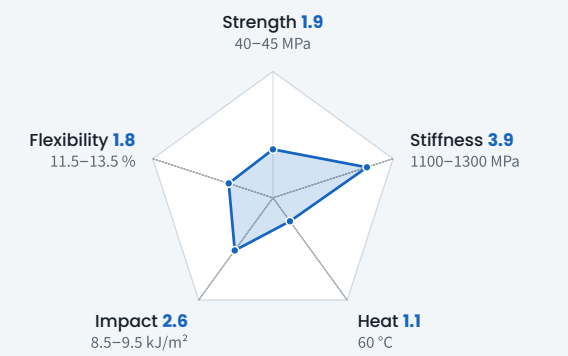
Filament Specifications

Material	Carbon fibre reinforced PLA
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
60 °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	40–45 MPa
Elongation at break	ISO 527	11.5–13.5 %
Tensile modulus	ISO 527	1100–1300 MPa
Flexural strength	ISO 178	85–95 MPa
Impact strength	ISO 180	8.5–9.5 kJ/m ²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.26–1.27 g/cm ³
Melt flow rate (190 °C, 2.16 kg)	ISO 1133	10–15 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	<0.5 %

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	60 °C
Continuous use temperature	IEC 60216	55 °C

Available Colours 8



Black



Green



Blue



Purple



Pink



Grey



Midnight Blue



Marsala

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.