



THE **LARGE-SCALE** FFF 3D-PRINTER
FOR **PROFESSIONAL** AND **INDUSTRIAL** USE.

TECHNICAL DATA SHEET
BigRep PET-CF

PET-CF is a polyamide grade 3D printing filament with carbon fibres combining outstanding mechanical properties and printability

Physical Properties

Material	Polyethylene terephthalate with carbon fibres
Filament Net Weight:	2.5, 4.5 and 8.0 kg
Diameter	2.85 mm
Density (ISO 1183)	1.23 g/cm³
Melting temperature (DSC)	250 °C

Recommended Printing Conditions (Original BigRep factory files for the material are available from BigRep Global Support)

Nozzle temperature	190 - 210 °C
Heating bed temperature	60 °C
Environmental temperature	0 - 40 °C
Printing speed	>40 mm/s
Additional Comments	<i>Material is sensitive to moisture and should be stored under dry conditions at all times</i>

Mechanical Properties (Dry State)

Young's Modulus (ISO 527)	9000 MPa
Tensile Strength (ISO 527)	80 MPa
Elongation at break (ISO 527)	2.5 %
Bending Modulus (ISO 178)	8000 MPa
Bending Strength (ISO 178)	130 MPa
Charpy Impact strength (ISO 179)	40 kJ/m²
HDT / B (ISO 75)	> 100 °C

Keep sealed in an air tight container, away from humidity.
Store at around room temperature and protect from direct heat or sunlight.

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