



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

TECHNICAL DATA SHEET
BigRep HI-TEMP

HI-TEMP is a bio polymer grade based 3D printing filament combining excellent heat resistance, mechanical properties and printability.

Physical Properties

Material	Biodegradable Polymer
Filament Net Weight:	4.5kg, 8.0kg
Diameter	2.85 mm
Density (ISO 1183)	1.39 g/cm³
Melting temperature (DSC)	190-210 °C
Vicat Softening Temperature (ISO 306)	160 °C
HDT / B (ISO 75)	115 °C

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

Nozzle temperature	215 °C
Heating bed temperature	55-60 °C
Environmental temperature	n.s. °C
Printing speed	>40 mm/s

Additional Comments *e.g. Material is sensitive to moisture and should be stored under dry conditions at all times*

Mechanical Properties (Dry State)

Flexural Modulus (ISO 527)	4400 MPa
Tensile Strength (ISO 527)	61 MPa
Elongation at break (ISO 527)	3 %
Breaking stress (ISO 178)	50 MPa
Impact resistance (ISO 179-1 eU)	72 kJ/m²
Notched Impact strength (ISO 179-1 eA)	4.4 kJ/m²

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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