

## TECHNICAL DATA SHEET

### PET-G CF

#### Description

Recreus PET-G CF is a highly modified, carbon fibre-additivated amorphous PET copolymer that belongs to the family of PET products commonly known as "PETG" (PET Glycol Modified). It has been specially designed for 3D printing extrusions due to its excellent melt strength. Its main characteristic is its mechanical strength which is 5 times higher than its original formulation.

Physical Property	Value	Unit	Test method according to
Material density	1,320	g/cm <sup>3</sup>	ISO 1183
Melt flow rate (230°C/2,16kg)	1320,000	kg/m <sup>3</sup>	ISO 1183
	0,000	g/10min	ISO 1133

Mechanical Property	Value	Unit	Test method according to
Tensile modulus (Young)	9000,00	MPa	ISO 527
Tensile strength	105	MPa	DIN 53504-S2
Elongation at break	4,00	%	DIN 53504-S2
Notched impact strength (Charpy)n at +23°C	6,50	kJ/m <sup>2</sup>	ISO 179

Thermal Property	Value	Unit	Test method according to
HDT (0,45MPa)	72,0	°C	ISO 75-2
HDT (01,82MPa)	67,0	°C	ISO 75-2
VST Vicat Softening Temperature	80,0	°C	Vicat A Method: 50 Nw, 50°C/h

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Date / Revised: 1

Printing Propierties	Recommneded
Printing temperatures	245-260°C
Printing speed	40-50mm/s
Hot-bed temperature	70°C
Optimal layer height	0,2 mm
Minimal nozzle	0,4 mm - 0,6 mm (recommended)
Retractions	1-2 mm (speed 20-50mm/s)
	Hardened steel or ruby-type (avoid brass) of 0.50 mm and never of smaller diameter, to avoid jamming in the extruder.

0/01/2022 (REF 28109023 )

Product: PET-G CF

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