

Nanovia PC CF :

Carbon fibre reinforced

With its carbon fibre reinforced matrix, this 3D printing polycarbonate filament allows for rigid component with high dimensional stability and low warping whilst printing. Unlike native polycarbonate, Nanovia PC CF is UV resistant and can be used in direct sun exposure up to 120 °C.



Advantages :

Rigid • Good fire resistance • High temperature resistance (120 °C) • UV resistant

3D Printing

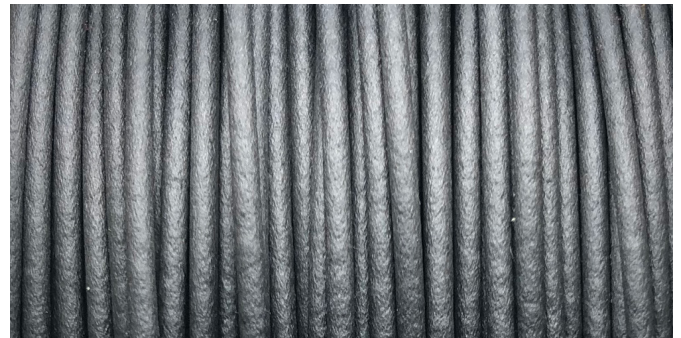
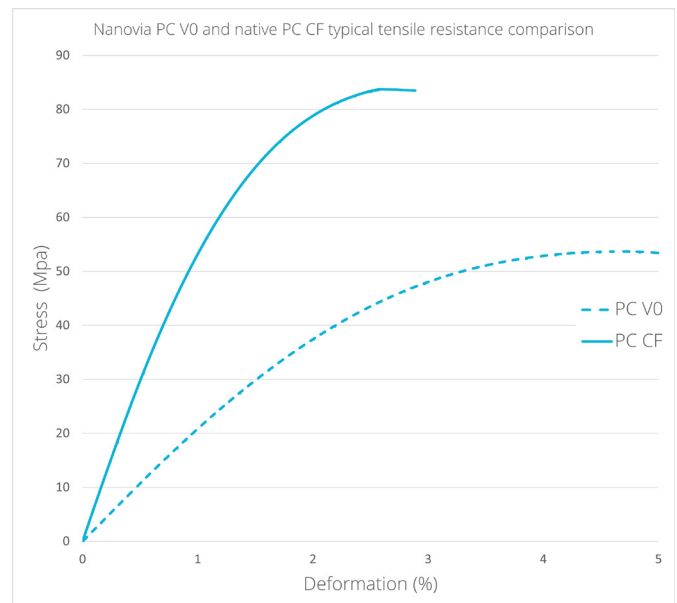
Extrusion temperature	260 - 290	°C
Plate temperature	100 - 140	°C
Enclosure temperature	> 100	°C
Nozzle (minimal)	0.5	mm

Mechanical properties

	Physical		
Density	1.26	g/cm ³	ISO 1183
	Traction (0°)		
Young's modulus	6390	MPa	ISO 527/1A
Ultimate strength	87	MPa	ISO 527/1A
Ultimate strength elongation	2.7	%	ISO 527/1A

Thermal properties

Tg	120	°C
HDT at 46 kg/cm ²	144	°C ASTN D648
HDT at 18,6 kg/cm ²	133	°C ASTN D648



COMPOSITE MATERIALS for
ADVANCED INDUSTRIALS

For more information on this filament, please visit :

www.nanovia.tech/pc-cf

Application

Storage

- Store Nanovia PC CF in a dry and dark location, if possible with a desiccant.
- In order to guarantee good printing conditions, dehydrate at 100 °C for 4 hours or longer, when the spool has been exposed to moisture for an extended period.

Printing

- In order to protect your equipment we recommend using a nozzle adapted for abrasive materials.

Health and safety

Printing

- We recommend printing Nanovia PC CF in a room equipped with air extraction or by using appropriate breathing equipment.

Post treatment

- We recommend wearing standard safety equipment during the post treatment of your prints.

Packaging

- Spools are equipped with both a material traceability and a production series number.
- Spools are packed in individual boxes, vacuum sealed with desiccant.
- Nanovia PC CF is also available in pellet form for plastic extrusion and 3D FGF pellet printing.

Spool	L1	L2	D1	D2	D3	weight
500 g	53	46	200	90	52	182 g
2 kg	92	89	300	175	52	668 g

