Technical Datasheet

Date of issue : 02/03/2026
Version 1.0

inFil PETG CF

PETG CF is a carbon fiber reinforced filament designed to manufacture functional parts with increased rigidity, dimensional stability, and a professional finish. It combines the ease of printing of PETG with a significant improvement in mechanical behavior, reducing unwanted flex and improving the accuracy of technical components.

It is the ideal choice when PLA falls short and you need a stronger material without complicating the printing process.

Carbon fiber reduces deformation under load and improves the geometric stability of the part. This allows you to manufacture:

Structural supports
Tooling and jigs
Technical housings
Components subjected to continuous stress
Parts with tight tolerances
Furthermore, it exhibits less warping than other technical materials, facilitating the manufacture of medium and large parts with good repeatability.

The carbon fiber reinforcement provides a uniform matte finish that eliminates the typical gloss of conventional PETG. Layers are better concealed, and the part acquires a clean, technical aesthetic.

It maintains the good layer adhesion characteristic of PETG, with less moisture absorption than other technical materials. This improves consistency in long print runs and reduces variations during printing.

Recommended for users seeking a functional, stable material with a professional finish without resorting to highly complex polymers like nylon or PC.

Physical properties	**Conditions**	**Test Method**	**Typical Values**
Density		ISO 1183	1,32 g/cc
Thermal properties	**Conditions**	**Test Method**	**Typical Values**
Glass transition temperature		ISO 306	77 ºC
Mechanical properties	**Conditions**	**Test Method**	**Typical Values**
Tensile strength		ISO 527-1	9000 MPa
Tensile elongation		ISO 527-1	4 %
IZOD	Unnotched	ISO 179	45 KJ/m^2
IZOD	Notched	ISO 179	6,5 KJ/m^2
Parámetros de impresión			**Typical Values**
Printing Temperature			230 - 240 ºC
Heated Bed temperature			80 – 90 ºC
Printing speed			< 200 mm/s
Retraction			3 mm
Adhesion			Spray
Parámetros de calidad			**Typical Values**
Tolerance	max		0,03 mm
Tolerance	media		+/- 0,03 mm
Standard deviation	max		0,02 mm
Ovality	max		2 %

3DFILAMENTS S.L
Calle Chelva 32
03206 Elche, Alicante
España

info@3dfils.com
(+34)965 641 644
www.3dfils.com