

# Innofil<sup>3D</sup> | PETCF

PET Carbon Fiber  
MADE WITH LUVOCOM® 3F

PET CF is an Carbon Fiber reinforced PET made with LUVOCOM® 3F. This filament has been developed in collaboration with Lehmmann&Voss&Co, who specializes in high-performance compounds which allow precisely tuned material properties for a wide range of technical applications. Key properties PET CF are:

- High dimensional stability
- Heat resistant up to 100°C
- Very low moisture absorption
- Low abrasion
- Compatible with HIPS for breakaway support
- Strong and stiff parts

PET CF is a high-performance and functional 3D printing material optimized to meet your requirements. Its high dimensional stability and low abrasiveness offers an easy to print experience which allow direct printing on glass or a PEI sheet. PET CF heat resistant property, strength and stiffness make this filament highly suitable for a wide range of industrial application. To provide users with valuable information we have collected data regarding the mechanical properties of the 3D-printed specimens according to the ISO standards.

For more information go to [www.innofil3d.com/material-data](http://www.innofil3d.com/material-data)  
LUVOCOM® 3F is a trademark from Lehmann&Voss&Co KG.

## PET CF | PRINT SETTINGS

BASED ON 0.4MM NOZZLE

PRINT TEMP\* | 245 - 265°C

PRINT SPEED | 40 - 80 mm/s

BED TEMP | 70 - 80°C

FILL DENSITY | 20%\*\*\*

EXTRUSION WIDTH | 0.6\*\*

FAN SPEED | 0%

TOP/BOTTOM THICKNESS | 0.8 - 1.0

LAYER HEIGHT | 0.2 mm \*

\* For excellent layer adhesion a layer height of 0.2mm is recommended. Lower layer heights can also cause clogging of the nozzle.

\*\* Also we recommend a nozzle diameter of at least 0.6 mm to prevent clogging of the nozzle. For good strength and aesthetic results, adjust the EXTRUSION WIDTH to the diameter of the nozzle.

\*\*\* Higher infill density will create stronger and more solid parts.

## Innofil<sup>3D</sup> | PROFESSIONAL SERIES

MATERIAL PORTFOLIO

**PET CF**

**ABS FUSION<sup>+</sup>**

**PRO1**

**ASA**

**HIPS**

**PP**

Low abrasive, high dimensional stability, heat resistant up to 100°C, strong and stiff parts

Low warp, direct printing on glass, high heat resistant, adheres to INNOSOLVE PVA

Engineering PLA, high strength, tough, versatile, fast and easy printing

UV resistant, outdoor use, anti-static properties

Suitable for sanding and painting, solvable abs support

Low density, resistant to fatigue and chemicals, high impact strength

PET CF	ABS FUSION <sup>+</sup>	PRO1	ASA	PP	HIPS	ABS	PLA	PET
++	++	++	+	+	+	±	++	++
++	+	++	-	-	±	-	++	++
++	-	++	±	-	-	±	±	+
+	+	++	+	±	+	+	+	++
-	++	±	+	++	±	++	-	-
+	+	-	++	-	-	+	-	±
++	++	±	++ <sup>1</sup>	-	-	++	-	-
+	+	-	+	-	++	+	-	±

<sup>1</sup>After annealing

Professional  
Series

PETCF

QUICK REFERENCE GUIDE



Innofil<sup>3D</sup>