

Innofil^{3D} | PP GF30 Polypropylene Glass Fiber 30%

Innofil3D PP GF30 is a polypropylene reinforced with 30% glass fibers. The fibers in this compound are specially designed for 3D-printing filaments and are compatible with a wide range of standard FFF 3D-printers. The extreme stiffness makes this material highly suitable for demanding industrial applications. Key properties of PP GF30 are:

- Extremely high stiffness
- High heat resistance
- UV-resistant
- Chemical resistant

PP GF30 is a functional 3D printing filament which can be used in high performance-applications. The excellent mechanical properties, high temperature- and chemical resistance make this filament highly suitable in an industrial environment. 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

EASY TO PRINT
 DIMENSIONAL STABILITY
 TENSILE STRENGTH
 BENDING STRENGTH
 IMPACT RESISTANCE
 UV RESISTANCE
 HEAT RESISTANCE
 POST PROCESSING

PP GF30	PAHT CF	PET CF	ABS FUSION ⁺	PRO1	ASA	PP	HIPS
+	++	++	++	++	+	+	+
++	++	+	+	++	-	-	±
++	++	++	-	++	±	-	-
+	+	+	+	++	+	±	+
-	-	-	++	±	+	++	±
±	-	-	+	-	++	-	-
++	++	++	++	++ ¹	++	-	-
-	-	-	+	-	+	-	++

¹ After annealing



PP GF | PRINT SETTINGS

BASED ON 0.6MM NOZZLE

PRINT TEMP | 240 ± 10°C

FAN SPEED | Up to 100%

TOP/BOTTOM THICKNESS | ≥ 0.6mm (3 layers)

PRINT SPEED | 40 - 80 mm/s

NOZZLE** | 0.6 mm

SHELL THICKNESS | ≥ 1.2mm (2 lines)

GLASS BED TEMP* | 30°C

BED ADHESION | Strapping tape
(Scotch extreme)

LAYER HEIGHT | ≥ 0.2mm

* For adhesion to the bed we used strapping tape of the brand Scotch Extreme. This provided the best results

** PPGF30 is an abrasive material, hardened nozzle (steel or ruby) is advised of ≥ 0.6 mm to prevent clogging of the nozzle. Infill >80% will cause high warpage



Innofil^{3D} | PROFESSIONAL SERIES

MATERIAL PORTFOLIO

PP GF30

Extremely high stiffness, high heat resistance, UV-resistance, chemical resistance

PAHT CF

High chemical resistance, high heat resistant up to 150°C, low warping

PET CF

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

ABS Fusion⁺

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

PRO1

High Toughness, versatile, fast printing

ASA

UV resistant, suitable for outdoor use, good anti-static properties

HIPS

Suitable for sanding and painting, ABS support

PP

Low density, resistant to fatigue, chemical resistant

Professional
Series

PP GF30 (POLYPROPYLENE GLASS FIBER 30%)
QUICK REFERENCE GUIDE



Innofil^{3D}