PET-G carbon

PET-G Carbon is our 20% carbon fiber reinforced PET-G based filament. The result is a twice as stiff filament as PET-G with increased impact and heat resistance (HDT) to 80˚C. This, together with other features, such as a matt surface, no warp, dimensionally stable and extremely forgiving to print, makes PET-G Carbon suitable for a very wide variety of applications besides the typically mentioned RC parts, drones, automotive and more.

Features:
- 20% Carbon fiber reinforced PET-G
- Extremely stiff
- Increased impact and heat resistance
- No warping and dimensionally stable
- Matt surface
- Abrasive (see * at additional info*)

Colours:
Check the website for available colours.

Filaments specifications		
Size	Ø Tolerance	Roundness
1.75mm	± 0.05mm	≥ 95%

Material properties		
Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,19 g/cc
MFR 300°C/1,2 kg	ISO 1133	N.D.
Tensile strength at yield	ISO 527	52,5 Mpa
Strain at yield	ISO 527	4,2%
Tensile modulus (E-Modules)	ISO 527	3800 MPa
Impact strength - charpy method 23˚C	ISO 179	3,8 kJ/m2
Printing temperature	dddrop	235 - 255°C
Melting temperature	ISO 294	230°C ± 10%
Vicat softening temperature	ISO 306	80°C

Additional info:
Recommended temperature for heated bed is ± 75˚C.
* Please consider the use of a Stainless steel nozzle when printing with PET-G Carbon. The carbon fibers are abrasive and will result in fast wear of regular brass nozzles.
Storage: Cool and dry (15-25˚C) and away from UV light. This enhances the shelf life significantly.