Product name: CarbonFil™

Our CarbonFil filament is based upon the unique PETG blend of our HDglass compound and is reinforced with 20% ultra-light and relatively long stringer carbon fibres, which has resulted in an exceptionally stiff carbon-fibre reinforced 3D printer filament. CarbonFil is twice as stiff as HDglass and yet it is even 10% more impact resistant, which is a remarkable feature for carbon-fibre reinforced filament.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	1.19 g/cc	ISO 1183	-
Melt flow rate	3.7 cm³/10min	ISO 1133	200° C/5Kg
Water absorption	-	-	-
Moisture absorption	± 0.13%	-	-
Mechanical			
Impact strength	5 KJ/m²	ISO 179	Charpy Notched @23° C (73° F)
Tensile strength	92 Mpa	ISO 527	@Break
Tensile modulus	9495 Mpa	ISO 527	-
Elongation at break	3.4%	ISO 527	Strain at Break
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	-	-	-
Thermal			
Print temperature	± 230 - 265° C	-	-
Melting termperature	-	-	-
Viscat softening temp.	± 79° C	ISO 306	@ 0.455 Mpa (66psi)
Optical			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance	
HS Code	39169090
REACH compliant	Yes
RoHS certified	Yes

Diameter	Tolerance	Roundness
1.75mm	± 0.05mm	≥ 95%
2.85mm	± 0.10mm	≥ 95%