

# TECHNICAL DATA SHEET

## CarbonFil

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### Product specifications

CarbonFil is a 15% carbon fiber reinforced PETG based 3D printer filament that is extremely stiff. CarbonFil 3D prints 3D prints with a high dimensional accuracy and virtually no warping.

### Important key features

10% more impact resistant than HDglass  
Very easy to print  
Great dimensional stability

### Suitable applications

Automotive  
Aviation & Heavy industry

### Recommended pretreatment

**Drying**  
Recommended  
40 - 60 °C  
12 h

**Print with**  
Enclosure Yes  
Dry box No

### Recommended print settings regular speed

Print speed 25 - 70 mm/s  
Nozzle temperature 230 - 275 °C  
Bed temperature 80 - 90 °C  
Fan speed 0 - 50 %

Material properties	Typical value	Unit of Measure	Test method	Test condition
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Density				
Specific gravity	1,32	g/cm <sup>3</sup>	ISO 1183	
Melt flow rate				

### Mechanical properties

Impact strenght	5.4	kJ/m <sup>2</sup>	ISO 179-1eU	Charpy notched 23°C
Tensile strenght at yield				
Tensile strenght at break	45	MPa	ISO 527-1	
Tensile modulus				
Elongation at yield				
Elongation at break	4,9	%	ISO 527-1	
Flexural strenght				
Flexural modulus	4250	MPa	ISO 527-1	
Rockwell hardness				

### Thermal properties

Melting temperature				
Heat deflection temperature				
Vicat softening temperature	80	°C	ISO 306	
Glass transition temperature				

### Product export information

HS code	Description	Origin
39169090	Monofilament for 3D printing	European Union

### Disclaimer

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