PET Carbon F. TDS

AzureFilm PET Carbon Fiber for FDM 3D Printers

Product Description

AzureFilm PET CF is easiest to print with carbon fiber filled material on the market.This filament has excellent mechanical properties with no warping, including high z-layer strength, with short (max. 3hrs) temperature resistance up to 125 °C and low water uptake.

Properties

Physical properties	Test method	Value
Material	**PET Carbon Fibre**	Color Black
Specific gravity	ISO 1183-3	1,4 g/cm3
Water absorption	23°C / 24h ISO 62	< 0,3 %
Mechanical properties at 23°C / 50% rh		
Tensile strength	ISO 527	80 MPa
Elongation at maximum force	ISO 527	2,5%
Modulus of elasticity	ISO 527	9 GPa
Flexural strength	ISO 178	130 MPa
Flexural elongation at max. force	ISO 178	3,5 %
Flexural modulus	ISO 178	8 Gpa
Charpy impact strength	ISO 179 1eU	40 kJ/m2
Thermal properties		
Service temperature (up to 3hrs)	During lifetime max. 200h ISO 3167 A	125 °C
Continuous service temp.	UL 746B	100 °C

Printing Recommendations

Nozzle temperature: 245 – 270°C
Heated bed: recommended 80-90 °C
Print speed: 40 – 60 mm/s
Layer height: 0,2 mm
Nozzle diameter: 0,6 mm
Build platform: Blue tape, Kapton tape, glass bed + Dimafix spray

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