

PEEK CF · Technical Data Sheet

General Features

Chemical Name Polyether ether ketone - carbon fiber	Benefits • Outstanding temperature and chemical resistance • Very high strength and stiffness • Suitable for dynamically-stressed parts • Flame retardant • Low smoke and toxic gas emissions	
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Filament Characteristics

Diameter	Ø 1.75mm
Meters per spool	305.7m
Weight per meter	3.27g
Tolerance	±0.05mm

Material Properties

		Typical value	Test Method
Specific gravity	g/cc	1,36	ISO 1183
MFI 380°C/10kg	g/10 min	16	ISO 1133
Tensile strength at yield	MPa	126	ISO 527
Elongation strain at yield	%	3,9	ISO 527
Tensile (E) modulus	MPa	7800	ISO 527
Impact strength charpy method 23°C – notched	kJ/m²	7	ISO 179 1eA
Flammability behaviour		V-0	UL94
Heat deflection temp. A (1,8MPa)	°C	280	ISO 75
Mold shrinkage	%	0,2-0,4	DIN 16742
Printing temp.	°C	425±25	Internal method

Additional info:

Recommended temperature for heated bed is ≥110°C. Adhesion is possible on different surfaces.

PEEK CF can be used on desktop FDM or FFF technology 3D printers able to reach the required temperatures. Dry the spool before printing: 6-8 hours at max. 120°C or 4 hours at 130 °C.

*Please consider the use of a hardened steel nozzle when printing with PEEK CF. The carbon fibers are abrasive and will result in fast wear of regular brass nozzles. Note: brass nozzles are not allowed - this contains copper which is reactive with PEEK.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.

Disclaimer:

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⚠ WARNING: This Filament - when used in the operation of 3D Printers or 3D Pens - can expose you and others in the same room to carbon black, a chemical known to the State of California to cause cancer. www.P65Warnings.ca.gov. **ALWAYS OPERATE THIS PRODUCT IN A WELL-VENTILATED AREA.**