Carbon fiber reinforced PPS

Carbon fiber reinforced polyphenylene sulfide

PPS CF is a high-performance thermoplastic that combines high rigidity, thermal stability up to 250 °C, and excellent chemical resistance. The addition of carbon fibers enhances mechanical strength and dimensional accuracy, reducing deformation and shrinkage. It is ideal for technical and structural components used in environments with high thermal or mechanical stress, where long-term durability and reliability are required.

Material properties

Density	ISO 1183	**1,34**	g/cm³
Suitability for food contact		**NO**	
Tensile strength	ISO 527	**74**	MPa
Elongation at break	ISO 527	**4**	%
Flexural strength	ISO 178	**138**	MPa
HDT 0.45 MPa	ISO 75	**250**	°C
Flammability	UL94	**HB**	

Printing layer height
0.16 mm

Maximum dimensions
300x300x300 mm (11.8x11.8x11.8 in)

Infill
30%

Shell thickness
1,68

Tolerances
± 0,60 mm < 100 mm ; ± 0,75% > 100 mm

Applications
PPS CF is used in structural, electrical, and mechanical components operating under extreme conditions, such as motor parts, sensor supports, industrial housings, and technical equipment, where high thermal stability, rigidity, and chemical resistance are required.

Certifications
RoHS - REACH - UL94 HB