



Technical Data Sheet: CarbonX™ CF15 PEKK-A 3D Printing Filament

Physical Properties	Standard	Unit	Typical Value
Density	ISO 1183	g/cc	1.39

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength, Break	ISO 527	MPa	110
Tensile Modulus	ISO 527	MPa	8465
Tensile Elongation, Break	ISO 527	%	2.5
Flexural Strength	ISO 178	MPa	142
Flexural Modulus	ISO 178	MPa	8542

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	DSC	°C	165
Melt Temperature (Tm)	DSC	°C	305
Deflection Temperature at 0.45 MPa (66psi)	ISO 75	°C	275

Electrical Property	Standard	Unit	Typical Value
Surface Resistance	ASTM D257	Ohm/sq	>10 ⁸

Printing Recommendations

Nozzle: 0.4mm or Larger [Hardened Nozzle]

Layer Height: 0.25mm [60% of Nozzle Diameter is Ideal]

Extrusion Multiplier: 0.95-1.0

Extrusion Temp: 385-400°C

Print Bed Temp: 120-160°C

Enclosed Chamber Temp: up to 165°C Ideal

Drying Recommendations: 140°C for 4-6 hours