



TDS Rev 3.1

Technical Data Sheet: ThermaX™ PEKK-C 3D Printing Filament

Physical Properties	Standard	Unit	Metric
Density	ISO 1183	g/cc	1.29

Mechanical Properties	Standard	Unit	Metric
Tensile Strength	ISO 527	MPa	105
Tensile Modulus	ISO 527	MPa	3200
Tensile Elongation	ISO 527	%	10
Flexural Strength	ISO 178	MPa	134
Flexural Modulus	ISO 178	MPa	2900

Thermal Properties	Standard	Unit	Metric
Glass Transition Temperature (Tg)	DSC	°C	165
Melt Temperature (Tm)	DSC	°C	335
Deflection Temperature at 0.45 MPa (66psi)	ISO 75	°C	182

Fire Testing*	Standard	Unit	Typical Value
Flamability Rating (*Base Resin)	UL 94	-	V-0 @ 0.8mm

Printed Specimen Conditions
Printer: Gearbox™ HT2
Nozzle: 0.4mm
Layer Height: 0.25mm
Infill: 100%, +/- 45°, 3 Perimeter Walls
Extrusion Temp: 370°C
Chamber Temp: 160°C
Specimen Orientation: XY Flat

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