

PEKK

Property Data

Property	Test Method	Value
Density g/cm ³	ISO 1183	1.27
Water absorption/ %	ISO 62 (23°C/24hr)	0.2
Melt Volume Flow Rate/ cm ³ /10min	ISO 1133 (380°C/5kg)	35
Heat Deflection Temperature/ °C	ISO 75-f	139
Melting Point*/ °C	DSC	300-305
Glass Transition (Tg)/ °C	DSC	160
Flammability Rating	UL 94	V-0
Tensile Strength/ kpsi	ISO 527	12.7
Tensile Elongation/ %	ISO 527	5.4
Tensile Modulus/ kpsi	ISO 527	406
Flexural Strength/ kpsi	ISO 178	14
Flexural Modulus/ kpsi	ISO 178	390
Charpy Impact Strength (notched)/ kJ/m ²	ISO 179	5
Volume resistivity/ ohm.cm (23°C)	IEC 60093	10 ¹⁶

*PEKK is amorphous, melting point is an approximation

Recommended Printer Settings

Parameter	Value
Nozzle temperature	345-370 °C
Heated bed temperature	> 120 °C
Heated Chamber	Recommended to reduce warping; 70-140 °C
Speed	40-60 mm/s
Infill	As needed, up to 100 %
Layer thickness	0.2 mm recommended starting point (adjust as needed)
Nozzles	0.4 mm recommended starting point
Drying	120 °C; keep filament in dry, sealed bag/container for storage

These processing conditions are general guidelines only. Each printer will likely have a unique set of printing parameters. Generally, slower speeds, larger nozzles and layers are beneficial. PEKK is moisture sensitive, take care to dry and maintain filament and store in a sealed container.