

TECHNICAL DATA SHEET

PEEK

Property	Method	Units	Specification
Physical			
Specific gravity	ASTM D792	g/cm ³	1.30 – 1.32
Water absorption	ASTM D570	%	0.1
Mechanical			
Tensile strength	ASTM D638	MPa	≥ 95
Elongation	ASTM D638	%	≥ 10
Tensile modulus	ASTM D 638	GPa	33 - 4
Compressive strength	ASTM D 695	MPa	≥ 100
Izod impact strength	ASTM D 256	J/m	≥ 85
Hardness	ASTM D2240	Shore D	≥ 88
Hardness Rockwell	ASTM D 785	Rockwell	≥ 97
Compression strength at 1% deformation	ASTM D695	MPa	≥ 4
Coefficient of static friction	ASTM D3702	-	≤ 0.30
Coefficient of dynamic friction	ASTM D3702	-	≤ 0.20
Thermal			
Peak Melting Temperature	ASTM D3418	°C	340 - 343
Specific heat capacity	DSC	kJ kg ⁻¹ °C ⁻¹	2.2
Thermal conductivity	ASTM E1630	W/m.K	0.25
Deflection Temperature	ASTM D648	°C	157
CLTE-Flow direction	ASTM E831	10 ⁻⁵ /°C	45
Working condition		°C	143 (289°F) – 162 (323°F)
Electrical			
Dielectric strength	ASTM D149	kV/mm	≥ 22
Volume resistivity	ASTM D257	Ohm.cm	10 ¹⁶
Surface resistivity	ASTM D257	ohm	10 ¹⁷

