TECHNICAL DATA SHEET

PEEK

Polyether ether ketone · 5600 grades

Property	Standard	Unit	PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30	PEEK5600FE20
MECHANICAL PROPERTIES							
Tensile strength (23 °C)	ISO 527	MPa	95	250	175	145	70
Flexural strength (23 °C)	ISO 178	MPa	155	350	268	220	118
Compressive strength (23 °C)	ISO 604	MPa	118	300	247	170	105
Notched Izod impact strength	ISO 179/U	kJ/m^2	9.5	45	55	32	47
THERMAL PROPERTIES							
Melting point	ISO 11357	°C	343	344	345	346	347
Heat deflection temperature	ISO 75	°C	163	315	315	293	150
Continuous working temperature	UL 74685	°C	260	260	260	260	240
Coefficient of thermal expansion	ASTM D696	10^{-5} /°C	4.7	1.5	2.2	2.2	6
Flammability (V-0 at thickness shown)	UL 94	mm	1.5	1.5	1.5	0.75	1.5
ELECTRICAL PROPERTIES							
Dielectric strength	IEC 60243-1	kV/mm	20	21	22	23	24
Dielectric constant	IEC 60250	—	3	4	5	6	7
Surface resistivity	IEC 60093	Ω	10^{15}	10^{15}	10^{15}	10^{15}	10^{15}
OTHER PROPERTIES							
Density	ISO 1183	g/cm^3	1.30 ± 0.02	1.40 ± 0.02	1.50 ± 0.02	1.43 ± 0.02	1.41 ± 0.02
Hardness	ISO 2039	HRR	118	121	119	108	113
Coefficient of friction	ASTM D3702	—	0.30–0.38	0.28	0.38–0.46	0.18	0.17–0.20
Water absorption	ISO 62	%	1.5	0.5	0.8	0.5	1.8

The test data above were obtained by the manufacturer using its own laboratory equipment. Due to differences between equipment and machines, slight variations may occur in practical application; values are for reference only.