

Technical Data Sheet



SustaPEEK natural

PEEK

Typical characteristics

- Flame retardant
- Self-extinguishing
- Good dimensional stability
- Low smoke density

Typical industries

- Electronics
- Healthcare
- Aerospace
- Mechanical Engineering Industry
- Oil and Gas
- Semiconductor Industry

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	1,31
Water absorption	DIN EN ISO 62	%	0,2
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0 / V0
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	110
Elongation at break	DIN EN ISO 527	%	20
Tensile modulus of elasticity	DIN EN ISO 527	MPa	4000
Shore hardness	DIN EN ISO 868	scale D	88
Thermal properties			
Melting temperature	ISO 11357-3	°C	343
Thermal conductivity	DIN 52612-1	W / (m * K)	0,25
Thermal capacity	DIN 52612	kJ / (kg * K)	1,34
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	50
Service temperature, long term	Average	°C	-60 ... 250
Service temperature, short term (max.)	Average	°C	310
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	152
Electrical properties			
Dielectric constant	IEC 60250		3,2
Dielectric dissipation factor (50 Hz)	IEC 60250		0,001



	Test method	Unit	Guideline value
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	$4,9 \cdot 10^{16}$
Surface resistivity	DIN EN 62631-3-2	Ω	10^{18}
Dielectric strength	IEC 60243	kV / mm	20