

Technical Data Sheet

SustaPEEK FG natural

PEEK

Typical characteristics

- Flame retardant
- Self-extinguishing
- 1935/2004/EC compliant
- Low smoke density
- Good resistance against high energy radiation
- High abrasion resistance
- Low creep tendency
- Good machinability
- good adhesive properties
- Good weldability
- high dimensional stability under heat
- High continuous service temperature
- Low coefficient of thermal expansion
- Electrically insulating
- Good thermoformability
- Good wear resistance
- High tensile strength
- High stiffness
- Good impact strength
- Good sliding properties
- Good dimensional stability

Typical industries

- Bakery and Confectionery
- Meat, Fish and Poultry Processing
- Beverage Industry
- Food Industry
- Mechanical Engineering 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



	Test method	Unit	Guideline value
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
Volume resistivity	DIN EN 62631-3-1	Ω * cm	4,9 * 10 ¹⁶
Surface resistivity	DIN EN 62631-3-2	Ω	10 ¹⁸
Dielectric strength	IEC 60243	kV / mm	20