

Technical Data Sheet

SustaPEEK natural - ASTM

PEEK

Typical characteristics

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

Typical industries

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

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	1.32
Water Absorption 24 hours	ASTM D570	%	0.1
Dissipation Factor	ASTM D150	1MHz	0.003
Water Absorption Saturation	ASTM D570	%	0.5
Mechanical properties			
Hardness	ASTM D2240	Shore D	85
Tensile Strength at yield 73°F	ASTM D638	psi	16000
Tensile Modulus	ASTM D638	psi	500000
Elongation at Break	ASTM D638	%	20
Flexural Strength	ASTM D790	psi	25000
Flexural Modulus	ASTM D790	psi	600000
Compressive Strength	ASTM D695	psi	18000
Rockwell Hardness	ASTM D785		105
Rockwell Hardness	ASTM D785	R	126
Shear Strength	ASTM D732	psi	7700
Izod Impact, Notched	ASTM D256	ft-lb/in	1.2
Coefficient of Friction, Dynamic			0.4
Thermal properties			
Thermal Conductivity		in/hr/ft ² /°F	1.73

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	Test method	Unit	Guideline value
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	2.6
Melting Point	ASTM D789	°F	630
Continuous Service Temperature, Air		°F	480
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	320
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	360
Flammability, UL94		1/8 inch	V-0
Electrical properties			
Dielectric constant	ASTM D150	1MHz	3.3
Dielectric strength	ASTM D149	V/mil	480
Surface resistivity	ASTM D257	Ω/cm	10 ¹³
Compliance properties			
FDA			Yes
NSF			No
USDA			Yes

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.

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