

Technical data sheet

SUSTAPEEK CF 30 (Polyether ether ketone - Carbon filled 30%)

Product characteristics

- Very low coefficient of thermal expansion
- Very high rigidity and stiffness
- Good dimensional stability

Typical field of application

- Electrical industry
- Military technology
- Precision mechanics

Physical Properties	tested method	unit	value
Specific Gravity	D792	g/cm ³	1.41
Water Absorption 24 hours	D570	%	0.06
Water Absorption Saturation	D570	%	0.3
Dissipation Factor	D150	1 MHz	-
Mechanical Properties	tested method	unit	value
Hardness	D785	Shore D	D93
Rockwell Hardness	D785	M	M102
Rockwell Hardness	D785	R	R124
Tensile Strength at yield 73 °F	D638	psi	20,000
Tensile Modulus	D638	psi	1,000,000
Elongation at Break	D638	%	5
Flexural Strength	D790	psi	25,000
Flexural Modulus	D790	psi	1,300,000
Compressive Strength	D695	psi	29,000
Shear Strength	D732	psi	-
Izod Impact, Notched	D256	ft-lb/in	1.0
Coefficient of Friction, Dynamic	-	-	0.2
Thermal Properties	tested method	unit	value
CTE, linear	D696	in/in/°F	1x10 ⁻⁵
Melting Point	D3418	°F	645
Continuous Use	-	°F	480
Thermal Conductivity	-	in/hr/ft ² /F°	6.3
Deflection Temperature at 1.8Mpa (66psi)	D648	°F	-
Deflection Temperature at 1.8Mpa (264psi)	D648	°F	520
Flammability, UL94	-	1/8 inch	V-0
Electrical Properties	tested method	unit	value
Dielectric constant	D150	-	3.3
Surface resistivity	D257	Ohm/cm	<10 ⁵
Dielectric strength	D149	V/mil	32
Compliance Properties	tested method	unit	value
FDA	-	-	No

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.