



PEEK GF30 natural

Chemical Designation

PEEK (Polyetheretherketone)

Colour

natural opaque

Density

1.53 g/cm³

Fillers

30% glass fibres

Main features

- good heat deflection temperature
- very good chemical resistance
- very high creep resistant
- hydrolysis and superheated steam resistant
- inherent flame resistance
- very high stiffness
- high dimensional stability
- resistance against high energy radiation

Target Industries

- aircraft and aerospace technology
- automotive industry
- electrical engineering
- chemical plant engineering
- mechanical engineering
- conveyor technology
- textile industry

Mechanical properties	condition	value	test method
Modulus of elasticity (tensile test)	1% Sec, @ 73 °F	1,000,000 psi	ASTMD 638
Shear strength	@ 73 °F	14,100 psi	-
Tensile strength at yield	@ 73 °F	14500 psi	ASTMD 638
Tensile strength at break	@ 73 °F	14,500 psi	ASTMD 638
Elongation at break	@ 73 °F	2.2 %	ASTMD 638
Flexural strength	@ 73 °F	14500 psi	ASTMD 790
Modulus of elasticity (flexural test)	@ 73 °F	1,000,000 psi	ASTMD 790
Compression strength	@ 10% strain, 73 °F	25,000 psi	ASTMD 695
Compression modulus	@ 73 °F	696,000 psi	ASTMD 695
Impact strength (Izod)	@ 73 °F	1.8 ft-lbs/in	ASTMD 256
Rockwell hardness	M Scale	103	ASTMD 785
Coefficient of friction	@ 68 °F	0.30	ASTMD 3702
Thermal properties	condition	value	test method
Melting temperature		633 °F	-
Deflection temperature	@264 psi, 1/4	600 °F	ASTMD 648
Service temperature	Long Term	500 °F	-
Service temperature	short term	572 °F	-
Thermal expansion (CLTE)		1.2*10 ⁻⁵ in/in/°F	ASTMD 696
Thermal conductivity		3.0 BTU-in/hr-ft ² -°F	ASTM C 177
Electrical properties	condition	value	test method
Specific surface resistance		1.0*10 ¹⁶ Ω/square	ASTMD 257
Volume resistivity	@ 73 °F	1.0*10 ¹⁶ Ω*cm	ASTMD 149
Dielectric strength		175 V/mil	ASTMD 257
Other properties	condition	value	test method
Moisture absorption	@ 24 hrs, 73 °F	0.02 %	ASTMD 570
Moisture absorption	@ saturation, 73°F	0.03 %	ASTMD 570
Flammability (UL94)		V-0	-

■ NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.



Values may vary according to brand name. Please ask your Dtmars for more specific information about an individual brand.

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