

PEEK

Polyetheretherketone (PEEK), 30% Carbon-Fiber Reinforced

Where steel rusts and aluminum fatigues, PEEK keeps running.

PEEK is a high-performance semi-crystalline thermoplastic that combines outstanding mechanical strength, chemical resistance, and continuous-use temperature in excess of 480°F. It machines cleanly, holds tight tolerances, and replaces metal in demanding service where weight, corrosion, or wear would otherwise drive cost. This grade is reinforced with chopped carbon fiber for higher stiffness, lower thermal expansion, and improved dimensional stability under load.

GENERAL	
Density ISO 1183	1.39 g/cm³ 0.05 lb/in ³
Molding shrinkage longitudinal · ISO	0.3 %
Molding shrinkage transverse · ISO	0.9 %
MECHANICAL	
Tensile strength ISO	242 MPa 35,000 psi
Tensile modulus ISO	24400 MPa 3,538,000 psi
Elongation at break ISO	1.8 %
Impact strength (Charpy) ISO	44 kJ/m² 20 ft·lbf/in ²

ASTM D6262

ISO 10993 (MEDICAL GRADES)

ROHS / REACH

APPLICATIONS

- Aerospace bushings, brackets, and seal carriers
- Semiconductor wafer-handling and process components
- Pump impellers, seal rings, and chemical-handling parts
- Medical instruments and surgical fixtures
- Bearings, bushings, and wear components in oil & gas service

STANDARD COLORS

Black

OPERATING ENVIRONMENT	
Glass transition temp.	143 °C 285 °F
Melting temperature	343 °C 645 °F
Heat deflection temp. ISO-R	332 °C 625 °F
Service temperature long term	260 °C 500 °F
Service temperature short term	300 °C 570 °F

ELECTRICAL	
Surface resistivity EN	10⁵ Ω
Volume resistivity EN	10⁴ Ω·cm