

PEEK Technical Datasheet

Key Features

- Excellent chemical resistance
- Very low moisture absorption
- Inherently good wear and abrasion resistance
- UL94-V0
- Impact resistance
- High tensile
- Flexural
- Unaffected by continuous exposure to hot water or steam

Common Applications

- Automotive
- Marine
- Electronics
- Medical
- Aerospace
- Oil and gas
- Alternative energy

Material Description

PEEK, or Polyether Ether Ketone, is a high-performance thermoplastic known for its exceptional mechanical properties and resistance to extreme temperatures, chemicals, and wear. It offers high tensile strength, stiffness, and creep resistance, making it suitable for demanding applications in industries such as aerospace, automotive, electronics, and medical. Its ability to maintain mechanical properties at high temperatures and resistance to harsh chemicals make it ideal for use in demanding environments. Additionally, PEEK can be easily machined, molded, and fabricated into complex shapes, allowing for versatility in design and manufacturing.

Mechanical Properties

Ultimate Tensile Strength Tensile Yield Strength Hardness Elongation at Break 98.9 MPa 97.1 MPa Rockwell M100 25.8%

Physical Properties

Density Thermal Conductivity Modulus of Elasticity Melting Point

0.048 lb/in³ (1.34 g/cm³) 0.299W/m.K 3.88 GPa 340 °C

Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

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