

PEEK

Polyether Ether Ketone

OVERVIEW

PEEK is high temperature-resistant engineered thermoplastic with excellent chemical and fatigue resistance and thermal stability. PEEK exhibits superior mechanical and electrical properties with a maximum continuous working temperature of 480°F and excellent retention of mechanical properties up to 570°F in a steam or high-pressure water environment. Superior chemical resistance has allowed PEEK to work effectively as a metal replacement in harsh environments. PEEK is inert to all common solvents and resists a wide range of organic and inorganic liquids.

APPLICATIONS & USES

Because of its robustness, PEEK is used to fabricate items used in demanding applications where extreme heat, pressure, and chemicals come into play.

- Bearings
- Piston Parts
- HPLC columns
- Compressor plate valves
- Cable insulation
- Medical implants
- Aerospace applications
- Chemical process applications

TECHNICAL DATA

PROPERTY	VALUE
Friction Coefficient	0.34
Tensile Strength	14500 - 16000 PSI
Flexural Strength	24650 PSI
Shear Strength	7690 PSI
Impact Strength, Notched Izod	1.6 Ft-lbs/Inch
Hardness (Rockwell & Burnell)	R126
Deflection Temperature (264 PSI)	320F
Specific Gravity	1.31
Melting Point	644F
Elongation	40%

The data provided gives the typical properties of the material. These are "typical" properties only, and should not be used for specification purposes. This information is based on our experience to date and we believe it to be reliable. It is intended to be used only as a guide at your discretion and risk. Jade cannot guarantee favorable results and assumes no liability in connection with the use of this product. None of this information is to be taken as a license to operate under, or recommendation to infringe, any patents.