



# PEEK - Polyetheretherketone

## Properties

### Background

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- n PEEK is a high performance engineered polymer with amazing strength and heat resistant properties. PEEK has become a popular replacement for metal in applications such as aerospace where weight is a primary concern. It has also become the gold standard for HPLC analytical science applications due to its purity, high burst pressure, and chemical resistance. In medical applications PEEK's biocompatibility, high tensile strength, and lubricity have made it an ideal replacement for stainless steel. PEEK is a very rigid plastic with excellent lubricity and is tan in its natural color.



### Key Properties

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- n Good coefficient of friction
- n Gamma and autoclavesterilizability
- n Chemical resistance (all common solvents, acids and bases)
- n Maximum service temperature 250-260° C
- n Excellent impact and wear resistance
- n Excellent creep and fatigue resistance
- n Idea replacement for stainless steel for weight and chemical compatibility

### Additional Properties

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- n Radiation Resistance
- n High temperature resistance
- n Low flammability value
- n Excellent hydrolysis resistance
- n High strength
- n Thermoformability
- n Exceptional torsional stability
- n High strength
- n High burst pressure

### YOZONE Capabilities

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- n Fillers available for material modification
  - Radio opaque
  - Carbon
  - Pigments
- n Tight tolerance extrusions
- n Extruded forms
  - Tubing
  - Lay-flat tubing
  - Special profiles
  - Heat shrink
  - Monofilament
  - Multi-lumen
  - Analytical tubing
  - Sub-Lite-Wall® tubing

