



**SOLVAY**

asking more from chemistry®

KetaSpire® | AvaSpire®

**KetaSpire® PEEK**

**AvaSpire® PAEK**

High-Performance Polyketones

**SPECIALTY  
POLYMERS**

## KetaSpire® PEEK

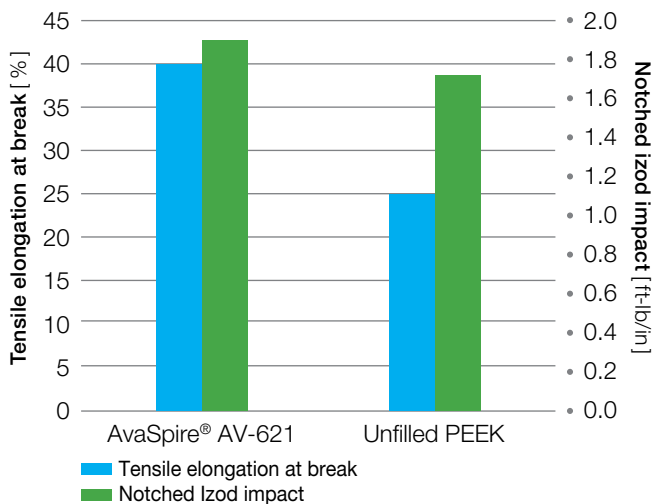
KetaSpire® PEEK (polyetheretherketone) is one of the industry's most chemically resistant plastics and provides excellent strength and fatigue resistance along with a continuous-use temperature of 240 °C (464 °F). Its unique combination of superlative properties enables it to replace metal in some of the most severe end-use environments. Glass fiber and carbon fiber reinforced grades provide a wide range of performance options.

### Key features

- Exceptional chemical resistance to organics, acids and bases
- Continuous use up to 240°C (464°F)
- Very good wear and abrasion resistance
- Low CLTE and high limiting PV properties
- Best-in class fatigue resistance
- Excellent dimensional stability
- Excellent resistance to hydrolysis in boiling water and superheated steam
- Superior dielectric with low loss at high temperatures and frequencies
- Ease of processing
- High purity

### Ductility and toughness comparison

ASTM test method



## AvaSpire® PAEK

AvaSpire® resin is a versatile family of polyaryletherketones (PAEK) that are tailored to provide new and unique combinations of performance and value. The AV-600 Series delivers a range of distinctive performance attributes with some grades offering more attractive economics when compared to PEEK. The AV-700 Series offers comparable performance to PEEK at up to 30 % lower cost.

### AV-600 Series

#### Key features

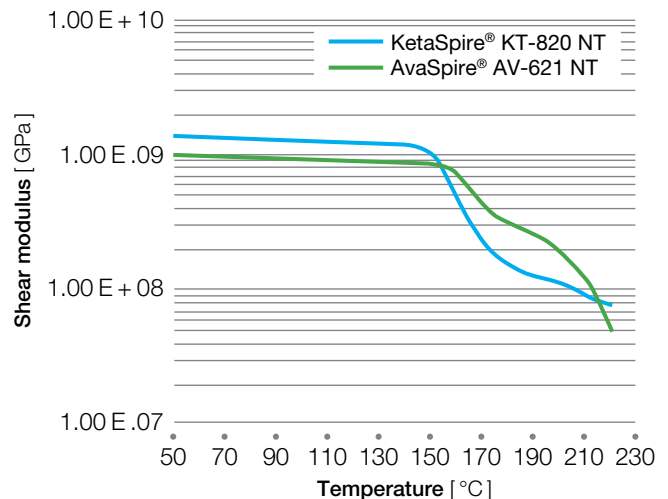
- Higher stiffness than PEEK from 150 °C to 190 °C (302 °F to 374 °F)
- Improved ductility and toughness
- Excellent chemical resistance
- UL 94 V0 rating at 0.8 mm
- Excellent aesthetics and colorability

### AV-700 Series

#### Key features

- Comparable strength and stiffness to PEEK
- Equal or better chemical resistance than PEEK
- Very good friction and wear properties
- Up to 30 % lower cost

### Mechanical performance at high temperature



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