

SEAT MATERIALS - PEEK

PEEK is the common name for Poly Ether Ether Ketone. It is a high performance engineered thermoplastic. It offers excellent chemical and water resistance and is unaffected by continuous exposure to hot water or steam. Its temperature stability is good to 550°F and it is a high strength alternative to fluoropolymers used for valve seats. These properties make it a superb seat choice for elevated pressure coupled with elevated temperature. Flow-Tek offers PEEK in two grades, unfilled and filled. The filled is a unique blend of carbon/graphite fillers to ensure consistent, uniform material properties. This lowers the coefficient of friction, reducing the operating torque requirements of our valves.

Other features of PEEK include:

- Abrasion resistance of PEEK is much higher than fluoropolymer seats
- PEEK is a strong material making it a good choice for handling slurries and for high pressure applications
- Our PEEK seats contain no polytetrafluoroethylene (PTFE), so it is suitable for tobacco processing applications
- The material is non-porous, thus is good for monomer services that can polymerize and destroy PTFE based seats
- PEEK offers excellent corrosion resistance
- PEEK has FDA approval in the unfilled grade.

Temperature range: -70°F to 550°F.

Color: unfilled is Tan and the filled is Black