

AF803 Filled PEEK

Bearing Grade PEEK Victrex 450FC30

AF803 is a semi-crystalline very high performance engineering thermoplastic with optimised properties for demanding bearing and low friction applications.

- Very high thermal mechanical bearing strength
- Excellent low friction and sliding properties even without lubrication
- Excellent creep resistance
- Excellent radiation resistance
- High hardness and rigidity
- Good chemical resistance
- High maximum use temperature

Typical Physical properties

| Property | Test Method | Value |
|----------------------------------|------------------|--------------------------|
| Specific Gravity | ISO 1183 | 1.48 g/cm ³ |
| Tensile Strength | ISO 527 | 141 MPa |
| Elongation | ISO 527 | 2.2% |
| Compressive Strength | ASTM D695 | 150 MPa |
| Coefficient of Friction | | 0.11 |
| Max Continuous use Temperature | | 250 °C |
| Coefficient of Thermal Expansion | ASTM D696 | 2.2 x10 ⁻⁵ °C |
| Heat Deflection Temperature | 1.8MPa ISO 75A-f | 315°C |
| Limiting PV at 20°C | | 794 Mpa m/min |

Updated February 2020 AFT Fluorotec Technical Department

All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

AFT Fluorotec LTD

Solutions and components in Fluoropolymer Plastics

Phone: +44 (0)1992 515880

Email: salesdesk@fluorotec.com

Website: www.fluorotec.com

AF803 Filled PEEK

Temperature Data

| Property | Temperature | Value |
|--------------------|-------------|-----------|
| Flexural Modulus | 250°C | 3.00 Gpa |
| | 120°C | 8.00 Gpa |
| | 23°C | 8.10 Gpa |
| | -20°C | 8.31 Gpa |
| | -60°C | 8.27 Gpa |
| Flexural Strength | 250°C | 36 Mpa |
| | 120°C | 135 Mpa |
| | 23°C | 210 Mpa |
| | -20°C | 220 Mpa |
| | -60°C | 241 Mpa |
| Tensile Break | 250°C | 25 Mpa |
| | 23°C | 131.8 Mpa |
| | -20°C | 146.7 Mpa |
| | -60°C | 170.6 Mpa |
| Tensile Elongation | 23°C | 2.55% |
| | -20°C | 3.51% |
| | -60°C | 3.68% |

Updated February 2020 AFT Fluorotec Technical Department

All information is based on typical test results performed under specific conditions and limited sample size. This does not represent a legally binding guarantee of certain properties or the suitability for specific applications. All information is provided in good faith at time of print.

AFT Fluorotec LTD

Solutions and components in Fluoropolymer Plastics

Phone: +44 (0)1992 515880

Email: salesdesk@fluorotec.com

Website: www.fluorotec.com



MADE WITH
VICTREX PEEK POLYMER