

Ensinger Tecapeek® GF30 Polyetheretherketone, 30% Glass Reinforced (PEEK)

Category: Polymer, Thermoplastic, Polyketone, Polyetheretherketone (PEEK)

Material Notes:

Tecapeek™, made from Victrex PEEK polymer, is an excellent material for a wide spectrum of applications where thermal, chemical, and combustion properties are critical to performance. Excellent flexural, impact, and tensile characteristics Very high continuous working temp Very high heat distortion temp Exceptional chemical resistance Superior dielectric at high temperatures and frequencies Good radiation resistance Outstanding wear and abrasion resistance Low smoke and toxic gas emissions Excellent hydrolysis resistance Information provided by Ensinger, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Ensinger-Tecapeek-GF30-Polyetheretherketone-30-Glass-Reinforced-PEEK.php

| Physical Properties | Metric | English | Comments |
|---------------------|-----------|---------------------------|------------------------|
| Density | 1.49 g/cc | 0.0538 lb/in ³ | ASTM D792 |
| Water Absorption | 0.11 % | 0.11 % | at 24 hours; ASTM D570 |

| Mechanical Properties | Metric | English | Comments |
|-------------------------|------------|---------------|----------------------|
| Hardness, Rockwell M | 103 | 103 | ASTM D785 |
| Tensile Strength, Yield | 157 MPa | 22800 psi | ASTM D638 |
| Elongation at Break | 2.2 % | 2.2 % | ASTM D638 |
| Tensile Modulus | 9.6995 GPa | 1406.8 ksi | 1 % Sec; ASTM D638 |
| Flexural Strength | 233 MPa | 33800 psi | ASTM D790 |
| Flexural Modulus | 10.309 GPa | 1495.2 ksi | Tangent; ASTM D790 |
| Compressive Strength | 215 MPa | 31200 psi | ASTM D695 |
| Shear Strength | 97.2 MPa | 14100 psi | Ultimate; ASTM D3846 |
| Izod Impact, Notched | 0.961 J/cm | 1.80 ft-lb/in | ASTM D256 |

| Thermal Properties | Metric | English | Comments |
|----------------------------------|----------------------|------------------------------------|------------|
| CTE, linear | 21.6 μm/m-°C | 12.0 μin/in-°F | ASTM D696 |
| GTE, lilledi | @Temperature 20.0 °C | @Temperature 68.0 °F | A31W D090 |
| Thermal Conductivity | 0.432 W/m-K | 3.00 BTU-in/hr-ft ² -°F | ASTM C177 |
| Melting Point | 334 °C | 633 °F | |
| Maximum Service Temperature, Air | 250 °C | 482 °F | Continuous |
| | | | |



| Thermal Properties | Metric | English | Comments |
|--------------------|--------|---------|----------|
| Flammability, UL94 | V-0 | V-0 | |

| Electrical Properties | Metric | English | Comments |
|--------------------------------|-----------------|-----------------|-----------|
| Volume Resistivity | 1.00e+16 ohm-cm | 1.00e+16 ohm-cm | ASTM D257 |
| Surface Resistivity per Square | 1.00e+16 ohm | 1.00e+16 ohm | ASTM D257 |
| Dielectric Strength | 6.89 kV/mm | 175 kV/in | ASTM D149 |

Contact Songhan Plastic Technology Co.,Ltd.

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China