

InStruc® PEEKGF30

Americhem - Polyetheretherketone

General Information

Product Description

30% GLASS FIBER REINFORCED POLYETHERETHERKEYTONE

General

| | |
|------------------------|--|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Asia Pacific • Europe • Latin America • North America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Features | • Filled • Good Dimensional Stability • High Stiffness • High Strength |
| Uses | • Aerospace Applications • Connectors • Electrical/Electronic Applications • Engineering Parts • Housings • Industrial Applications • Industrial Parts • Metal Replacement • Military/Defense Applications • Oil/Gas Applications • Outdoor Applications • Semiconductor Applications |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

 Properties ¹

| | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Physical | | | |
| Density / Specific Gravity | 1.53 | | ASTM D792 |
| Molding Shrinkage - Flow | 2.0E-3 to 4.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.10 | % | ASTM D570 |
| Mechanical | | | |
| Tensile Modulus | 1.50E+6 | psi | ASTM D638 |
| Tensile Strength | 23000 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 2.0 to 3.0 | % | ASTM D638 |
| Flexural Modulus | 1.50E+6 | psi | ASTM D790 |
| Flexural Strength | 40000 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact (0.125 in) | 2.0 | ft·lb/in | ASTM D256 |
| Unnotched Izod Impact (0.125 in) | 18 | ft·lb/in | ASTM D4812 |
| Thermal | | | |
| Deflection Temperature Under Load (264 psi, Unannealed) | 600 | °F | ASTM D648 |

Processing Information

| | Nominal Value | Unit |
|------------------------|------------------|------|
| Injection | | |
| Drying Temperature | 300 | °F |
| Drying Time | 4.0 | hr |
| Processing (Melt) Temp | 680 to 750 | °F |
| Mold Temperature | 350 to 400 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |
| Vent Depth | 1.5E-3 to 3.0E-3 | in |

