# InStruc® PEIGF10HF

**Product Description** 10% GLASS FIBER REINFORCED HIGH FLOW POLYETHERIMIDE

**Material Status** Commercial: Active

**Availability** Africa & Middle East, Asia Pacific, Europe, Latin America, North America

**Filler / Reinforcement** Glass Fiber, 10% Filler by Weight

**Features** Filled, Good Dimensional Stability, High Flow, High Stiffness, High Strength

**Uses** Aerospace Applications, Connectors, Consumer Applications, 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

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.34 | g/cm³ | ASTM D792 |
| Molding Shrinkage - Flow | 0.40 to 0.50 | % | ASTM D955 |
| Water Absorption (24 hr) | 0.24 | % | ASTM D570 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Strength | 128 | MPa | ASTM D638 |
| Tensile Elongation (Yield) | 3.0 to 5.0 | % | ASTM D638 |
| Flexural Modulus | 4830 | MPa | ASTM D790 |
| Flexural Strength | 183 | MPa | ASTM D790 |

| Impact | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Notched Izod Impact (3.18 mm) | 53 | J/m | ASTM D256 |
| Unnotched Izod Impact (3.18 mm) | 430 | J/m | ASTM D4812 |

| Thermal | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Deflection Temperature Under Load | | | ASTM D648 |
| 1.8 MPa, Unannealed | 207 | °C | |

| Electrical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Surface Resistivity | 1.0E+17 | ohms | ASTM D257 |

Properties provided are only typical values and Americhem assumes no liability for the customer's use of the information provided. The customer assumes all responsibility for testing determining this products suitability in the customer's specific end application.

Revision Date: 9/16/2024

Americhem World Headquarters
2000 Americhem Way
Cuyahoga Falls, OH 44221
Tel: +1 330 929 4213
Toll Free: +1 800 228 3476

Americhem Engineered Compounds
20 Progress Drive
Morrisvillle, PA 19067
Tel: +1 215 736 1126
Toll Free: +1 800 863 4260

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 149 | °C |
| Drying Time | 4.0 | hr |
| Processing (Melt) Temp | 360 to 379 | °C |
| Mold Temperature | 149 | °C |
| Back Pressure | 0.345 to 0.689 | MPa |
| Screw Speed | 40 to 70 | rpm |

**Notes**

[1] Typical properties: these are not to be construed as specifications.

Properties provided are only typical values and Americhem assumes no liability for the customer's use of the information provided. The customer assumes all responsibility for testing determining this products suitability in the customer's specific end application.

Revision Date: 9/16/2024

Americhem World Headquarters
2000 Americhem Way
Cuyahoga Falls, OH 44221
Tel: +1 330 929 4213
Toll Free: +1 800 228 3476

Americhem Engineered Compounds
20 Progress Drive
Morrisvillle, PA 19067
Tel: +1 215 736 1126
Toll Free: +1 800 863 4260