InStruc® PEEKGF30HFMD

Product Description 30% GLASS FIBER REINFORCED HIGH FLOW POLYETHERETHERKEYTONE LOCKED FORMULATION FOR MEDICAL USAGE

Material Status Commercial: Active

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

Filler / Reinforcement Glass Fiber, 30% Filler by Weight

Features Autoclave Sterilizable, E-beam Sterilizable, Ethylene Oxide Sterilizable, Filled, Good Dimensional Stability, Heat Sterilizable, High Flow, High Stiffness, High Strength, Radiation Sterilizable, Steam Sterilizable

Uses Connectors, Electrical/Electronic Applications, Engineering Parts, Housings, Industrial Parts, Medical/Healthcare Applications, Metal Replacement, Semiconductor Applications, Surgical Instruments

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.53	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.20 to 0.40	%	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	10300	MPa	ASTM D638
Tensile Strength	159	MPa	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	10300	MPa	ASTM D790
Flexural Strength	276	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	110	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	960	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	316	°C	

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: 1/13/2025

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Polyetheretherketone

Injection	Nominal Value	Unit
Drying Temperature	149	°C
Drying Time	4.0	hr
Processing (Melt) Temp	360 to 399	°C
Mold Temperature	177 to 204	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	40 to 70	rpm
Vent Depth	0.038 to 0.076	mm

Notes

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

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