

InStruc® PEIGF30

Americhem - Polyetherimide

General Information
Product Description

30% GLASS FIBER REINFORCED POLYETHERIMIDE

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.49		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.50E+6	psi	ASTM D638
Tensile Strength	25000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	35000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	680 to 750	°F
Mold Temperature	300 to 350	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

