

InStruc® PEIGF20

Americhem - Polyetherimide

General Information

Product Description

20% GLASS FIBER REINFORCED POLYETHERIMIDE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• 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		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.21	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.15E+6	psi	ASTM D638
Tensile Strength	23000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.13E+6	psi	ASTM D790
Flexural Strength	32500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	11	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.12 in	V-0		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	670 to 725	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

