

InStruc® FEPGF10

Americhem - Perfluoroethylene Propylene Copolymer

General Information

Product Description

10% GLASS FIBER REINFORCED FLUORINATED ETHYLENE PROPYLENE (FEP)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	
Uses	• Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Housings	• HVAC Applications • Industrial Applications • Industrial Parts • Metal Replacement	• Oil/Gas Applications • Pump Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	2.18		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.015	in/in	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	4200	psi	ASTM D638
Tensile Elongation (Break)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	480000	psi	ASTM D790
Flexural Strength	6900	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	No Break		ASTM D256
Unnotched Izod Impact	24	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	308	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	ASTM D257
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	480	V/mil	ASTM D149
Dielectric Constant			ASTM D150
100 Hz	2.40		
1 MHz	2.40		
Dissipation Factor			ASTM D150
100 Hz	2.0E-3		
1 MHz	2.0E-4		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	650 to 725	°F
Mold Temperature	300 to 400	°F
Back Pressure	50.0 to 100	psi



Screw Speed	40 to 70 rpm
Notes	
¹ Typical properties: these are not to be construed as specifications.	

