

InStruc® ETFEGF30

Americhem - Ethylene Tetrafluoroethylene Copolymer

General Information

Product Description

30% GLASS FIBER REINFORCED ETFE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	• Wear Resistant
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	1.88		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.20E+6	psi	ASTM D638
Tensile Strength (Yield)	5800	psi	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	7500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	4.0	ft·lb/in	ASTM D256
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+15	ohms	ASTM D257
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	410	V/mil	ASTM D149
Dielectric Constant			ASTM D150
100 Hz	3.40		
1 MHz	3.41		
Dissipation Factor			ASTM D150
100 Hz	3.0E-3		
1 MHz	8.0E-3		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250 to 300	°F
Drying Time	4.0	hr
Rear Temperature	540 to 570	°F
Middle Temperature	560 to 620	°F
Front Temperature	600 to 640	°F



Processing (Melt) Temp	590 to 620 °F
Mold Temperature	200 to 250 °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.

