

InStruc® ETFECF20

Americhem - Ethylene Tetrafluoroethylene Copolymer

General Information

Product Description

20% CARBON FIBER REINFORCED ETFE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	• Wear Resistant
Uses	• 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	1.78		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.80E+6	psi	ASTM D638
Tensile Strength	9000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.45E+6	psi	ASTM D790
Flexural Strength	16000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	2.9	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 1.0E+4	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	600	°F
Mold Temperature	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.

