InElec® PESCF20GF20

Americhem - *Polyethersulfone*

General Information

Product Description			
20% CARBON FIBER REINFORCED 20% GLASS FIBER REINFORCED POLYETHERSULFONE			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight	• Glass Fiber, 20% Filler by Weight	
Features	• Electrically Conductive • ESD Protection • Filled	• Good Dimensional Stability • High Stiffness • High Strength	• Permanent Antistatic
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • 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	1.59		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3.20E+6	psi	ASTM D638
Tensile Strength	23000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.80E+6	psi	ASTM D790
Flexural Strength	34000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	1.2	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+2 to 1.0E+6	ohms	

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.040	%
Processing (Melt) Temp	650 to 715	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm