

InStruc® PESGF10

Americhem - Polyethersulfone

General Information

Product Description

10% GLASS FIBER REINFORCED POLYETHERSULFONE

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 10% Filler by Weight 		
Features	<ul style="list-style-type: none"> Filled Good Dimensional Stability 	<ul style="list-style-type: none"> High Stiffness High Strength 	
Uses	<ul style="list-style-type: none"> Aerospace Applications Connectors Consumer Applications Electrical/Electronic Applications Engineering Parts 	<ul style="list-style-type: none"> Housings Industrial Applications Industrial Parts Metal Replacement Military/Defense Applications 	<ul style="list-style-type: none"> Oil/Gas Applications Outdoor Applications Semiconductor Applications
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.44		ASTM D792
Specific Volume	19.2	in ³ /lb	
Molding Shrinkage - Flow	4.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.40	%	ASTM D570
Mechanical			
Tensile Strength	14000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	600000	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	0.80	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	1.8E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+17	ohms	
Flammability			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	650 to 715	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

