InStruc® PSUGF20

Americhem - *Polysulfone*

General Information

Product Description			
20% GLASS FIBER REINFORCED POLYSULFONE			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts	• Housings • 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	1.38		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.20	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	14500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact	10 to 12	ft·lb/in	ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	365	°F	ASTM D648
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+15	ohms·cm	ASTM D257

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	275	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	640 to 700	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm