InStruc® PPSBGF30

Americhem - *Polyphenylene Sulfide*

General Information

Product Description			
30% GLASS FIBER REINFORCED BRANCHED POLYPHENYLENE SULFIDE			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Branched Polymer Structure • 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	1.57		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.030	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.90E+6	psi	ASTM D638
Tensile Strength	19000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact	8.0	ft·lb/in	ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	500	°F	ASTM D648

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	610 to 630	°F
Mold Temperature	275 to 350	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm