

InStruc® PPSBGF40
Americhem - Polyphenylene Sulfide
General Information
Product Description

40% GLASS FIBER REINFORCED POLYPOLYPHENYLENE 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	1.69		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.020	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.30E+6	psi	ASTM D638
Tensile Strength (Break)	23000	psi	ASTM D638
Tensile Elongation (Break)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.10E+6	psi	ASTM D790
Flexural Strength	32000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.7	ft·lb/in	ASTM D256
Unnotched Izod Impact	7.5	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	510	°F	ASTM D648

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	585 to 625	°F
Mold Temperature	275 to 350	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	3.0E-4 to 5.0E-4	in

