

InElec® PPSCF10
Americhem - Polyphenylene Sulfide
General Information
Product Description

ELECTRICALLY CONDUCTIVE AND REINFORCED POLYPHENYLENE SULFIDE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Features	• Branched Polymer Structure • 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	1.71		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 2.0E-3	in/in	
Water Absorption (Equilibrium)	0.040	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.40E+6	psi	ASTM D638
Tensile Strength	22000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.0	ft·lb/in	ASTM D256
Unnotched Izod Impact	4.0 to 6.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	505	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+5 to 1.0E+7	ohms	ASTM D257

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

