

**InElec® PPSCF30**
*Americhem - Polyphenylene Sulfide*
**General Information**
**Product Description**

30% CARBON FIBER REINFORCED POLYPHENYLENE SULFIDE

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Features	• Branched Polymer Structure	• Filled	• High Strength
	• Electrically Conductive	• Good Dimensional Stability	• Permanent Antistatic
	• ESD Protection	• High Stiffness	
Uses	• Aerospace Applications	• Engineering Parts	• Military/Defense Applications
	• Connectors	• Industrial Applications	• Oil/Gas Applications
	• Consumer Applications	• Industrial Parts	• Outdoor Applications
	• Electrical/Electronic Applications	• Metal Replacement	• Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.45		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.040	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	4.30E+6	psi	ASTM D638
Tensile Strength	26000	psi	ASTM D638
Tensile Elongation (Break)	0.80	%	ASTM D638
Flexural Modulus	3.60E+6	psi	ASTM D790
Flexural Strength	38000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact	1.0	ft-lb/in	ASTM D256
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	515	°F	ASTM D648
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+2 to 1.0E+4	ohms	ASTM D257

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	580 to 630	°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

