

**InElec® PCCF20**

Americhem - Polycarbonate

## General Information

**Product Description**

20% CARBON FIBER REINFORCED POLYCARBONATE

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight		
Features	• Electrically Conductive	• Good Dimensional Stability	• Permanent Antistatic
	• ESD Protection	• High Stiffness	
	• Filled	• High Strength	
Uses	• Automotive Applications	• Electrical/Electronic Applications	• Industrial Applications
	• Closures	• Engineering Parts	• Industrial Parts
	• Connectors	• Household Goods	• Office Automation Equipment
	• Consumer Applications	• Housings	
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.28		ASTM D792
Specific Volume	21.6	in <sup>3</sup> /lb	
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.090	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ASTM D790
Flexural Strength	30000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	ASTM D257

## Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	540 to 630	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

