

**InElec® PCCF20HFFR**

Americhem - Polycarbonate

**General Information**
**Product Description**

20% CARBON FIBER REINFORCED, HIGH FLOW, FLAME RETARDANT 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
Additive	• Flame Retardant
Features	• Electrically Conductive • Good Dimensional Stability • High Strength • ESD Protection • Halogenated • Permanent Antistatic • Filled • High Flow • Flame Retardant • High Stiffness
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	1.32		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Modulus	1.80E+6	psi	ASTM D638
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.70E+6	psi	ASTM D790
Flexural Strength	30000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact	10	ft·lb/in	ASTM D4812
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
<b>Electrical</b>			
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257
<b>Flammability</b>			
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		V-0	

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	540 to 600	°F
Mold Temperature	200	°F



Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

