

InElec® PCCF10HFFR

Americhem - Polycarbonate

General Information
Product Description

10% 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, 10% Filler by Weight
Additive	• Flame Retardant
Features	• Filled • Halogenated • High Strength • Flame Retardant • High Flow • Permanent Antistatic • Good Dimensional Stability • 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 ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.28		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.30E+6	psi	ASTM D638
Tensile Strength	17500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	20000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.3	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	280	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in	•	V-0	
	•	5VA	

Processing Information

Injection	Nominal Value	Unit
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

¹ Typical properties: these are not to be construed as specifications.

