

InElec® PECF10
Americhem - Polyethylene Homopolymer
General Information
Product Description

10% CARBON FIBER REINFORCED ELECTRICALLY CONDUCTIVE POLYETHYLENE

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	• Filled • Good Dimensional Stability • High Stiffness • High Strength • Permanent Antistatic
Uses	• Closures • Connectors • Consumer Applications • Electrical/Electronic Applications • Housings • HVAC Applications • Industrial Applications • Industrial Parts
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.00		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 5.0E-3	in/in	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	4500	psi	ASTM D638
Flexural Modulus	450000	psi	ASTM D790
Flexural Strength	6000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	3.5	ft·lb/in	ASTM D256
Unnotched Izod Impact	6.0 to 8.0	ft·lb/in	ASTM D4812
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+7	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	170	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	430	°F
Mold Temperature	100	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

