

InElec® PEICF30

Americhem - Polyetherimide

General Information

Product Description			
30% CARBON FIBER REINFORCED POLYETHERIMIDE			
General			
Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Carbon Fiber, 30% Filler by Weight 		
Features	<ul style="list-style-type: none"> Electrically Conductive ESD Protection Filled 	<ul style="list-style-type: none"> Good Dimensional Stability High Stiffness High Strength 	<ul style="list-style-type: none"> Permanent Antistatic
Uses	<ul style="list-style-type: none"> Aerospace Applications Connectors Consumer Applications Electrical/Electronic Applications 	<ul style="list-style-type: none"> Engineering Parts Industrial Applications Industrial Parts Metal Replacement 	<ul style="list-style-type: none"> Military/Defense Applications Oil/Gas Applications Outdoor Applications Semiconductor Applications
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.39		ASTM D792
Specific Volume	19.9	in ³ /lb	
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.14	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.00E+6	psi	ASTM D638
Tensile Strength	31000	psi	ASTM D638
Tensile Elongation (Yield)	1.5	%	ASTM D638
Flexural Modulus	2.60E+6	psi	ASTM D790
Flexural Strength	42000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648
CLTE - Flow	7.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	680 to 715	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

