

InElec® PEICF25HF

Americhem - Polyetherimide

General Information

Product Description

25% CARBON FIBER REINFORCED, HIGH FLOW POLYETHERIMIDE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 25% Filler by Weight		
Features	• Electrically Conductive • ESD Protection • Filled	• Good Dimensional Stability • High Flow • High Stiffness	• High Strength • Permanent Antistatic
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • Industrial Applications • Industrial Parts • Metal Replacement	• Military/Defense Applications • Oil/Gas Applications • Outdoor Applications • Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.37		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.60E+6	psi	ASTM D638
Tensile Strength	29000	psi	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	41000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+5	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	680 to 750	°F
Mold Temperature	300 to 350	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

