

InElec® PEICF5HF

Americhem - Polyetherimide

General Information
Product Description

InElec® PEICF5HF is a 5% carbon fiber-reinforced high flow polyetherimide.

General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe Latin America North America
Filler / Reinforcement	<ul style="list-style-type: none"> Carbon Fiber, 5.0% Filler by Weight
Features	<ul style="list-style-type: none"> Filled Good Dimensional Stability High Flow High Stiffness High Strength Permanent Antistatic
Uses	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Pellets
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.30		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical			
Tensile Strength	18500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	29500	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft-lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	1.6E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+10 to 1.0E+12	ohms	
Flammability			
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

