



## InElec® PEEKCF30HF

**PRODUCT DESCRIPTION** 30% CARBON FIBER REINFORCED HIGH FLOW POLYETHERETHERKETONE

**MATERIAL STATUS** Commercial: Active

**AVAILABILITY** Africa & Middle East, Asia Pacific, Europe, Latin America, North America

**FILLER / REINFORCEMENT** Carbon Fiber, 30% 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

PHYSICAL	NOMINAL VALUE	UNIT	TEST METHOD
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
MECHANICAL	NOMINAL VALUE	UNIT	TEST METHOD
Tensile Modulus	3.00E+6	psi	ASTM D638
Tensile Strength	32500	psi	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	2.60E+6	psi	ASTM D790
Flexural Strength	46500	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	600	°F	ASTM D648
ELECTRICAL	NOMINAL VALUE	UNIT	TEST METHOD
Surface Resistivity	1.0E+2 to 1.0E+6	ohms	ASTM D257
FLAMMABILITY	NOMINAL VALUE	UNIT	TEST METHOD
Flame Rating (0.06 in)	V-0		Internal Method

INJECTION	NOMINAL VALUE	UNIT
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	660 to 750	°F
Mold Temperature	325 to 425	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

#### NOTES

<sup>1</sup> Typical properties: these are not to be construed as specifications.