

InElec® PCCF40HFFR

Americhem - Polycarbonate

General Information
Product Description

InElec PCCF40HFFR is a 40% carbon fiber filled, high flow, flame retardant polycarbonate. This product is semi-conductive and offers EMI/RFI shielding. NOTE: This is a preliminary datasheet. Data is subject to change.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Additive	• Flame Retardant		
Features	• Electrically Conductive • Electromagnetic Shielding (EMI) • ESD Protection • Filled	• Flame Retardant • Good Dimensional Stability • Halogenated • High Flow	• High Stiffness • High Strength • Permanent Antistatic • Radio Frequency Shielding (RFI)
Uses	• Automotive Applications • Closures • Connectors • Consumer Applications	• Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings	• Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.42		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.080	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.60E+6	psi	ASTM D638
Tensile Strength	25000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	3.00E+6	psi	ASTM D790
Flexural Strength	35000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	300	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	540 to 630	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

