

InElec® PCSS20HFFR

Americhem - Polycarbonate

General Information
Product Description

InElec PCSS20HFFR is a 20% stainless steel fiber reinforced, electrically conductive, EMI/RFI shielding, high flow polycarbonate. This material is also flame retardant to meet a UL 94 V-1 flame rating.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Stainless Steel Fiber, 20% Filler by Weight		
Additive	• Flame Retardant		
Features	• Electrically Conductive • Electromagnetic Shielding (EMI) • ESD Protection	• Flame Retardant • Halogenated • High Flow	• 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

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.40		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical			
Tensile Modulus	520000	psi	ASTM D638
Tensile Strength	10000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	520000	psi	ASTM D790
Flexural Strength (Yield)	18000	psi	ASTM D790
Impact			
Notched Izod Impact	0.70	ft·lb/in	ASTM D256
Unnotched Izod Impact	7.0 to 9.0	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	255	°F	ASTM D648
Electrical			
Surface Resistivity	1.0 to 1.0E+3	ohms	ASTM D257
Flammability			
Flame Rating (0.06 in)	V-1		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	180 to 240	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

