

InElec® PCNCCF20HFFRUVMD

Americhem - Polycarbonate

General Information

Product Description

20% NICKEL COATED CARBON FIBER REINFORCED, HIGH FLOW, FLAME RETARDANT, UV STABILIZED POLYCARBONATE (LOCKED MEDICAL FORMULATION)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Nickel-Coated Carbon Fiber, 20% Filler by Weight		
Additive	• Flame Retardant	• UV Stabilizer	
Features	• Autoclave Sterilizable • E-beam Sterilizable • Electrically Conductive • ESD Protection • Ethylene Oxide Sterilizable • Flame Retardant	• Good Dimensional Stability • Halogenated • Heat Sterilizable • High Flow • High Stiffness • High Strength	• Permanent Antistatic • Radiation Sterilizable • Steam Sterilizable • UV Stabilized
Uses	• Closures • Connectors • Electrical/Electronic Applications	• Engineering Parts • Housings • Industrial Parts	• Medical/Healthcare Applications • Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.39		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical			
Tensile Modulus	1.40E+6	psi	ASTM D638
Tensile Strength	17500	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	26000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	0.90	ft-lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+2 to 1.0E+3	ohms	ASTM D257
Flammability			
Flame Rating			
0.06 in	V-2		Internal Method
0.12 in	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	540 to 600	°F
Mold Temperature	200	°F



Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

