

**InElec® PA66CF10FRHS**

Americhem - Polyamide 66

## General Information

Product Description	
10% CARBON FIBER REINFORCED, FLAME RETARDANT, HEAT STABILIZED NYLON 6/6	
General	
Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> <li>North America</li> </ul>
Filler / Reinforcement	<ul style="list-style-type: none"> <li>Carbon Fiber, 10% Filler by Weight</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Flame Retardant</li> <li>Heat Stabilizer</li> </ul>
Features	<ul style="list-style-type: none"> <li>Filled</li> <li>Flame Retardant</li> <li>Good Dimensional Stability</li> <li>Halogenated</li> <li>Heat Stabilized</li> <li>High Stiffness</li> <li>High Strength</li> <li>Permanent Antistatic</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Closures</li> <li>Connectors</li> <li>Consumer Applications</li> <li>Electrical/Electronic Applications</li> <li>Engineering Parts</li> <li>Household Goods</li> <li>Industrial Applications</li> <li>Industrial Parts</li> <li>Office Automation Equipment</li> <li>Outdoor Applications</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow	0.15 to 0.35	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.50E+6	psi	ASTM D638
Tensile Strength	21000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 5.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	31000	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)	8.0 to 9.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	460	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 1.0E+8	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		V-0	

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	550 to 570	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

