

InElec® PA6CF10

Americhem - Polyamide 6

General Information
Product Description

10% CARBON FIBER REINFORCED NYLON 6

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	• Permanent Antistatic
Uses	• Closures • Connectors • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • Household Goods • Industrial Applications • Industrial Parts	• Office Automation Equipment • Outdoor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.17		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.5	%	ASTM D570
Mechanical			
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 4.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	31000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	0.80	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
CLTE - Flow	2.3E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+6	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	510 to 530	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

