

InElec® PA610CF30

Americhem - Polyamide 610

General Information

Product Description

30% CARBON FIBER REINFORCED NYLON 610

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Carbon Fiber, 30% Filler by Weight 		
Features	<ul style="list-style-type: none"> Electrically Conductive ESD Protection Filled 	<ul style="list-style-type: none"> Good Dimensional Stability High Stiffness High Strength 	<ul style="list-style-type: none"> Permanent Antistatic
Uses	<ul style="list-style-type: none"> Closures Connectors Consumer Applications Electrical/Electronic Applications 	<ul style="list-style-type: none"> Engineering Parts Household Goods Industrial Applications Industrial Parts 	<ul style="list-style-type: none"> Office Automation Equipment Outdoor Applications
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.23		ASTM D792
Specific Volume	22.5	in ³ /lb	
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical			
Tensile Modulus	2.70E+6	psi	ASTM D638
Tensile Strength	28000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	2.20E+6	psi	ASTM D790
Flexural Strength	40500	psi	ASTM D790
Shear Strength	12000	psi	ASTM D732
Impact			
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	14	ft·lb/in	ASTM D4812
Hardness			
Rockwell Hardness (M-Scale)	90		
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	495	°F	ASTM D648
CLTE - Flow	9.0E-6	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+2 to 1.0E+6	ohms	
Flammability			
Flame Rating (0.06 in)	HB		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	460 to 525	°F



Mold Temperature	200 °F
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm
Vent Depth	5.0E-4 to 1.0E-3 in

Notes

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

