

InElec® PA6CF10GF20TF15FRHS

Americhem - Polyamide 6

General Information

Product Description

10% CARBON FIBER AND 20% GLASS FIBER REINFORCED, 15% PTFE LUBRICATED, HEAT STABILIZED, FLAME RETARDANT, 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	• Glass Fiber, 20% Filler by Weight	
Additive	• Flame Retardant	• Heat Stabilizer	• PTFE Lubricant: 15%
Features	• Chemical Resistant • Filled • Flame Retardant • Good Dimensional Stability	• Good Mold Release • Halogenated • Heat Stabilized • High Stiffness	• High Strength • Lubricated • Permanent Antistatic • Wear Resistant
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	1.68		ASTM D792
Molding Shrinkage - Flow	0.15 to 0.35	in/in	ASTM D955
Water Absorption (24 hr)	0.70	%	ASTM D570
Mechanical			
Tensile Modulus	2.10E+6	psi	ASTM D638
Tensile Strength	17000	psi	ASTM D638
Tensile Elongation (Yield)	2.5	%	ASTM D638
Flexural Modulus	1.75E+6	psi	ASTM D790
Flexural Strength (Yield)	26500	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.7	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12 to 14	ft-lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+4 to 1.0E+7	ohms	ASTM D257
Flammability			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	480 to 550	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

