

InElec® PA612CF13IM

Americhem - Polyamide 6/12 Copolymer

General Information

Product Description

13% CARBON FIBER REINFORCED AND IMPACT MODIFIED NYLON 6/12

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 13% Filler by Weight		
Additive	• Impact Modifier		
Features	• Filled • Good Dimensional Stability • High Impact Resistance	• High Stiffness • High Strength • Impact Modified	• Low Temperature Toughness • 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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.11		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.30E+6	psi	ASTM D638
Tensile Strength	20500	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	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	2.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+6	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
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

