

InElec® PA612CF40HS

Americhem - Polyamide 6/12 Copolymer

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Electrically Conductive • Electromagnetic Shielding (EMI) • ESD Protection • Filled	• Good Dimensional Stability • Heat Stabilized • High Stiffness • High Strength	• Permanent Antistatic • Radio Frequency Shielding (RFI)
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	1.28		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.55E+6	psi	ASTM D638
Tensile Strength	33300	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	3.00E+6	psi	ASTM D790
Flexural Strength	49500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.9	ft·lb/in	ASTM D256
Unnotched Izod Impact	15	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	425	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 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

Notes

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

