

InElec® PA66CF30IM2MD

Americhem - Polyamide 66

General Information

Product Description

30% CARBON FIBER REINFORCED, IMPACT MODIFIED NYLON 6/6. THIS IS A LOCKED MEDICAL FORMULA.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• Impact Modifier		
Features	• Electrically Conductive	• Good Dimensional Stability	• Impact Modified
	• ESD Protection	• High Impact Resistance	• Low Temperature Toughness
	• Ethylene Oxide Sterilizable	• High Stiffness	• Permanent Antistatic
	• Filled	• High Strength	
Uses	• Closures	• Engineering Parts	• Surgical Instruments
	• Connectors	• Industrial Parts	
	• Electrical/Electronic Applications	• Medical/Healthcare Applications	
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.24		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.70	%	ASTM D570
Mechanical			
Tensile Modulus	1.90E+6	psi	ASTM D638
Tensile Strength	21000	psi	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.5	%	ASTM D638
Flexural Modulus	2.50E+6	psi	ASTM D790
Flexural Strength	35000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	3.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	19	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	500 to 575	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

