

InStruc® PA66GF50HSMD

Americhem - Polyamide 66

General Information

Product Description

50% GLASS FIBER REINFORCED, HEAT STABILIZED, LOCKED MEDICAL FORMULA NYLON 6/6

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Ethylene Oxide Sterilizable	• Good Dimensional Stability	• High Stiffness
	• Filled	• Heat Stabilized	• High Strength
Uses	• Closures	• Housings	• Surgical Instruments
	• Electrical/Electronic Applications	• Industrial Parts	• Window & Door Components
	• Engineering Parts	• Medical/Healthcare Applications	
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.57		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.50E+6	psi	ASTM D638
Tensile Strength	36000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	2.40E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	3.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	20 to 22	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+17	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

