

**InStruc® PA66GF33HSMD**

Americhem - Polyamide 66

## General Information

**Product Description**

33% GLASS FIBER REINFORCED, HEAT STABILIZED NYLON 6/6 (LOCKED MEDICAL FORMULATION)

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 33% 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 <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.39		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.50E+6	psi	ASTM D638
Tensile Strength	25000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	1.25E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.8	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	16	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	500 to 575	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

