

InStruc® PA6GF35HSMD

Americhem - Polyamide 6

General Information

Product Description

InStruc PA6GF35HSMD is a 35% glass fiber reinforced, heat stabilized nylon 6. InStruc PA6GF35HSMD offers great stiffness, chemical resistance, strength, and surface finish. This is a locked medical formulation.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Ethylene Oxide Sterilizable • Filled	• Good Dimensional Stability • Heat Stabilized	• High Stiffness • High Strength
Uses	• Closures • Electrical/Electronic Applications • Engineering Parts	• Housings • Industrial Parts • Medical/Healthcare Applications	• Surgical Instruments • Window & Door Components
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.1	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	25500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.35E+6	psi	ASTM D790
Flexural Strength	38000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.2	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+16	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	480 to 550	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

