

InStruc® PA66GF33IMMRMD

Americhem - Polyamide 66

General Information

Product Description

33% GLASS FIBER REINFORCED, IMPACT MODIFIED LUBRICATED NYLON 6/6, FOR HEALTHCARE APPLICATIONS.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Impact Modifier	• Mold Release	
Features	• Ethylene Oxide Sterilizable • Filled • Good Dimensional Stability • Good Mold Release	• High Impact Resistance • High Stiffness • High Strength • Impact Modified	• Low Temperature Toughness • Lubricated
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	1.32		ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.70	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.10E+6	psi	ASTM D638
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	4.0 to 5.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	5.7	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	18	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	480	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	545 to 575	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

