

InStruc® PCGF10HFMD

Americhem - Polycarbonate

General Information
Product Description

10% GLASS FIBER REINFORCED, HIGH FLOW POLYCARBONATE (LOCKED MEDICAL FORMULATION)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Features	• Autoclave Sterilizable • E-beam Sterilizable • Ethylene Oxide Sterilizable • Filled	• Good Dimensional Stability • Heat Sterilizable • High Flow • High Stiffness	• High Strength • Radiation Sterilizable • Steam Sterilizable
Uses	• Closures • Connectors • Electrical/Electronic Applications	• Engineering Parts • Housings • Industrial Parts	• Medical/Healthcare Applications • Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.26		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	550000	psi	ASTM D638
Tensile Strength	9200	psi	ASTM D638
Tensile Elongation (Yield)	8.0 to 9.0	%	ASTM D638
Flexural Modulus	500000	psi	ASTM D790
Flexural Strength	15000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	35	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	275	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	180 to 240	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

