

InStruc® PCGF30HFMRMD

Americhem - Polycarbonate

General Information

Product Description

30% GLASS FIBER REINFORCED, HIGH FLOW POLYCARBONATE WITH MOLD RELEASE (LOCKED MEDICAL FORMULATION)

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 30% Filler by Weight 		
Additive	<ul style="list-style-type: none"> Mold Release 		
Features	<ul style="list-style-type: none"> Autoclave Sterilizable E-beam Sterilizable Ethylene Oxide Sterilizable Filled Good Dimensional Stability 	<ul style="list-style-type: none"> Good Mold Release Heat Sterilizable High Flow High Stiffness High Strength 	<ul style="list-style-type: none"> Lubricated Radiation Sterilizable Steam Sterilizable
Uses	<ul style="list-style-type: none"> Closures Connectors Electrical/Electronic Applications 	<ul style="list-style-type: none"> Engineering Parts Housings Industrial Parts 	<ul style="list-style-type: none"> Medical/Healthcare Applications Surgical Instruments
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.44		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.30E+6	psi	ASTM D638
Tensile Strength	18000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	25000	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)	14 to 16	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+17	ohms	ASTM D257
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
Suggested Max Moisture	0.020	%
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

