InStruc® PCGF20HFMRMD

Americhem - *Polycarbonate*

General Information

Product Description			
20% GLASS FIBER REINFORCED, HIGH FLOW POLYCARBONATE WITH MOLD RELEASE			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• Mold Release		
Features	• Filled • Good Dimensional Stability • Good Mold Release	• High Flow • High Stiffness • High Strength	• Lubricated
Uses	• Closures • Connectors • Electrical/Electronic Applications	• Engineering Parts • Housings • Medical/Healthcare Applications	• Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.090	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	850000	psi	ASTM D638
Tensile Strength	16200	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	2.5	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)	285	°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