

InStruc® PCGF20HFMRFR

Americhem - Polycarbonate

General Information
Product Description

20% GLASS FIBER REINFORCED, HIGH FLOW, FLAME RETARDANT POLYCARBONATE WITH MOLD RELEASE

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Flame Retardant • Mold Release
Features	• Filled • Good Mold Release • High Stiffness • Flame Retardant • Halogenated • High Strength • Good Dimensional Stability • High Flow • Lubricated
Uses	• Automotive Applications • Electrical/Electronic Applications • Industrial Applications • Closures • Engineering Parts • Industrial Parts • Connectors • Household Goods • Office Automation Equipment • Consumer Applications • Housings
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.38		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.16	%	ASTM D570
Mechanical			
Tensile Strength	16000	psi	ASTM D638
Tensile Elongation (Yield)	4.0 to 6.0	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Flexural Strength	19000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	2.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12 to 14	ft-lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
Electrical			
Surface Resistivity	> 1.0E+17	ohms	ASTM D257
Flammability			
Flame Rating			UL 94
0.06 in		V-2	
0.12 in		V-0	

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	500 to 608	°F
Mold Temperature	122 to 248	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

