

InStruc® PCGF10HFMFR1

Americhem - Polycarbonate

General Information

Product Description

10% GLASS FIBER REINFORCED, HIGH FLOW, FLAME RETARDANT POLYCARBONATE WITH MOLD RELEASE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Flame Retardant	• Mold Release	
Features	• Filled • Flame Retardant • Good Dimensional Stability	• Good Mold Release • Halogenated • High Flow	• High Stiffness • High Strength • Lubricated
Uses	• Automotive Applications • Closures • Connectors • Consumer Applications	• Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings	• Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.32		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	666000	psi	ASTM D638
Tensile Strength	12200	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 7.0	%	ASTM D638
Flexural Modulus	701000	psi	ASTM D790
Flexural Strength	26000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.7	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	25	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	280	°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			UL 94
0.06 in		V-0	
0.12 in		V-0	
		5VA	

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	520 to 560	°F



Mold Temperature	180 to 240 °F
Back Pressure	50.0 to 100 psi
Screw Speed	40 to 70 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

