

InStruc® PCGF40HFMRRF

Americhem - Polycarbonate

General Information

Product Description

40% 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, 40% 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

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.59		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical			
Tensile Modulus	1.90E+6	psi	ASTM D638
Tensile Strength	22000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.70E+6	psi	ASTM D790
Flexural Strength	31000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	2.5	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	18 to 20	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	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	540 to 600	°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.

