

InStruc® PCGF40HFMR

Americhem - Polycarbonate

General Information

Product Description

40% GLASS FIBER REINFORCED, HIGH FLOW POLYCARBONATE WITH MOLD RELEASE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Additive	• Mold Release		
Features	• Filled	• High Flow	• Lubricated
	• Good Dimensional Stability	• High Stiffness	
	• Good Mold Release	• High Strength	
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	1.52		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			
Tensile Modulus	1.35E+6	psi	ASTM D638
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 4.0	%	ASTM D638
Flexural Modulus	1.45E+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	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

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

