

InStruc® PCGF5HFMRFR

Americhem - Polycarbonate

General Information

Product Description

5% 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, 5.0% 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	1.27		ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	460000	psi	ASTM D638
Tensile Strength	9800	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Flexural Modulus	480000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.6	ft·lb/in	ASTM D256
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-2	
0.12 in		V-0	

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 580	°F
Mold Temperature	180 to 240	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

