

**InStruc® PCGF20HFMRUV**

Americhem - Polycarbonate

## General Information

**Product Description**

20% GLASS FIBER REINFORCED, HIGH FLOW, UV-STABILIZED POLYCARBONATE WITH MOLD RELEASE

**General**

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

 Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.090	%	ASTM D570
<b>Mechanical</b>			
Tensile Modulus	850000	psi	ASTM D638
Tensile Strength	16200	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
<b>Impact</b>			
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
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	285	°F	ASTM D648
<b>Flammability</b>			
Flame Rating (0.12 in)	HB		UL 94

## Processing Information

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	180 to 240	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

