

**InStruc® PA6GF10**

Americhem - Polyamide 6

## General Information

**Product Description**

10% GLASS FIBER REINFORCED NYLON 6

**General**

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

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Specific Volume	23.1	in <sup>3</sup> /lb	
Molding Shrinkage - Flow	6.0E-3 to 8.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.4	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	14500	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 4.0	%	ASTM D638
Flexural Modulus	600000	psi	ASTM D790
Flexural Strength	20500	psi	ASTM D790
Shear Strength	9700	psi	ASTM D732
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.80	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	375	°F	ASTM D648
CLTE - Flow	2.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	480 to 550	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

