

**InStruc® PA6GF20UV**

Americhem - Polyamide 6

**General Information**
**Product Description**

20% GLASS FIBER REINFORCED UV STABILIZED NYLON 6

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• UV Stabilizer		
Features	• Filled	• High Stiffness	• UV Stabilized
	• 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>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.27		ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.3	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	19000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 4.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (0.125 in)	1.2	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft-lb/in	ASTM D4812
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+17	ohms	
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	HB		UL 94

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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

