

InStruc® PA6GF50

Americhem - Polyamide 6

General Information

Product Description

50% GLASS FIBER REINFORCED NYLON 6

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Filled • Good Dimensional Stability • High Stiffness • High Strength
Uses	• Automotive Applications • Closures • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Industrial Applications • Industrial Parts • Office Automation Equipment • Outdoor Applications • Window & Door Components
Forms	• Pellets
Processing Method	• Injection Molding

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.57		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	31000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	2.20E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	3.3	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	22	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	ASTM D257
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

