

InStruc® PA612GF50HS

Americhem - Polyamide 612

General Information
Product Description

50% GLASS FIBER REINFORCED, HEAT STABILIZED NYLON 612

General

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

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.51		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4 to 1.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.070	%	ASTM D570
Mechanical			
Tensile Strength	28500	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 4.0	%	ASTM D638
Flexural Modulus	1.55E+6	psi	ASTM D790
Impact			
Notched Izod Impact	2.8	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
Electrical			
Surface Resistivity	> 1.0E+17	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	510 to 530	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes
¹ Typical properties: these are not to be construed as specifications.
