

InStruc® PA46GF30HS

Americhem - Polyamide 46

General Information

Product Description

30% GLASS FIBER REINFORCED, HEAT STABILIZED NYLON 46

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Filled • Good Dimensional Stability	• Heat Stabilized • High Stiffness	• High Strength
Uses	• Automotive Applications • Closures • Consumer Applications • Electrical/Electronic Applications • Engineering Parts	• Household Goods • Housings • Industrial Applications • Industrial Parts • Office Automation Equipment	• Oil/Gas Applications • Outdoor Applications • Window & Door Components
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.46E+6	psi	ISO 527-1
Tensile Stress (Break)	30500	psi	ISO 527-2
Tensile Strain (Break)	3.0 to 4.0	%	ISO 527-2
Flexural Modulus	1.35E+6	psi	ISO 178
Flexural Stress	43500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	5.7	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	545	°F	ISO 75-2/A

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	4.0	hr
Suggested Max Moisture	< 0.10	%
Processing (Melt) Temp	581 to 617	°F
Mold Temperature	250 to 300	°F

