

InStruc® PA66GF45

Americhem - Polyamide 66

General Information
Product Description

45% Glass Fiber Reinforced Nylon 66

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 45% 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 ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.52		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical			
Tensile Modulus	2.10E+6	psi	ASTM D638
Tensile Strength	31500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	2.00E+6	psi	ASTM D790
Flexural Strength	46000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	2.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	20	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Processing (Melt) Temp	530 to 570	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

