

InStruc® PA6CF30IM2

Americhem - Polyamide 6

General Information
Product Description

30% CARBON FIBER REINFORCED, IMPACT MODIFIED NYLON 6

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• Impact Modifier		
Features	• Filled	• High Stiffness	• Low Temperature Toughness
	• Good Dimensional Stability	• High Strength	
	• High Impact Resistance	• Impact Modified	
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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.25		ASTM D792
Molding Shrinkage - Flow	2.0E-5 to 4.0E-5	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.00E+6	psi	ASTM D638
Tensile Strength	30000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	2.40E+6	psi	ASTM D790
Flexural Strength	45000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	18	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4	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

