

InStruc® PCGB10
Americhem - Polycarbonate
General Information
Product Description

10% GLASS BEAD FILLED, POLYCARBONATE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Bead, 10% Filler by Weight		
Features	• Filled	• Good Dimensional Stability	
Uses	• Automotive Applications • Closures • Connectors • Consumer Applications	• Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings	• Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 8.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	350000	psi	ASTM D638
Tensile Strength	8000	psi	ASTM D638
Tensile Elongation (Yield)	> 10	%	ASTM D638
Flexural Modulus	380000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	No Break		ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	275	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	180 to 240	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

