

InElec® PBTCF10
Americhem - Polybutylene Terephthalate
General Information
Product Description

10% CARBON FIBER REINFORCED PBT

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight
Features	• Filled • Good Dimensional Stability • High Stiffness • High Strength • Permanent Antistatic
Uses	• Automotive Applications • Battery Cases • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Industrial Applications • Industrial Parts • Semiconductor Applications
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow	7.0E-3 to 0.010	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical			
Tensile Strength	15000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	26000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	0.90	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	7.0	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	380	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+7	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	230	°F
Drying Time	4.0	hr
Processing (Melt) Temp	430 to 500	°F
Mold Temperature	225	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

