

InStruc® PBTGF20
Americhem - Polybutylene Terephthalate
General Information
Product Description

20% GLASS FIBER REINFORCED PBT

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• Filled • Good Dimensional Stability • High Stiffness • High Strength
Uses	• Automotive Applications • Battery Cases • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings • Industrial Applications • Industrial Parts • Semiconductor Applications
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.45		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.080	%	ASTM D570
Mechanical			
Tensile Strength	15500	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	820000	psi	ASTM D790
Flexural Strength	23500	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+17	ohms	
Flammability			
Flame Rating (0.06 in)	HB		UL 94

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

