

InStruc® PBTGF25MIN15FR
Americhem - Polybutylene Terephthalate
General Information
Product Description

25% GLASS FIBER REINFORCED, 15% MINERAL FILLED, FLAME RETARDANT, POLYBUTYLENE TEREPHTHALATE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight	• Mineral, 15% Filler by Weight	
Additive	• Flame Retardant		
Features	• Filled • Flame Retardant	• Good Dimensional Stability • Halogenated	• 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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.65		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	16000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	23000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.6	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0	hr
Processing (Melt) Temp	460 to 500	°F
Mold Temperature	175 to 225	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

