

InLube® PBTGF20TF15

Americhem - Polybutylene Terephthalate

General Information

Product Description

20% GLASS FIBER REINFORCED 15% PTFE LUBRICATED PBT

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• PTFE Lubricant: 15%		
Features	• Chemical Resistant	• Good Mold Release	• Low Friction
	• Filled	• High Stiffness	• Lubricated
	• Good Dimensional Stability	• High Strength	• Wear Resistant
Uses	• Automotive Applications	• Electrical/Electronic Applications	• Industrial Parts
	• Battery Cases	• Engineering Parts	• Semiconductor Applications
	• Connectors	• Household Goods	
	• Consumer Applications	• Industrial Applications	
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.56		ASTM D792
Specific Volume	17.8	in ³ /lb	
Molding Shrinkage - Flow	3.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.050	%	ASTM D570
Mechanical			
	Nominal Value	Unit	Test Method
Tensile Strength	15000	psi	ASTM D638
Tensile Elongation (Yield)	3.0 to 5.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	24000	psi	ASTM D790
Impact			
	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	15	ft·lb/in	ASTM D4812
Thermal			
	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	2.2E-5	in/in/°F	ASTM D696
Electrical			
	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	
Flammability			
	Nominal Value	Unit	Test Method
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
Vent Depth	1.5E-3 to 3.0E-3	in

