

InLube® PBTCTF15TF15
Americhem - Polybutylene Terephthalate
General Information
Product Description

15% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED PBT

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight		
Additive	• PTFE Lubricant: 15%		
Features	• Chemical Resistant • Filled • Good Dimensional Stability	• Good Mold Release • High Stiffness • High Strength	• Low Friction • Lubricated • Wear Resistant
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	1.44		ASTM D792
Specific Volume	19.2	in ³ /lb	
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.040	%	ASTM D570
Mechanical			
Tensile Strength	17000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.3	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	9.0	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+7	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
Vent Depth	1.5E-3 to 3.0E-3	in

