

InLube® PBTCTF30TF15

Americhem - Polybutylene Terephthalate

General Information

Product Description			
30% 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, 30% 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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.51		ASTM D792
Specific Volume	18.3	in ³ /lb	
Molding Shrinkage - Flow	5.0E-4 to 1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.050	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	19000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.50E+6	psi	ASTM D790
Flexural Strength	30000	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)	10	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	6.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
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

