

InLube® PBTGF30TF10SI2MD

Americhem - Polybutylene Terephthalate

General Information

Product Description

30% GLASS FIBER REINFORCED, 10% PTFE LUBRICATED, 2% SILICONE LUBRICATED, POLYBUTYLENE TEREPHTHALATE (PBT)

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 30% Filler by Weight 		
Additive	<ul style="list-style-type: none"> PTFE Lubricant: 10% 	<ul style="list-style-type: none"> Silicone Lubricant: 2% 	
Features	<ul style="list-style-type: none"> Chemical Resistant E-beam Sterilizable Ethylene Oxide Sterilizable Filled Good Dimensional Stability 	<ul style="list-style-type: none"> Good Mold Release High Stiffness High Strength Low Friction Lubricated 	<ul style="list-style-type: none"> Radiation Sterilizable Steam Sterilizable Wear Resistant
Uses	<ul style="list-style-type: none"> Battery Cases Connectors Electrical/Electronic Applications 	<ul style="list-style-type: none"> Engineering Parts Industrial Parts Medical/Healthcare Applications 	<ul style="list-style-type: none"> Semiconductor Applications Surgical Instruments
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.61		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	140000	psi	ASTM D638
Tensile Strength	17000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	135000	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	14	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0	hr
Processing (Melt) Temp	460 to 520	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

