Plaslube® PES GF30 TL15

Techmer Polymer Modifiers - *Polyethersulfone*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• PTFE Lubricant: 15%
Features	• Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.70		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	18200	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.19		
vs. Steel - Static	0.16		
Wear Factor	55	10^-10 in³·min/ft·lb·hr	ASTM D3702
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.6	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	7.0	ft·lb/in	ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	420	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	290	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	650 to 735	°F
Middle Temperature	650 to 735	°F
Front Temperature	650 to 735	°F
Processing (Melt) Temp	630 to 730	°F
Mold Temperature	280 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm