

Plaslube® PEEK CF15 T/GL15 A

Techmer Polymer Modifiers - Polyetheretherketone

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Carbon Fiber
Additive	• Lubricant
Features	• Lubricated
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.46		ASTM D792
Molding Shrinkage - Flow (0.125 in)	9.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	21200	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	34000	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.22		
vs. Steel - Static	0.19		
Wear Factor	28	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Limiting Pressure Velocity			ASTM D3702
10 fpm	40000.0	psi·fpm	
100 fpm	45000.0	psi·fpm	
1000 fpm	28000.0	psi·fpm	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.7	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	116		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	> 600	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	590	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+4 to 1.0E+6	ohms·cm	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	680 to 730	°F
Middle Temperature	680 to 730	°F
Front Temperature	680 to 730	°F
Processing (Melt) Temp	680 to 720	°F
Mold Temperature	350 to 425	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

