

Plaslube® PE 4000 GF10

 Techmer Polymer Modifiers - *Ultra High Molecular Weight Polyethylene*

General Information

Product Description

1947115

General

Material Status	• Commercial: Active
Availability	• North America
Appearance	• Colors Available • Colors Available
Processing Method	• Injection Molding

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.980		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/1.05 kg)	4.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.020	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	310000	psi	ASTM D638
Tensile Strength (Yield)	3600	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	245000	psi	ASTM D790
Flexural Strength	5200	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.27		
vs. Steel - Static	0.19		
Wear Factor	60	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Limiting Pressure Velocity			ASTM D3702
10 fpm	3000.0	psi·fpm	
100 fpm	5000.0	psi·fpm	
1000 fpm	2500.0	psi·fpm	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	4.5	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	66		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	200	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	130	°F	ASTM D648
CLTE - Flow	5.3E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257

