

Plaslube® PE 4000 LE

 Techmer Polymer Modifiers - *Ultra High Molecular Weight Polyethylene*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Features	<ul style="list-style-type: none"> Low Extractables
Appearance	<ul style="list-style-type: none"> Colors Available
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.943		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)	0.022	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	4700	psi	ASTM D638
Tensile Elongation (Break)	80	%	ASTM D638
Flexural Modulus	130000	psi	ASTM D790
Flexural Strength	7000	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)	No Break		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

