



Plaslube® PE 5900

Techmer Polymer Modifiers - Ultra High Molecular Weight Polyethylene

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Lubricant
Features	• Lubricated
Appearance	• Colors Available • Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.970		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/10.0 kg)	1.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.030	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	3700	psi	ASTM D638
Tensile Elongation (Break)	30	%	ASTM D638
Flexural Modulus	70000	psi	ASTM D790
Flexural Strength	6000	psi	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.15		
vs. Steel - Static	0.080		
Wear Factor	16	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.0	ft·lb/in	ASTM D256
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	5.0E-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))	500	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Limiting Pressure Velocity	• 300010	fpm psi·fpm	
	• 5000100	fpm	
	• 25001000	fpm	

