

Plaslube® PE 4000

Ultra High Molecular Weight Polyethylene

Techmer Polymer Modifiers

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

1895115

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• Techmer Polymer Modifiers • Plaslube®
Availability	• North America
Appearance	• Colors Available
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	0.928 g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	1.5 to 1.8 %	ASTM D955
Water Absorption (24 hr)	0.070 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1240 MPa	ASTM D638
Tensile Strength		ASTM D638
Yield	24.1 MPa	
Break	22.1 MPa	
Tensile Elongation (Break)	16 %	ASTM D638
Coefficient of Friction		ASTM D1894
vs. Steel - Dynamic	0.27	
vs. Steel - Static	0.19	
Wear Factor	120 10 ⁻⁸ mm ³ /N·m	
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 (23°C, 3.18 mm)	190 J/m	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		ASTM D648
0.45 MPa, Unannealed	93.3 °C	
1.8 MPa, Unannealed	54.4 °C	
CLTE - Flow	9.5E-5 cm/cm/°C	ASTM D696

Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+15 ohms·cm	ASTM D257

Injection	Nominal Value Unit
Drying Temperature	66 °C
Drying Time	1.0 to 2.0 hr
Suggested Max Moisture	< 0.050 %



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Injection	Nominal Value Unit
Rear Temperature	199 to 221 °C
Middle Temperature	204 to 227 °C
Front Temperature	210 to 232 °C
Nozzle Temperature	216 to 238 °C
Mold Temperature	10 to 52 °C
Insert Molding (Melt) Temperature	204 to 235 °C
Back Pressure	0.345 to 0.689 MPa

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

