

Plaslube® PE 4000

 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
Appearance	<ul style="list-style-type: none"> Natural Color
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.930		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.015 to 0.018	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	180000	psi	ASTM D638
Tensile Strength (Yield)	3500	psi	ASTM D638
Tensile Strength (Break)	3200	psi	ASTM D638
Tensile Elongation (Break)	16	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	3.5	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

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	150	°F
Drying Time	1.0 to 2.0	hr
Rear Temperature	390 to 430	°F
Middle Temperature	400 to 440	°F
Front Temperature	410 to 450	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	400 to 455	°F
Mold Temperature	50 to 125	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	psi
Screw Speed	Moderate	

