

Plaslube® PE 4000 BK

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

General	
Material Status	• Commercial: Active
Availability	• North America
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.910		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.020 to 0.022	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	490000	psi	ASTM D638
Tensile Strength (Yield)	4000	psi	ASTM D638
Tensile Strength (Break)	3800	psi	ASTM D638
Tensile Elongation (Break)	13	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.3	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	195	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	135	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	150	°F
Drying Time	1.0 to 2.0	hr
Rear Temperature	410 to 450	°F
Middle Temperature	420 to 460	°F
Front Temperature	430 to 470	°F
Nozzle Temperature	435 to 480	°F
Processing (Melt) Temp	420 to 480	°F
Mold Temperature	50 to 125	°F
Injection Rate	Slow-Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	Moderate	

