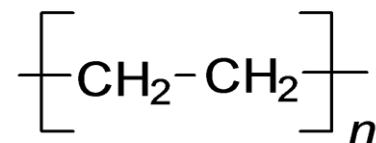


## Ultrahigh Molecular Weight Polyethylene (UHMW High Performance Blend)



### SPECIFICATIONS

Property	Spec	Value
Specific Gravity	ASTM D792	0.970 g/cc
Tensile Strength	ASTM D4894	3,100 psi
Hardness	ASTM D2240	70 Shore D
Compressive Strength	ASTM D695	13,300 psi
Co. of Thermal Exp. (x 10 <sup>-5</sup> ) (MD/CD)	ASTM D 696 78°F - 200°F	1.0 in/in/°F
Limiting PV		1000
Max. P	Static	1000 psi
Max. V		50 fpm
Coefficient of Friction		.08 - .12 Static (Dry)
Temperature Range		Cryogenic to +200°F

### DESCRIPTION

ML57 is a UHMW material with hardness 70 Shore D, specially compounded high-performance blend that works well under high pressure and abrasive environments. Ultrahigh Molecular Weight Polyethylene (UHMWPE) has simple and linear carbon-carbon polymer backbone but with molecular weight reaching several millions. This chemical structure makes UHMWPE highly crystalline, thus it offers high tensile strength and dimensional stability even at high pressures. The most outstanding known properties of UHMWPE are wear/abrasion resistance along with chemical resistance to aqueous and hydrocarbon solvents. UHMWPE has a very low coefficient of friction (much lower than polyamide and acetal), good toughness and fatigue resistance.