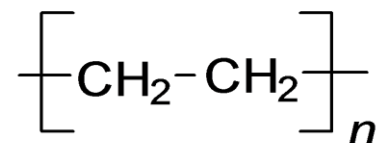


Ultrahigh Molecular Weight Polyethylene (UHMW Gold)

SPECIFICATIONS

Property	Spec	Value
Hardness (Shore D)	D2240	67
Density	D792	0.935-0.945 gm/c ³
Tensile Strength	D638	>5500 PSI
Elongation at Break	D638	>190%
Tensile Impact	D1822	>700 ft X lbs/in
Coefficient of Friction (Static)	D1894	0.15-0.20
polished steel		
Coefficient of Friction (Dynamic)	D1894	0.10-0.14
polished steel		
Tensile Modulus of Elasticity	D638	>119,000 PSI
Flexural Modulus of Elasticity	D790B	>109,000 PSI
Coefficient of linear thermal expansion	D696	7.8x10 ⁻⁵ in/in/°F
Application temperature - maximum	D648	<200° F
Application temperature - minimum	D648	> -400° F
Melting range	DSC	>278° F
Color		Gold



DESCRIPTION

ML20 is a UHME compound with hardness 67 Shore D, specially compounded in gold color. 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 nylon and acetal), good toughness and fatigue resistance.