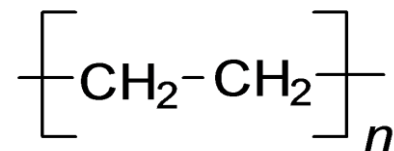


Ultrahigh Molecular Weight Polyethylene (UHMW)

SPECIFICATIONS

| Property | Spec | Value |
|---|------|------------------------------|
| Hardness (73°F) | D785 | R64 |
| Rockwell & Burnell | | |
| Specific Gravity (73°F) | | 0.94 |
| Tensile Strength (73°F) | D638 | 4,750 PSI |
| Elongation at Break | D638 | 325% |
| Impact Strength (73°F) | D256 | no break |
| notched Izod | | |
| Coefficient of Friction (Dynamic) | | 0.12 |
| Shear Strength (73°F) | D732 | 3,500 PSI |
| Tensile Modulus of Elasticity (73°F) | D638 | 90,000 Psi |
| Flexural Modulus of Elasticity (73°F) | D790 | 110,000 PSI |
| Limiting PV | | 2,000 PSI.FPM |
| Abrasion resistance index | | 10 |
| Coefficient of linear thermal expansion | D696 | 7.2x10 ⁻⁵ in/in°F |
| Continuous Service Temp. - in Air (max) | | 160° F |
| Water Absorption (24 hrs) | D570 | <0.01 % |
| Color | | White |



DESCRIPTION

ML10 is a UHMW material with hardness R64, specially compounded for standard grade applications. 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 polyamides and acetal), good toughness and fatigue resistance.