



UHMW, Ultra High Molecular Weight Polyethylene

UHMW (ultra high molecular weight polyethylene) is an extremely tough plastic with high abrasion and wear resistance. The versatility of polyethylene has made it a popular plastic for countless industrial applications that require durability, low friction, and chemical resistance.

Performance characteristics:

- Extremely tough and durable
- Low friction
- Excellent abrasion resistance
- Good chemical resistance
- Low moisture absorption
- Easy to fabricate

TECHNICAL DATA SHEET | (EFFECTIVE 24FEB25)

UHMW, Ultra High Molecular Weight Polyethylene			
PHYSICAL PROPERTY	TEST METHOD	UNIT	VALUE
Tensile Strength	D638	psi	3,100
Flexural Modulus	D790	psi	110,000
Izod Impact (notched)	D256	ft-lbs/in	18.0
Heat Deflection Temperature @ 264 psi	D648	°F	-
Maximum Continuous Service Temperature in air	-	°F	180
Water Absorption (immersion 24 hours)	D570	%	Slight
Coefficient of Linear Thermal Expansion	D696	in/in/°Fx10 ⁻⁵	11.1