



DURAVAR[®] “XT” UHMW-PE
Premium Grade Ultra-High Molecular Weight Polyethylene
Produced Utilizing Advanced Ram Extrusion Technology

PROPERTIES TABLE

Information Provided Below is a Collection of Multiple Sourcing and Believed to be Accurate

TYPICAL	TEST	U/M	DURAVAR [®] “XT”
PHYSICAL PROPERTIES			Premium Grade
PHYSICAL			
Intrinsic Viscosity (IV)	ASTM D-4020	dl/gm	28 – 30
Density	ASTM D- 792	g/cm ³	0.93
Hardness (Scale)	ASTM D-2240	Rockwell-R	> 67
Water Absorption	ASTM D- 570	%	Nil
MECHANICAL			
Yield Strength	ASTM D- 638	psi	> 2800
Tensile Break	ASTM D- 638	psi	> 5200
Elongation at Break	ASTM D- 638	%	> 400
Flexural Modulus	ASTM D- 790	psi	90,000
Izod Impact	ASTM D- 256	ft-lb/in ²	No Break
Abrasion Index (Relative To Steel @ 100)	Sand Slurry	---	7.5
Coefficient of Friction – Static (Polished Steel)	ASTM D-1894	---	.12 – .15
Coefficient of Friction – Dynamic (Polished Steel)	ASTM D-1894	---	.10 – .14
THERMAL			
Coefficient of Linear Thermal Expansion	ASTM D- 696	In/in/°F	7.8 x 10 ⁻⁵
Application Temperature – Maximum	ASTM D- 648	°F	< 200
Melting Range	DSC	°F	> 278
ELECTRICAL			
Volume Resistivity	ASTM D- 257	ohms-cm	10 ¹⁶
Surface Resistivity	ASTM D- 257	ohms	10 ¹⁶

This Chart Represents Typical Values for “Premium Grade” UHMW-PE Based on ASTM Testing Standards.

Tech Data-XT 090110

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