



DURAVAR[®] “R” UHMW-PE

Reprocessed Ultra-High Molecular Weight Polyethylene

Produced By Utilizing Advanced Ram Extrusion Technology

PROPERTIES TABLE

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

TYPICAL PHYSICAL PROPERTIES	TEST	U/M	DURAVAR [®] “R” Reprocessed
PHYSICAL			
Intrinsic Viscosity (IV)	ASTM D-4020	dl/gm	26 – 30
Density	ASTM D- 792	gm/cm ³	0.935 – 0.945
Hardness	ASTM D-2240	Shore-D	64 – 70
Water Absorption	ASTM D- 570	%	Nil
MECHANICAL			
Yield Point	ASTM D- 638	psi	2800 – 3200
Tensile Break	ASTM D- 638	psi	3600 – 5200
Elongation at Break	ASTM D- 638	%	150 – 350
Tensile Modulus	ASTM D- 638	psi	90,000 – 127,000
Flexural Modulus	ASTM D- 790	psi	86,000 – 101,000
Izod Impact	ASTM D-256A	ft-lb/in ²	No Break
Tensile Impact	ASTM D-1822	ft-lbs/in ²	250 – 540
Abrasion Index	SAND SLURRY	---	10 - 22
Coefficient of Friction – Static (Polished Steel)	ASTM D-1894	---	.15 – .20
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
Compressive Modulus	ASTM D- 621	psi	n/a
Compressive Deformation	ASTM D- 621	% @ 1000 psi	6 – 8
Application Temperature – Maximum	ASTM D- 648	°F	180 - 200
Melting Range	DSC	°F	> 278 – 290
ELECTRICAL			
Dielectric Strength (Short time, 1/8 inch thick)	n/a	n/a	n/a
Dielectric Constant (@ 1 kHz)	n/a	n/a	n/a
Dissipation Factor (@ 1 kHz)	n/a	n/a	n/a
Static Decay Time*	n/a	n/a	n/a
Volume Resistivity	ASTM D- 257	Ohms-cm	>10 ¹⁰ - >10 ¹⁵
Surface Resistivity	ASTM D- 257	Ohms	>10 ¹⁰ - >10 ¹⁵

This Chart Represents Typical Values for UHMW-PE Based on ASTM Testing Standards.

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Artek, Inc. – 3311 Enterprise Rd. – Fort Wayne, Indiana 46808
 Phone #: (800) 762-6808 Fax #: (260) 484-6914 Website: artek-inc.com