



Typical Properties of

UHMW- Glass**Ultra High Molecular Weight Polyethylene with Glass Beads**

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	0.96
Tensile Strength	D638	psi	5,600
Tensile Modulus	D638	psi	102,000
Elongation	D638	%	300
Flexural Strength	D790	psi	3,300
Flexural Modulus	D790	psi	109,000
Compressive Strength	D695	psi	3,000
Compressive Modulus	D695	psi	94,000
Hardness, Rockwell	D785	--	N / A
Hardness Durometer	--	--	D64
Izod Impact (notched)	D256	ft. lb of notch	No Break
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.12
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	11 x 10 ⁻⁵
Continuous Use Temperature	--	°F	180
Heat Deflection Temperature	D648	°F	116
Glass Transition Temperature	D3418	°F	115
Melting Point	D3418	°F	275
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	2.84
Dielectric Strength	D149	Volts/mil	N / A
Surface Resistivity	EOS/ESD 511.11	ohm/square	>10 ¹⁵
Flammability	UL94	--	HB
Water Absorption, 24 hrs.	D570	% by weight	<.01
Water Absorption, Saturation	D570	% by weight	<.01
Limiting PV (4:1 Safety Factor)	--	--	2,000
K-Factor	--	--	110
FDA Compliance	--	--	No

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.
All values at 73 F unless otherwise stated.