



## UHMWPE 1000 DATA SHEET

Property		Testing Method	Value
Molecular weight	1E6 g/mol	ASTM D4020	3-5
Density	g/cm <sup>3</sup>	ISO 1183-1	0.93-0.96
Dynamic coefficient of friction		ISO8295	≅ 0.15
Notched Impact Strength (Charpy)	kJ/m <sup>2</sup>	ISO 11542-2	100-170
Abrasion Index (Sand-slurry)		ISO/DIS 15527	100-110
Hardness (Shore D)		ISO868	60-70
Elongation at break at 23 degree	%	ISO527	≥200
Yield strength	MPa	ASTM D638	20.2
Tensile impact	Ft-lbs/in <sup>2</sup>	ASTM D1822	≥436
Water absorption		ASTM D570	≅ 0.1
Compressive deformation	% at 1000 psi	ASTM D621	6.0-8.0
Compression Strength, 10% Deformation	MPa	ASTM D695	21
IZOD Impact	Ft-lbs/in <sup>2</sup>	ASTM D4020	Non-break
Thermal Expansion	K <sup>-1</sup>	DIN53752	≈2X10 <sup>-4</sup>
Heat Deflection Temperature	°C	ASTM D648	47
Melting Temperature	°C	DIN53736	135
Operating Temperature	°C		-80 to +80
Volume Resistivity	Ohm-cm	DIN60093	10 <sup>14</sup>
Surface Resistivity	Ohm	DIN60093	10 <sup>15</sup>

The above data sheet are based on the present knowledge and our present products and are given without guarantee .Different color may have a little difference on the properties.