

<b>Physical properties</b>			
<b>Characteristic</b>	<b>Method of verification</b>	<b>Unit</b>	<b>UHMW PE</b>
<b>I.Physical Properties</b>			
Density	ISO 1183	g/cm <sup>3</sup>	0.93
Water absorpoin	ISO 62	%	0.01
<b>II.Mechanical Properties</b>			
Tensile strength at yield	ISO 527-2	MPa	17
Tensile strength at break	ISO 527-2	MPa	40
Elongation at break	ISO 527-2	%	≥50
Modulus of elasticity after tensile test	ISO 527-2	MPa	700
Modulus of elasticity after flexural test	ISO 178	MPa	900
Hardness-Rockwell	ISO 2039-2		-
Hardness-Shore D	DIN 53505		61
Charpy impact strength at 23 °C	ISO 179	kJ/m <sup>2</sup>	N.B.
Friction coefficient	DIN 53375		0.25
<b>III.Thermal Properties</b>			
Heat deflection temperature-HDT/A	ISO 75-2	°C	42
Max. service temperature-Short term		°C	120
Max. service temperature-Long term		°C	90
Thermal conductivity at 23 °C	DIN 11359	W/(K*m)	0.42
Coefficient of linear thermal expansion	ISO 11359	10 <sup>-4</sup> *K <sup>-1</sup>	2.00
<b>IV.Electrical Properties</b>			
Dielectric constant at 1 MHz	IEC 60250	10 <sup>6</sup> Hz	3.00
Dielectric loss factor at 1 MHz	IEC 60250	10 <sup>6</sup> Hz	0.0001
Volume resistively	IEC 60093	Ohm(Ω)*cm	>10 <sup>14</sup>
Surface resistively	IEC 60093	Ohm(Ω)	>10 <sup>11</sup>
Dielectric strength	IEC 60243-1	kV/mm	45
<b>V.Miscellaneous Data</b>			
Flammability	UL 94	Class	HB

NOTE: 1 g/cm<sup>3</sup> = 1,000 kg/m<sup>3</sup>, 1 Mpa = 1 N/mm<sup>2</sup>, 1kV/mm = 1 MV/m

The information mentioned the above are approximate figures based on our experience & knowledge.

They are as products and possible application.

will not provide any legally binding guarantee of certain properties, or any suitability.