UHMWPE, Min. Mol. Wt 9.0 Million

Property	Standard	Value
Suitable For Food Contact	-	Yes
Density	DIN EN ISO 1183	0.93 g/cm^3
Flamability	DIN 4102	B2 mm
Flamability	UL 94	HB
Water Absorption Rate	DIN EN ISO62	<0.01 %
Yield Stress / Tensile Strength	DIN EN ISO 527-1	20 N/mm^2
Elongation at Break	DIN EN ISO 527-1	>200 %
Tensile Modulus of Elasticity	DIN EN ISO 527-1	680 N/mm^2
Notched Impact Strength Charpy	DIN EN ISO179.2	- mJ/mm^2
Notched Impact Strength (Double) V Notch	DIN EN ISO 179.2	>130 mJ/mm^2
Shore - D Hardness	DIN EN ISO 868/ 15	63
Melting Temperature	DIN EN ISO 3146	135 Deg C
Thermal Conductivity	ISO 8302	0.4 W/m.k
Specific Thermal Capacity	DIN 51005	1.9 J/k.kg.
Coefficient of Linear Thermal Expansion	DIN 53752	150 – 230 1/K.10^6
Service Temperature Long Term	-	- 250 to 80 Deg C
Service Temperature Short Term	-	130 Deg C
Heat Deflection Temperature	DIN EN ISO 306 VICAT A	Deg C
Heat Deflection Temperature	DIN EN ISO 306 VICAT B	79 Deg C
Dielectric Constant	DIN VDE 0303-4	2.3
Di-electric Dissipation Factor	DIN VDE 0303-4	1 x 10^{14}
Specific Volume Resistivity	DIN VDE 0303-3	>10^{14} Ohm/scm
Surface Resistivity	DIN VDE 0303-3	>10^{14} Ohm
Comparative Tracking Index (Test Solution A)	IEC 60112	600 CTI
Di-electric Strength	IEC 60243	45 KV/mm

UHMWPE, Min. Mol. Wt 5.0 Million

Property	Standard	Value
Density	ASTM D792	0.93-0.95g/cm^3
Water Absorption	ASTM D570	<_0.01 %
Tensile strength	ASTM D638	≥ 18N/mm^2
Elongation	ASTM D638	≥50 %
Impact strength, Izod,23°C	ASTM D256	.100J/cm
Hardness	ASTM 785	61-65 Shore D
Compressive strength at 1% def.	ASTM D695	70 – 80 kg/cm^2
Thermal conductivity	ASTM D2214	0.41W/m. K
Volume resistivity, at 50% RH	ASTM D257	<10^{5}Ohm cm
Surface resistivity , at 50% RH	ASTM D257	<10^{5}Ohm
Safe Operating temperatures	-	- 80 to +80 deg C
Coefficient of friction, static	ASTM D3028	≤ 0.2
Coefficient of friction, dynamic	ASTM D3028	≤ 0.15
Moisture / solvent absorption	-	Negligible
Combustibility	-	Partly non-combustible
Weather resistance	-	Excellent

Disclaimer:

- The values given in the data sheet are for reference only.
- Customers are advised to test the suitability of our materials for their application as these values may not directly hold good under all complex / multiple application conditions.
- Our company does not undertake any liability, direct or indirect, linked with the usage and performance of our materials under application conditions.