

Raw Material

UHMWPE (Ultra High Molecular Weight Polyethylene)

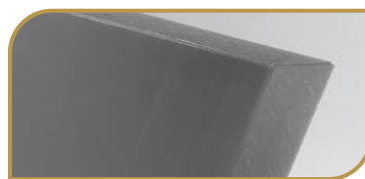
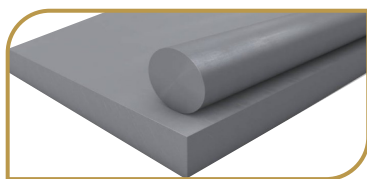
General Properties	Test Method	Unit	Value
Density	DIN EN ISO 1183-1	g/cm ³	~0.961
Water Absorption	DIN EN ISO 62	%	<0.01
Flammability (Thickness 3mm / 6mm)	UL 94	-	HB
Food Compliance	-	FDA/BfR	YES
UV Stability	-	-	YES
Mechanical Properties			
Yield Stress	DIN EN ISO 527	MPa	20
Elongation At Break	DIN EN ISO 527	%	360
Tensile Modules Of Elasticity	DIN EN ISO 527	MPa	700
Notched Impact Strength (Charpy)	DIN EN ISO 179	KJ/m ²	No break
Shore Hardness	DIN EN ISO 868	Scale D	65
Wear Resistance	Sand Slurry	-	70
Coefficient Of Friction	-	u	0.08
Thermal Properties			
Melting Temperature	ISO 11357-3	°C	135
Thermal Conductivity	DIN 52612-1	W/m*k	0.41
Thermal Capacity	DIN 52612	KJ / K*Kg	1.9
Coefficient Of Linear Thermal Expansion	DIN 53752	10 ⁻⁶ K ⁻¹	150-230
Service Temperature, Long Term	Average	°C	-250 ... 80
Service Temperature, Short Term (MAX)	Average	°C	130
Heat Deflection Temperature	DIN EN ISO 306, Vicat B	°C	80
Electrical Properties			
Dielectric Constant	IEC 60250	-	2.3
Dielectric Dissipation Factor (10 ⁶ Hz)	IEC 60250	-	0.0001
Volume Resistivity	IEC 60093	Ω*cm	>10 ¹⁵
Surface Resistivity	IEC 60093	Ω	>10 ¹⁴
Comparative Tracking Index	IEC 60112	-	600
Dielectric Strength	IEC 60243	KV/mm	45

Applications:

- Conveying components: bearings, belt guides
- Bushings, rollers, gears
- Sprockets

Characteristics:

- Wear strips
- Chutes, hoppers
- Chain guides



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