



UHMW PE (Ultra High Molecular Weight Polyethylene)

**Material Specification
 (Typical Properties)**

Technical

Property	Method	Units	Specification
Moulding compound pressed	DIN EN ISO 527-2		PE, QN, 33 G 000
Pressed to moulding compound standard	DIN EN ISO 1872, Pt.1		
Density	ISO 1183	g/cm ³	0.93
Yield stress	DIN EN ISO 527	MPa	21
Elongation at Yield	DIN EN ISO 527	%	11
Tensile modulus of elasticity	DIN EN ISO	MPa	700
Impact Strength	DIN EN ISO	Kj/m ²	Without break
Ball indentation hardness	DIN EN ISO 2039-1	MPa	38
Mean coefficient of linear thermal expansion	DIN 53752	K-1	1,8 x 10 ⁻⁴
Vicat B	DIN EN ISO 179-1eU		82
Fire Behaviour	DIN 4102 B2		Normal flammability
Dielectric strength	DIN IEC 60243-1	kV/mm	44
Surface resistivity	DIN IEC 60093	Ohm	74>10 ¹⁴
Temperature (min)		°C	-260
Temperature (max)		°C	+80
Physiological safety in accordance with BfR			Yes