

# UHMW-PE

## TECHNICAL DATA SHEET

PROPERTIES	TEST METHOD	UNIT	VALUE
<b>GENERAL</b>			
Description	UNE-EN ISO 1043-1		PE-UHMW
Density	UNE-EN ISO 1183-1	g/cm <sup>3</sup>	0,93
Average molecular weight	Viscosimetry	mill. g/mol	5-6
Water Absorption	UNE-EN ISO 62	%	< 0.01
<b>MECHANICAL</b>			
Strength	UNE-EN ISO 527-1	MPa	27,5
Stress at break	UNE-EN ISO 527-1	MPa	21
Stiffness modulus	UNE-EN ISO 527-1	MPa	750
Elongation at break	UNE-EN ISO 527-1	%	460
Charpy impact strength	UNE-EN ISO 180	kJ/m <sup>2</sup>	>120
Durometrehardness	ISO 868	-	62
Relative weight loss by weathering mixing	ISO 15527	-	100
<b>THERMAL</b>			
Melting point	UNE-EN ISO 11357-1/-3	°C	130,7
Thermal conductivity	UNE-EN ISO 52612-1	W/(m·K)	> 0,4
Coefficient of linear thermal expansion	UNE-EN ISO 11357-1/-3	°C <sup>-1</sup>	1,5·2*10 <sup>4</sup>
Vicat softening temperature	DIN-EN ISO 306	°C	80
Operating Temperature °C	Long term Short term	°C °C	120 200/+80
Flammability according UL94 3/6 mm thick	-	-	HB
<b>ELECTRICAL</b>			
Specific step resistance	IEC 62631-3-1	Ω* cm	> 10 <sup>12</sup>
Surface resistivity	IEC 62631-3-1	Ω	> 10 <sup>12</sup>
Dielectric strength	IEC 60243-1	KV/mm	45

This information solely describes the safety requirements of the products and is based on our current state of knowledge: This does not imply the information is exhaustive in all cases. It is your responsibility to determine the validity of this information for application in each case. It does not give any assurance concerning the products described within the meaning of statutory warranty regulations.