

# TECHNICAL DATA SHEET

## PE – UHMW 1000

Properties	Method	Unit	Specification
Color	-	-	Green
Molecular weight	-	g/mol	5000000
Density	UNE-EN ISO 1183	g/cm <sup>3</sup>	0.930
Hardness	UNE-EN ISO 868	Shore D	64
Water absorption	UNE-EN ISO 62	%	< 0.1
Yield stress	UNE-EN ISO 527	MPa	22
Ultimate tensile strength	UNE-EN ISO 527	MPa	27
Elongation at break	UNE-EN ISO 527	%	290
Impact strength Charpy unnotched	UNE-EN ISO 179-1	(Pendulum 25J) (KJ/m <sup>2</sup> )	Do not break
Modulus of elasticity	UNE-EN ISO 178	MPa	915
Flexural stress	UNE-EN ISO 178	MPa	23
Wear Resistance (Based on GUR 4120 = 100)	Internal method based in sand slurry test	-	100
Melt temperature	UNE 1135-3	°C	137
VICAT softening point (B50)	UNE-EN ISO 306	°C	83
Coefficient of linear thermal expansion by °C	UNE 53126	m/(mK)	1.10 * 10 <sup>-4</sup>
Surface electrical resistivity	UNE 21303	Ohm	> 10 <sup>14</sup>
Service Temperature (Continuous)	-	°C	-150/+80
Service Temperature (Shortly)	-	°C	+130
FDA Grade	-	-	Yes

