Technical Data Sheet

Robacer®

PE-UHMW / PE 1000

Typical characteristics

- UV-resistant
- Good sliding properties
- Good wear properties
- Low specific weight
- High impact resistance
- High stiffness
- Chemical resistant

Typical industries

- Industrie papetière

	Test method	Unit	Guideline value
General properties			
Densité	DIN EN ISO 1183-1	g / cm^3	1,00
Water absorption	DIN EN ISO 62	%	0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Molecular weight		g/mol	$9,2 * 10^6$
Couleur			black
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	19
Elongation at break	DIN EN ISO 527	%	200
Tensile modulus of elasticity	DIN EN ISO 527	MPa	550
Notched impact strength	DIN EN ISO 179/1eA	kJ / m^2	>80
Shore hardness	DIN EN ISO 868 / 15 sec	scale D	64
Thermal properties			
Melting temperature	DIN EN ISO 3146	°C	135
Thermal conductivity	DIN EN ISO 8302	W / (m * K)	0,41
Thermal capacity	DIN 51005	kJ / (kg * K)	1,84
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	200
Service temperature, long term	Average	°C	-200 ... 80
Service temperature, short term (max.)	Average	°C	110
Electrical properties			

	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{10}$

The data given are standard values which are based on our experience & previous technical studies. These values are influenced by the design, processing conditions and environmental influences out of our control. The sustainability of the material for a given application is the responsibility of the user. Typing and printing errors reserved.

Chemical properties: chemically resistant to all aggressive media with the exception of highly oxidising acids. High resistant to corrosion. This material is resistant to all standard chemicals used in paper production, felt/wire cleaning and corrosion inhibition.