

# Polietileno PE-1000

General properties		Test method	
Density	DIN EN ISO 1183-1	g/cm3	0,93
Water absorption	DIN EN ISO 62	%	<0.01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Mechanical properties			
Yield stress	DIN EN ISO 527	N/mm2	20
Elongation at break	DIN EN ISO 527	%	>200
Tensile modulus of elasticity	DIN EN ISO 527	MPa	680
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m2	no break
Shore hardness	DIN EN ISO 868	scale D	63
Wear resistance	Sand-slurry		80
Thermal properties			
Melting temperature	ISO 11357-3	°C	135
Thermal conductivity	DIN 52612-1	W/(m*K)	0,40
Thermal capacity	DIN 52612	kJ/(kg*K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10 <sup>-6</sup> K <sup>-1</sup>	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 (106Hz)	IEC 60250		0,0001
Volume resistivity	IEC 60093	Ω *cm	>10 <sup>14</sup>
Surface resistivity	IEC 60093	Ω	>10 <sup>14</sup>
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV/mm	45

**Product characteristics**

- High abrasion and wear resistance
- Low coefficient of friction
- High impact strength

**Typical field of application**

- Bottling and food industry
- Mechanical engineering
- Bearing and packing industry

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.