

PE-HD natural Polyethylen

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183-1	g / cm ³	0,95
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	MPa	>22
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1000
Notched impact strength	DIN EN ISO 179	kJ / m ²	>10
Shore hardness	DIN EN ISO 868	scale D	>60
Thermal properties			
Melting temperature	ISO 11357-3	°C	130 - 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 ⁻⁶ / K	150 - 230
Service temperature, long term	Average	°C	-50 / +80
Service temperature, short term (max.)	Average	°C	100
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	67
Electrical properties			
Dielectric constant	IEC 60250	---	2,4
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250	---	0,0004
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 ¹⁴
Surface resistivity	DIN EN 62631-3-2	Ω	>10 ¹⁴
Comparative tracking index	IEC 60112	---	600
Dielectric strength	IEC 60243	kV / mm	>40