Technical Data Sheet

PE 500 Virgin EL black

Polyethylen electrically conductive

General properties	Test method	Unit	Guidline Value
Density	DIN EN ISO 1183-1	g / cm³	≥ 0,95
Average molecular mass	Viscosimetrically determined	Mio. g/mol	~ 0,5
Water absorption (saturation in normal climate 23 °C)	DIN EN ISO 62	%	< 0,01
Burning behavior UL94 (thickness 3/6 mm)	---	---	HB
Mechanical properties measured in normal climate DIN EN ISO 291 - 23/50			
Yield stress	DIN EN ISO 527-1/2	MPa	> 20
Tensile modulus of elasticity	DIN EN ISO 527-1/2	MPa	> 1100
Notched impact strength	DIN EN ISO 179-1/2	kJ / m²	> 25
Shore hardness	DIN EN ISO 868	scale D	60 - 63
Wear behavior (according to the sand slurry method)	DIN EN ISO 15527	%	350
Thermal properties			
Thermal conductivity (23 °C)	DIN 52612	W / (m * K)	0,40
Coefficient of linear thermal expansion (between 23 °C - 80 °C)	ISO 11359-2	m / (K * m)	$20 * 10^{-5}$
Service temperature long term	T mo long term	°C	~ -100 / +80
Service temperature short term (max.)	T mo short term	°C	~ 100
Melting temperature	ISO 11357-3	°C	135
Electrical properties measured in normal climate DIN EN ISO 291 - 23/50			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	$< 10^4$
Surface resistivity	DIN EN 62631-3-1	Ω	$< 10^4$
Dielectric strength	IEC 60243-1	kV / mm	---

The values shown in this table are only reference values and are for your information only. Products in Black may have antistatic properties. The majority of these values are based on information received from our raw material suppliers and should assist in choosing the right material. We point out that the materials chosen should be compatible to the local conditions.

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Stand:24.05.2023