



PET 18x1000 mm black

Article No.	P1003504
Category	PET

Technical Properties

Density & Weight

Property	Value	Unit	Test standard
Density	1.46	g/cm ³	ISO 1183

Moisture Absorption

Property	Value	Unit	Test standard
Water absorption to saturation	0.02	%	ISO 62
Water Absorption to Saturation	0.02	%	ISO 62

Tensile Properties

Property	Value	Unit	Test standard
Tensile Strength	52	MPa	ISO 527
Modulus of elasticity (tensile)	3400	MPa	ISO 527-2
Breakdown Voltage	58	MPa	ISO 527
Break Elongation	5	%	ISO 527-2

Flexural Properties

Property	Value	Unit	Test standard
Flexural Strength	75.25	MPa	ISO 178

Impact Resistance

Property	Value	Unit	Test standard
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Property	Value	Unit	Test standard
Notched impact strength (Charpy)	90	kJ/m ²	ISO 180
Impact Resistance (Charpy)	37	kJ/m ²	ISO 179/1eU

Hardness

Property	Value	Unit	Test standard
Hardness Shore D	77	° Shore D	ISO 868
Rockwell hardness	112	M-scale	
Ball pressure hardness	166	MPa	ISO 2039

Temperature Limits

Property	Value	Unit	Test standard
Melting point	224	°C	ISO 3146
Maximal operating temperature (short-term)	138.75	°C	UL746B
Maximum Operating Temperature	97	°C	
Minimum temperature	-25	°C	
Heat deflection temperature (HDT/A)	85	°C	ISO 75
Heat deflection temperature (HDT/B)	100	°C	ISO 75
Vicat softening temperature (VST/B/50)	219	°C	ISO 306

Thermal Conductivity

Property	Value	Unit	Test standard
Thermal Conductivity	0.33	W/(m·K)	DIN 52612

Thermal Expansion

Property	Value	Unit	Test standard
Thermal Expansion Coefficient	0.8	10 ⁻⁴ /K	DIN 11359

Insulation Properties

Property	Value	Unit	Test standard
Dielectric Strength	22	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹⁸	Ω·cm	DIN EN 62631-3-1
Dielectric Constant (1 MHz)	3.3	-	IEC 60250
Dielectric loss factor (1 MHz)	0.0	-	IEC 60250
Dielectric loss factor (100 Hz)	0.0	-	IEC 60250

Static spread

Property	Value	Unit	Test standard
Surface Resistivity	10 ¹⁴	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112