

Multiplast PET black

Multiplast PET black, is a semi-crystalline polyester thermoplastic offering high level of hardness, rigidity and strength. Multiplast PET black has:

- Exelent sliding characteristics
- Low sliding abrasion
- High creep resistance
- Good machining properties
- Low moisture absorption
- Excellent level of dimensional stability
- Low moister absorption
- Good UV stability

Properties	Units		
Modulus of elasticity (tensile test)	MPa	3400	
Tensile strength	MPa	91	
Tensile strength at yield	MPa	91	
Elongation at yield	%	4	
Elongation at break	%	15	
Modulus of elasticity (flexural test)	MPa	3400	
Flexural strength	MPa	134	
Compression modulus	MPa	2800	
Compressive strength (1% / 2%)	MPa	19 / 36	
Impact strength (Charpy)	kJ / m ²	27	
Notched impact strength (Charpy)	kJ / m ²	-	
Ball indentation hardness	MPa	195	
Glass transition temperature	°C	81	
Melting temperature	°C	244	
Service temperature	short term	°C	170
	long term	°C	110
Thermal expansion	23 °C – 60 °C	10 ⁻⁵ K ⁻¹	8
	23 °C – 100 °C	10 ⁻⁵ K ⁻¹	10
Specific heat	J / (g x K)	-	
Thermal conductivity	W /m K	-	

Properties	Units	
Specific surface resistance	Ω	10^{14}
Specific volume resistance	$\Omega \times \text{cm}$	10^{14}
Dielectric strength	kV / mm	-
Resistance to tracking (CTI)	V	-
Water absorption 24 h / 96 h (@ 23°C)	%	0,02 / 0,03
Resistance to hot water / bases	-	Poor resistance
Resistance to weathering	-	Limited resistance
Flammability	UL94	HB
Density	g/cm ³	1.39
Colour	-	Black

Availability:

Sheet: Size: 620 x 3000 mm (smaller sizes are possible)
 Thickness: 10 - 100 mm

Rod: Length: 3000 mm (shorter lengths are possible)
 Diameter 16 - 150 mm

Cut pieces: On request

Parts: Finished products according to drawing