Nylon 66 Black

PA66 (Polyamide 66)
Filler: Molybdenum disulfide
Colour: Black
Density: 1.15g/cm^3

Material Data Sheet

Mechanical Properties	Parameter	Value	Unit	DIN/EN/ISO
Modulus of elasticity (tensile test)	1mm/min	3200	MPa	527-2
Tensile strength	50mm/min	84	MPa	527-2
Tensile strength at yield	50mm/min	83	MPa	527-2
Elongation at Yield	50mm/min	10	%	527-2
Elongation at break	50mm/min	40	%	527-2
Flexural strength	2mm/min 10N	114	MPa	178
Modulus of elasticity (flexural test)	2mm/min 10N	3100	MPa	178
Compression Strength	1%/2% 5mm/min 10N	20/38	MPa	604
Compression modulus	5mm/min 10N	2700	MPa	604
Impact strength (Charpy)	Max. 7,5J	N.B.	kJ/m²	179-1eU
Notched impact strength (Charpy)	Max. 7,5J	5	kJ/m²	179-1eA
Ball indentation hardness	-	168	MPa	2039-1

Thermal Properties	Parameter	Value	Unit	DIN/EN/ISO
Glass transition temperature	-	52	°C	53765
Melting temperature	-	253	°C	53765
Service temperature	Short term	170	°C	-
Service temperature	Long term	100	°C	-
Thermal expansion (CLTE)	23-60°C, Long	10	$10^{-5}K^{-1}$	11359-1;2
Thermal expansion (CLTE)	23-100°C, Long	10	$10^{-5}K^{-1}$	11359-1;2
Specific heat	-	1.5	J/(g*K)	22007-4:2008
Thermal conductivity	-	0.36	W/(K*m)	22007-4:2008

Electrical Properties	Parameter	Value	Unit	DIN/IEC
Surface resistance	-	10^{12}	Ω	60093

Other Properties	Parameter	Value	Unit	DIN/EN/ISO/IEC
Water absorption	24h/96h (23°C)	0.2/0.4	%	62
Resistance to hot water/bases	-	(+)	-	-
Resistance to weathering	-	(+)	-	-
Flammability (UL94)	Corresponding to	HB	-	60695-11-10

Direct Plastics Ltd. Rother Valley Way, Holbrook, Sheffield, S20 3RW