



Nylon Cast 6 HS Blue

PA6C (Cast Polyamide 6 + UV & Heat Stabilisers)

Colour: Blue

Density: 1.14g/cm³

Material Data Sheet

Mechanical Properties	Parameter	Value	Unit	DIN/EN/ISO
Modulus of elasticity	50mm/min	4000	MPa	527-1/2
Tensile strength	50mm/min	80	MPa	527-1/2
Elongation at break	50mm/min	>20	%	527-1/2
Flexural strength	1.5mm/min 10N	105	MPa	178
Modulus of elasticity (flexural test)	1.5mm/min 10N	3300	MPa	178
Compression Strength	5mm/min 10N	95	MPa	604
Compression modulus	1mm/min 10N	2700	MPa	604
Impact strength (Izod)	Notched	5.40	kJ/m ²	180
Hardness (shore D)	-	84	-	-

Thermal Properties	Parameter	Value	Unit	DIN/EN/ISO
Melting temperature	-	220	°C	-
Service temperature	Short term	180	°C	-
Service temperature	Long term	115	°C	-
Thermal expansion (CLTE)	23-55°C, Long	8 x 10 ⁻⁵	°C ⁻¹	11359-2
Thermal conductivity	-	-	W/m.°C	8301

Electrical Properties	Parameter	Value	Unit	DIN/IEC
Surface resistance ROA	-	1 x 10 ¹²	Ohm	60093
Volume resistivity	-	1 x 10 ¹³	Ohm.m	60093
Dielectric constant	-	3.7	1MHz	60250
Dissipation strength	-	25	kV/mm	60243-1
Comparative tracking index	-	600	CTI	60112

Other Properties	Parameter	Value	Unit	DIN/EN/ISO/IEC
Water absorption saturation	Immersion 23°C	5.3	%	62
Water absorption 24 hours	Immersion 23°C	0.3	%	62 (modified)
Resistance to weathering	-	(+)	-	-
Flammability (UL94)	-	HB	-	60695-11-10



Direct Plastics Ltd. Unit 14 Portland Business Park, Richmond Park Road, Sheffield, S13 8HS

The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales. Unless otherwise stated, these values represent averages taken from injection moulding samples. We reserve the right of technical alterations.