



SPECIFICATION SHEET

**PP-Nylon 6**

Properties	Test Method	Notes	Unit	Result
Density	ISO1183:1987	Test method A	g/cm <sup>3</sup>	1.15
Moisture absorption	ISO62:1999	50% RH, 23°C	%	-
Water Absorption (24 hrs)	ISO 62:1999	Immersion, 23°C	%	0.20
Water absorption (saturation)	Iso 62:1999	Immersion, 23°C	%	6
<b>Mechanical</b>				
Tensile Strength	ISO 527-1/2:1993	Sample type 1B, 50mm min <sup>-1</sup>	mPa	85
E-modulus	ISO 527-1/2:1993	Sample type 1B, 50mm min <sup>-1</sup>	mPa	4100
Elongation at break	ISO 527-1/2:1993	Sample type 1B, 50mm min <sup>-1</sup>	%	>20
Compression strength	ISO 604:2002	Sample type B, 5mm min <sup>-1</sup>	mPa	105
Compressive modulus	ISO 604:2002	Sample type A, 1mm min <sup>-1</sup>	mPA	3000
Flexural Strength	ISO 178:2001	1.5mm min <sup>-1</sup>	mPa	115
Flexural modulus	ISO 178:2001	1.5mm min <sup>-1</sup>	mPa	3700
Izod impact strength	ISO 180:2000	Sample type A (notched)	KJ/m <sup>2</sup>	4.5
Charpy impact strength	ISO 179-2:1999	Notched	KJ/m <sup>2</sup>	-
Hardness (shore D)	ISO 868:2003	-	-	85
Coefficient of friction (dynamic)	-	31.4m/min, 1.75MPa	-	0.25
Limiting PV	-	-	mPa/m.min	-
Wear rate	-	31.4m/min, 1.75mPa	Mg/km	-
k-factor	-	31.4m/min, 1.7mPa	mm <sup>3</sup> /Nm	-

Properties	Test Method	Notes	Unit	Result
<b>Thermal</b>				
Melting temperature	-	-	°C	220
Glass transition temperature (Tg)	ISO 11359-2:1999	-	°C	-
Heat deflection temperature HDT/A	ISO 75	.80mPa	°C	210
Heat deflection temperature HDT/B	ISO 75	0.45mPa	°C	220
Maximum intermittent service temperature	-	-	°C	170
Maximum continuous service temperature	-	5000 hours	°C	105
Minimum intermittent service temperature	-	-	°C	-100
Minimum continuous service temperature	-	-	°C	-40
Coefficient of linear thermal expansion (TMA)	ISO 11359-2:1999	23°C - 55°C	°C-1	$8 \times 10^{-5}$
Thermal conductivity	ISO 8301:1991	Mean T = 20°C	W/m. °C	-
Flammability	IEC 60695-11-10:2003-08	-	-	HB
<b>Electrical</b>				
Dielectric constant	IEC 60250:1969-01	1MHz	-	3.7
Dielectric Constant (Low frequency)	-	100Hz	-	4
Dissipation Factor	IEC60250:1969-01	100Hz	Hz	-
Dielectric Strength	IEC 60243-1:1998-01	-	kV/mm	25
Volume resistivity	IEC 60093:1980-01	-	Ohm.m	$1 \times 10^{13}$
Surface resistivity ROA	IEC 60093:1980-01	-	Ohm	$1 \times 10^{12}$
Comparative tracking index	IEC 60112:2003-01	-	CTI	600

**QUALITY ASSURED PRODUCTS WITH FULL TRACEABILITY**

Care should be taken in selecting the most suitable quality for each application.

Advice is available but final responsibility remains with the customer.