

# Nylon 6 Rod Extruded Technical Sheet

Natural / Black



	Test	Unit	Value
Density:	ISO 1183	g/cm <sup>3</sup>	1.14
Moisture pick-up till saturation (in normal climate 23 °C) :	ISO 62	%	2.5
Water absorption till saturation (in water at 23 °C) :	ISO 62	%	9
Temperature for using in air (maximum):	Max. short term	°C	160
Temperature for using in air (maximum):	Max. short term	°C	85
Temperature for using in air (minimum):	-	°C	-40
Heat distortion temperature (HDT A process):	ISO 75-2	°C	70
Coefficient of linear expansion, at length (23-60) °C :	DIN 53752	1/K	0.9·10 <sup>-4</sup>
Thermal conductivity (23 °C):	DIN 52612	W/(K·m)	0.28
Flammability according UL standard:	UL 94	Grade	HB
Vicat softening temperature (VST/B/50):	ISO 306	°C	-
Melting point DSC (10 K/min):	ISO 3146	°C	220
Tensile stress at yield (v = 50 mm/min):	ISO 527-2	N/mm <sup>2</sup>	76
Tensile stress at break (v = 5 mm/min):	ISO 527-2	N/mm <sup>2</sup>	-
Nominal percentage elongation at break:	ISO 527-2	%	> 50
Tensile modulus of elasticity:	ISO 527-2	N/mm <sup>2</sup>	3250
Flexural modulus of elasticity:	ISO 178	N/mm <sup>2</sup>	-
Ball indentation hardness (value at 30 s):	ISO 2039-1	N/mm <sup>2</sup>	150
Rockwell hardness:	ISO 2039-2	-	M 85
Charpy impact strength (23 °C) :	ISO 179/1eU	kJ/m <sup>2</sup>	n. br.**
Charpy impact strength - notched (23 °C) :	ISO 179/1eA	kJ/m <sup>2</sup>	5,5
Specific volume resistivity:	IEC 60093	Ω·m	10 <sup>12</sup>
Specific surface resistivity:	IEC 60093	Ω	10 <sup>13</sup>

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Dielectric constant (at 1 MHz)*:	IEC 60250	-	3.3
Dielectric constant (at 100 Hz)*:	IEC 60250	-	3.9
Dissipation factor (at 1 MHz)*:	IEC 60250	-	0.021
Dissipation factor (at 100 Hz)*:	IEC 60250	-	0.019
Dielectric strength K20/K20:	IEC 60243-1	kV/mm	25
Comparative tracking index (CTI):	IEC 60112	-	600

All The above information is for guide purposes only. The data has been taken from standard test results provided by manufactures.