



Material: Nylon 66

Material with a higher mechanical strength, stiffness, heat and wear resistance than Extruded Nylon 6. It also has better creep resistance but its impact strength and mechanical damping ability are reduced.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Natural(cream)/Black
Density	ISO 1183	g/cm ³	1.14
Water Absorption - saturation in air (23°C/50%RH)	-	%	2.4
Water Absorption - saturation in water (23°C)	-	%	8.00
Tensile strength*1	ISO 527	N/mm ²	90
Tensile modulus of elasticity*1	ISO 527	N/mm ²	3450
Elongation at break*1	ISO 527	%	>40
Impact - Charpy*1	179/1eU	kJ/m ²	No break
Impact – Izod notched	180/2A	kJ/m ²	4.5
Hardness	Rockwell Shore D	-	M88
Melt point	-	°C	255
Max service temp in air short periods	-	°C	180
Max service temp continuously for 20000hrs	-	°C	80
Linear thermal expansion coefficient	-	K ⁻¹ x10 ⁻⁵	8.0
Thermal Conductivity	-	W/(K.m)	0.28
Flammability (6mm thickness)	-	-	V-2
Volume resistivity*1	IEC93	Ohm.cm	>10 ¹⁴
Dielectric strength*1	IEC243	Kv/mm	27
Outside applications – UV resistance	-	-	A/B
Acids – strong (Ph<3)	-	-	C
Alkalis – strong (pH>11)	-	-	B/C
Chlorinated Hydrocarbons	-	-	A/B
Hot Water	-	-	B
‘A’ – Acceptable service, ‘B’ – Limited, ‘C’ – Unacceptable			
*1 Measured on dry test specimens (where applicable)			

Availability:

Rod, 1m & 3m long – 5-250mm diameter

Sheet, 1m & 2m long x 1m wide - 2-6mm thickness

Plate, 1m & 3m long x 610 wide – 8-100mm thickness

Tube, 1m & 3m long x 20–100mm od x 10–80mm id.

Coiled Strip, 0.25–3.18mm thick x 25.4-101.6mm wide (Length dependent on thickness)

Applications:

Racks, Pinions, Gears, Bearings, Rollers, Wheels, Cams, Nuts, Valve seats, Pulleys, Gaskets, Electrical Insulator.

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The data shown are typical values and are not intended to represent specifications. Their aim is to guide the user toward a material choice.

Not all material sizes shown within the availability programme of this data sheet are available as standard.

Please contact ABG Rubber and Plastics Ltd for further details.