



Material: Nylon 66 + MoS2

Nylon 66 with molybdenum disulphide filler. Giving the material even better wear resistance and a lower coefficient of friction. Stiffness, tensile strength and temperature resistance are also improved. High impact strength, good fatigue resistance, high mechanical damping, low weight (1/6 vs steel) and good alkaline resistance.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Grey/Black
Density	ISO 1183	g/cm ³	1.15
Water Absorption - saturation in air (23°C/50%RH)	-	%	2.30
Water Absorption - saturation in water (23°C)	-	%	7.80
Tensile strength* ¹	ISO 527	N/mm ²	92
Tensile modulus of elasticity* ¹	ISO 527	N/mm ²	3500
Elongation at break* ¹	ISO 527	%	20
Impact - Charpy* ¹	179/1eU	kJ/m ²	No break
Impact – Izod notched	180/2A	kJ/m ²	4
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)	0.29
Flammability (6mm thickness)	-	-	HB
Volume resistivity* ¹	IEC93	Ohm.cm	>10 ¹⁴
Dielectric strength* ¹	IEC243	Kv/mm	26
Outside applications – UV resistance	-	-	A
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 – 6-50mm diameter

Plate, 1m & 3m long x 610wide – 8-50mm thickness

Tube, 1m & 3m long x 20–66mm od x 10–55mm 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, Cable Sheaves, 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.