



Material: PET-P

PET-P offers a unique combination of physical properties compared to nylon or acetal. It has better wear and abrasion resistance, wet or dry, as well as significantly better dimensional stability. Physiologically inert as well ie suitable for food contact. Ideal for tight tolerance machined parts which have to sustain high loads and/or are subject to wear.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Natural(White)/Black
Density	ISO 1183	g/cm ³	1.39
Water Absorption - saturation in air (23°C/50%RH)	-	%	0.5
Water Absorption - saturation in water (23°C)	-	%	0.50
Tensile strength* ¹	ISO 527	N/mm ²	90
Tensile modulus of elasticity* ¹	ISO 527	N/mm ²	3700
Elongation at break* ¹	ISO 527	%	15
Impact - Charpy* ¹	179/1eU	kJ/m ²	>50
Impact – Izod notched	180/2A	kJ/m ²	2
Hardness	Rockwell Shore D	-	M96
Melt point	-	°c	255
Max service temp in air short periods	-	°c	160
Max service temp continuously for 20000hrs	-	°c	100
Linear thermal expansion coefficient	-	K ⁻¹ x10 ⁻⁵	6.0
Thermal Conductivity	-	W/(K.m)	0.29
Flammability (6mm thickness)	-	-	HB
Volume resistivity* ¹	IEC93	Ohm.cm	>10 ¹⁵
Dielectric strength* ¹	IEC243	Kv/mm	22
Outside applications – UV resistance	-	-	A
Acids – strong (Ph<3)	-	-	B
Alkalis – strong (pH>11)	-	-	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 long – 10-210mm diameter

Rod: 3m long – 10-150mm diameter

Plate: 1m & 3m long x 610mm - 8-100mm thickness

Tube: 1m & 3m long - 20-200mm od x 12-160mm id

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

Applications:

Slideways, Thrust washers, Bushings, Heavily loaded bearings and rollers, Pump components

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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.