



Material: PTFE

High molecular weight polymer with high heat resistance, high resistance to chemical agents and solvents, high anti-adhesiveness, good dielectric properties, low coefficient of friction and non-toxic. Suitable for use in temperatures ranging from -200°C to + 260°C enables PTFE to be used for a large range of products and applications.

Technical Specification

Property	Test Method	Units	Value
Specific Gravity	ASTM D792	-	2.17
Tensile Strength	ASTM D1457	N/mm ²	25
Elongation at Break	ASTM D1457	%	280
Compressive Strength 1% Deformation	ASTM D695	N/mm ²	4
Flexural Strength 0.7N/mm ²	ASTM D790	N/mm ²	No Break
Impact Strength (Izod) 57°C	ASTM D265	J/cm	1.1
Impact Strength (Izod) 23°C	ASTM D265	J/cm	1.6
Impact Strength (Izod) 77°C	ASTM D265	J/cm	3.3
Hardness	ASTM D2240	Shore D	55
Coefficient of Friction - Static	ASTM D3028	-	0.09
Coefficient of Friction - Dynamic	ASTM D3028	-	0.05
Coefficient of Friction - PTFE/Steel Lubricated	ASTM D3028	-	0.03
Coefficient of thermal expansion (25-100°C)	ASTM E831	°C	16 x 10 ⁻⁵
Thermal Conductivity	ASTM C177	W/mK	0.20
Specific Heat 0°C	-	KJ/Kg.K	0.96
Specific Heat 50°C	-	KJ/Kg.K	1.05
Volume resistivity	ASTM D257	Ohm/cm	10 ¹⁷
Surface resistivity	ASTM D257	Ohm	10 ¹⁵
Dielectric constant (50x109Hz)	ASTM D150	-	2.1
Dielectric strength (short-time air 0.5mm)	ASTM D149	kV/mm	55
Dissipation factor	ASTM D150	-	<0.0002
Water absorption	ASTM D570	%	<0.01
Flammability ATB	ASTM D635	sec	<5
Flammability AEB	ASTM D635	mm	<5

Availability:

Sheet - 600 x 600mm, 1200 x 1200mm, 1500 x 1500mm, 1-80mm thick

Rod - Various please ask.

Tube - Various please ask.

Skived Tapes - Various please ask.

Also available in various filled grades eg glass fibre, carbon and graphite.

Applications:

Printing guides, Valve Seats, Insulators, bearings, bushings, laboratory equipment, pump parts.

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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.