



Material: PTFE + Mica Filler (Fluorosint® 500)

PTFE has poor creep and wear resistance. These properties can be improved by the addition of a mineral filler.

In the case of Fluorosint® 500 this is achieved by the addition of mica. Excellent chemical resistance, harder, more rigid, better wear and creep resistance than PTFE over a wide operating temperature. Non stick surface with superb electrical/dielectric performance.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Light Fawn
Density	ISO 1183	g/cm ³	2.32
Water Absorption - saturation in air (23°C/50%RH)	-	%	-
Water Absorption - saturation in water (23°C)	-	%	3.0
Tensile strength* ¹	ISO 527	N/mm ²	8
Tensile modulus of elasticity* ¹	ISO 527	N/mm ²	2200
Elongation at break* ¹	ISO 527	%	10
Impact - Charpy* ¹	179/1eU	kJ/m ²	No break
Impact – Izod notched* ¹	180/2A	kJ/m ²	4
Hardness	Rockwell Shore D	-	R55
Melt point	-	°C	327
Max service temp in air short periods	-	°C	280
Max service temp continuously for 20000hrs	-	°C	260
Linear thermal expansion coefficient	-	K ⁻¹ x10 ⁻⁵	4.5
Thermal Conductivity	-	W/(K.m)	0.77
Flammability (3mm thickness)	-	-	V-0
Volume resistivity* ¹	IEC93	Ohm.cm	>10 ¹²
Dielectric strength* ¹	IEC243	Kv/mm	11
Outside applications – UV resistance	-	-	A
Acids – strong (Ph<3)	-	-	A
Alkalis – strong (pH>11)	-	-	A
Chlorinated Hydrocarbons	-	-	A
Hot Water	-	-	B
'A' – Acceptable service, 'B' – Limited, 'C' – Unacceptable			
* ¹ Measured on dry test specimens (where applicable)			

Availability:

Rod: 150, 305 & 1220mm long – 12.7-222.25mm diameter

Plate: 305mm long x 305mm wide – 6.35-76.2mm thickness

Tube: 150 & 305mm long, 31.75-304.80mm od x 11.1–254mm id.

Also available in an FDA/EU approved food grade, Fluorosint® 207 (white).

Applications:

Bearings, Thrust washers, slideways

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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.