

QUADRANT EPP PRODUCT DATA SHEET

FLUOROSINT® 500

June 2001

(PTFE + Mica Filler)

PTFE has poor creep and wear resistance, but 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 (pH 0-14)
- Harder & more rigid than PTFE
- Better wear resistance than PTFE
- Superb electrical/dielectric performance
- Wide operating range (-260°C to 260°C)
- Improved creep resistance over PTFE
- Non-stick surface

Common applications: Bearings; Thrust washers; Slides.

Delivery Programme

Rod 1220mm long			
Diameter (mm):	12.7 (Min)	31.75 (Max)	
Rod 305mm long			
Diameter (mm):	38.1 (Min)	101.6 (Max)	
Rod 150mm long			
Diameter (mm):	107.95 (Min)	222.25 (Max)	
Plate 305mm long			
Thickness (mm):	6.35 (Min)	76.2 (Max)	
Width (mm):	305		
Tube 305mm long			
O.D. (mm):	31.75 (Min)	304.8 (Max)	
I.D. (mm):	12.7 (Min)	254 (Max)	
Tube 150mm long			
O.D. (mm):	38.1 (Min)	196.85 (Max)	
I.D. (mm):	11.1 (Min)	44.45 (Max)	

Distributor

**Gilbert Curry
Industrial Plastics Co Ltd**

Tel: 024 76 588 388

Fax: 024 76 588 389

email: plastics@gcip.co.uk



Technical Specification

Property	ISO Methods	Units	FLUOROSINT® 500
Colour	-	-	Light fawn
Density	1183	g/cm ³	2.32
Water absorption			
Saturation in air (23°C / 50% RH)	-	%	-
Saturation in water (23°C)	-	%	3.00
Tensile strength* ¹	527	N/mm ²	8
Tensile modulus of elasticity* ¹	527	N/mm ²	2200
Elongation at break* ¹	527	%	10
Impact - Charpy* ¹	179/1eU	kJ/m ²	no break
Impact - Izod notched* ¹	180/2A	kJ/m ²	4
Hardness			
	Rockwell	-	R55
	Shore D	-	-
Melt point			
	-	°C	327
Max allowable service temp in air			
for short periods	-	°C	280
continuously for 20,000hrs	-	°C	260
Linear thermal expansion coefficient	-	K ⁻¹ x 10 ⁻⁵	4.5
Thermal conductivity	-	W/(K.m)	0.77
Flammability* ² (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 service; 'C' - Unacceptable.

*¹ Measured on dry test specimens (where applicable)

*² Tests completed by Quadrant EPP, using UL test methods

Not all material sizes shown within the delivery programme section of this data sheet are available as standard. Please contact Quadrant EPP UK Ltd for further details.

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