FLUOROCARBON

Issue 2

DATA SHEET

MATERIAL DATA SHEET

MATERIAL REFERENCE – **FLUORINOID® FL 301**

DESCRIPTION GLASS FIBRE FILLED ETFE

FORMULATION 75% ETFE, 25% GLASS FIBRE (BY WEIGHT)

This material exhibits relatively high strength, good chemical resistance, excellent radiation resistance and good wear and creep properties.

TYPICAL PHYSICAL PROPERTIES #

SPECIFIC GRAVITY		1.86 - 1.87	g/cm^3
TENSILE STRENGTH		69-83 (10000-12000)	MPa (psi)
ELONGATION		6 - 9	%
SHORE D HARDNESS		74	
FLEXURAL MODULUS		5.2-6.6 (7.5-9.5 $\times 10^5$)	GPa (psi)
IMPACT STRENGTH (NOTCHED, IZOD)	@ 23°C (73°F)	7.0 (373.73)	ft-lb/in (J/m)
	@ -40°C (-40°F)	>2.5 (133.475)	ft-lb/in (J/m)
COEFFICIENT OF FRICTION, 100 fpm, 100 psi		0.31	
WEAR FACTOR		16 x 10^{-10}	in^3 min/ft·lb·hr
DIELECTRIC STRENGTH @125 mil		410 (16.1)	V/mil (kV/mm)
WATER ABSORPTION (24 hours at 23°C)		0.01	%
DISTORTION TEMPERATURE @ 264 psi		210 (410)	°C (°F)
UPPER SERVICE TEMPERATURE		150 (302)	°C (°F)
COEFFICIENT OF LINEAR EXPANSION		0.4 x 10^{-5}	in/in/°F
		0.72 x 10^{-5}	cm/cm/°C

These figures are typical values for the material and do not represent a product specification. Properties will vary depending on the source of raw material, method of processing, physical form of the product, direction of measurement etc.

Fluorocarbon Headquarter
Unit C Argyle Gate, Argyle Way
Stevenage, Hertfordshire
SG1 2AD, UK
Tel: +44 (0)1992 550731
Fax: +44 (0)1992 584697
Email: info@fluorocarbon.co.uk
Web: www.fluorocarbon.co.uk