

Issue 4

DATA SHEET

MATERIAL REFERENCE – FLUORINOID® FL 354

DESCRIPTION CARBON FIBRE FILLED PEEK

PEEK is a high performance engineering thermoplastic with good chemical resistance, good wear resistance, high maximum use temperature, low flammability and good radiation resistance. The carbon fibre filler gives a higher tensile strength and lower coefficient of friction.

TYPICAL PHYSICAL PROPERTIES

	Injection	Extruded	Compression
SPECIFIC GRAVITY	1.44	1.40	1.42
TENSILE STRENGTH (MPa)	224	160	120
ELONGATION	2%	3%	4%
CTE Along Flow & below Tg (ppm K-1)	5	5	-
CTE perpendicular to Flow & below Tg	40	40	-
CTE below Tg	-	-	25
COMPRESSIVE STRENGTH	240 MPa		
MAXIMUM CONTINUOUS USE TEMPERATURE	260°C		
COEFFICIENT OF FRICTION AT 20°C, 30.5m / min, 70Kg LOAD	0.16		
LIMITING PV AT 20°C, 30.5m / min	813 MPa.m / min		
HARDNESS ShoreD	88		
VOLUME RESISTIVITY	$1.4 \ge 10^5 \Omega.cm$		

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.

Fluorinoid® is a registered trademark of Fluorocarbon Group



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