

Issue 3

## DATA SHEET

## MATERIAL REFERENCE – FLUORINOID® FL FL 328

<u>DESCRIPTION</u> POLYAMIDE 66 (NYLON 66)

A polyamide material offering high tensile strength and stiffness, high tensile and flexural modulus, excellent wear characteristics, high heat deflection temperature under load, good resistance to abrasion and good impact strength. FL 328 is hygroscopic which results in dimensional and property changes under the influence of humidity.

## TYPICAL PHYSICAL PROPERTIES #

Properties	DIN ASTM	Unit	Dry	Wet
Density	ASTM D792	g/cm <sup>3</sup>	1.14	
Tensile strength at yield	ASTM D638	MPa	80	60
Elongation at break	ASTM D638	%	40	150
Modulus of elasticity in tension	ASTM D638	MPa	3100	2000
Modulus of elasticity in flexure	ASTM D790	MPa	2830	
Ball indentation hardness	ISO 2039/1	MPa	170	100
Coefficient of friction against hardened				
and ground steel			0.35 -	- 0.42
$p = 0.05 \text{ N/mm}^2, v = 0.6 \text{ m/s}$				
Crystalline melting point	DIN 53736	°C	260	
Heat distortion temperature Method A	ISO R75	°C	100	
Method B	ISO R75	-C	>200	
Maximum service temperature S	Short term	°C	170	
L	ong term		100	
Dielectric constant at 10 <sup>5</sup> Hz	53483		3.6 - 5	
Specific volume resistance	60093	$\Omega$ .cm	$10^{12}$	
Dielectric Strength 1mm ASTM D14	ASTM D149	kV/m	28 - 30	
	ASTWIDITS	m		
Moisture absorption: Equilibrium in		%	2.8	
standard atmosphere			2.0	
Water absorption at saturation at 23°C		%	8.5	

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

Fluorocarbon Headquarter Unit C Argyle Gate, Argyle Way Stevenage, Hertfordshire SG1 2AD, UK

SG1 2AD, UK
Tel: +44 (0)1992 550731
Fax: +44 (0)1992 584697
Email: info@fluorocarbon.co.uk
Web: www.fluorocarbon.co.uk