

**MATERIAL SPECIFICATION** 

## PRODUCT

## fluteck K303

(Compression moulded 30% carbon fibers/graphite/PTFE reinforced Polyetheretherketone)

	Property	Method	Units	Specification
Physical	Specific gravity	ASTM D 792	g/cm <sup>3</sup>	1,45
	Water absorption, 24 hours	ASTM D 570	%	0,3
	Mold shrinkage, along flow	ASTM D 955	%	0.3
Mechanical	Elongation at break	ASTM D 638	%	≥1.8
	Tensile strength, at break (23℃)	ASTM D 638	MPa	≥ 130
	Tensile modulus	ASTM D 638	GPa	≥ 10
	Izod impact strength, unnotched	ASTM D 256	J/m	≥ 450
	Hardness Shore	ASTM D 2240	Shore D	≥ 80
	Hardness Rockwell	ASTM D 785	Rockwell	≥ 75
	Coefficient of fiction (Dry conditions)	ASTM D 3702		≤0.3
	Coefficient of friction (Lubrificated conditions)	ASTM D 3702		≤0.090
Thermal	Peak Melting Temperature	ASTMD3418	Ĵ	342
	Specific heat capacity at 23℃	DSC	kJ kg-1 ℃-1	1.8
	Thermal conductivity at 23℃	DSC	W/mK	0.87
	Deflection Temperature, 1.8MPa unannealed	ASTMD648	C	290
	Maximum service temperature	Internal test	C	310
	Flammability	UL94		V-0



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TYPICAL PROPERTIES

## fluteck<sup>®</sup> K303 – (Compression moulded 30% carbon fibers/graphite/PTFE reinforced PEEK)

## **General features:**

- Tribological applications for high strength
- Excellent wear resistance
- Very low coefficient of friction
- · Low coefficient of thermal expansion
- · Chemically resistant to aggressive environments
- High heat resistance
- Flame retardant

**Note:** The information contained in this technical data sheet are based on our experience to date and we believe it to be reliable. It is intended only as a guide for use at your own discretion. We can not guarantee favourable results and assume no liability in connection with its use or the use of the products described. None of this information is to be taken as a licence to operate under, or a recommendations to infringe any existing patents. Prior to any application the above product has to be tested and accepted by the processor.

In order to complete this data sheet, you can require us a DSC / TGA analysis and a microscope picture on our website http://www.fluteck.com

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