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## CARBON GRAPHITE FILLED PTFE MATERIAL SPECIFICATION SHEET (CG)

**DESCRIPTION:** Carbon and Graphite

**TYPE: 90% PTFE:** 90% PTFE 8% Carbon 2% Graphite (by weight)

### **TYPICAL APPLICATIONS:**

Carbon and graphite filled PTFE is used in dynamic sealing applications. Carbon filler gives good compression and wear resistance, good thermal conductivity and low permeability. Graphite improves the self-lubricating properties.

### **\*TYPICAL PHYSICAL PROPERTIES**

Density	g/cm <sup>3</sup>	ASTM D792	2.12 – 2.15
Hardness Shore D	Points	ASTM D2240	58 – 63
Tensile Strength	N/mm <sup>2</sup>	ASTM D4745	20 – 26
Elongation at Breal	%	ASTM D4745	200 – 250
Compressive strength at 1% deformation	N/mm <sup>2</sup>	ASTM D695	6 – 7
Deforementation under load at room temperature 24 hours At 13.7 N/mm <sup>2</sup>	%	ASTM D621	9 – 12
Permanent deformation as above after releasing of 24 hours at room temperature	%	ASTM D621	3 – 5
Coefficient of friction (dynamic)	/	ASTM D1894	0.09
Wear Factor (K)	Cm <sup>3</sup> min 10 <sup>-8</sup> / kg m h	ASTM D3702	140 - 150

### **THERMAL PROPERTIES**

Service Temperature (min/max)	°C	/	-200 / + 260
Thermal expansion coefficient (liner 25- 100°C)	10 <sup>-5</sup> / °C	ASTM D696	11 – 15

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

Registered in England 07549806  
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