



Material: PEEK Carbon Filled 30%

30% carbon fibre reinforced grade combines even better mechanical properties than PEEK Glass Filled 30% with an optimum wear resistance. The carbon fibres also provide a 3.5 times higher thermal conductivity than unreinforced PEEK - dissipating heat from the bearing surface faster.

Technical Specification

Property	Test Method	Units	Value
Colour	-	-	Black
Density	ISO 1183	g/cm ³	1.41
Water Absorption - saturation in air (23°C/50%RH)	-	%	0.14
Water Absorption - saturation in water (23°C)	-	%	0.30
Tensile strength* ¹	ISO 527	N/mm ²	130
Tensile modulus of elasticity* ¹	ISO 527	N/mm ²	7700
Elongation at break* ¹	ISO 527	%	5
Impact - Charpy* ¹	179/1eU	kJ/m ²	35
Impact – Charpy notched* ¹	180/2A	kJ/m ²	4
Hardness	Rockwell Shore D	-	M102
Melt point	-	°C	340
Max service temp in air short periods	-	°C	310
Max service temp continuously for 20000hrs	-	°C	250
Linear thermal expansion coefficient	-	K ⁻¹ x10 ⁻⁵	2.5
Thermal Conductivity	-	W/(K.m)	0.92
Flammability (3mm thickness)	-	-	V-0
Volume resistivity* ¹	IEC93	Ohm.cm	10 ⁵
Dielectric strength* ¹	IEC243	Kv/mm	-
Outside applications – UV resistance	-	-	A
Acids – strong (Ph<3)	-	-	A
Alkalis – strong (pH>11)	-	-	A
Chlorinated Hydrocarbons	-	-	A
Hot Water	-	-	A
‘A’ – Acceptable service, ‘B’ – Limited, ‘C’ – Unacceptable			
* ¹ Measured on dry test specimens (where applicable)			

Availability:

Rod: 500mm, 1m & 3m long – 6-80mm diameter

Plate: 500mm, 1m & 3m long x 525mm wide – 5-8mm thickness

Plate: 500mm & 1m long x 305 & 625mm wide – 10-60mm thickness

Plate: 3m long x 305 & 625mm wide – 10-25mm thickness

Tube: 1m & 3m long, 50–200mm od x 30–160mm id

Applications:

Bearings, Valve Seats, Pump Components, Rollers, Gears, High Temp Insulation, Components in boiling water or steam.

Tel: 01604 700 880

Web: www.abgrp.co.uk

Email: sales@abgrp.co.uk

The data shown are typical values and are not intended to represent specifications. Their aim is to guide the user toward a material choice.

Not all material sizes shown within the availability programme of this data sheet are available as standard.

Please contact ABG Rubber and Plastics Ltd for further details.