

# DMR Material PTCF15-GD60

## Carbon Fibre Filled PTFE



### MATERIAL DATA SHEET (Version 5.1 – 05.2019)

#### Description

DMR Seals PTCF15-GD60 material is a Carbon Fibre reinforced PTFE material. The addition of Carbon Fibre to PTFE provides higher compressive strength, increased hardness, excellent sliding ability, lower wear and lower creep values.

PTCF15-GD60 material is commonly used for O-Ring energised composite seals and spring energised seals and can be utilised for seals in both unlubricated and lubricated hydraulic fluids, although water-based fluids with zinc additives should be avoided.

#### Physical Properties

Property	Test method	Unit	Typical value
Colour			Grey/Black
Density	ASTM D792	g/cm <sup>3</sup>	2.12
Hardness	ASTM D2240	Shore D	60
Elongation at break	ASTM D4745	%	321
Tensile Strength	ASTM D4745	N/mm <sup>2</sup>	22
Minimum service temperature		°C	-200
Maximum service temperature		°C	+260

#### Main Characteristics

- High compressive strength
- Good sliding ability
- Good dimensional stability
- Low creep rate
- Good wear properties

#### Typical products

- Composite seals
- Spring energised seals
- Bearing rings / guide rings
- Bushes
- Bespoke parts

#### Typical Applications

Due to its excellent deformation and wear resistance, compressive strength and sliding ability, PTCF15-GD60 is an excellent material choice for composite seals, guide rings, wear rings, slideways and bearing bushes working in both lubricated and unlubricated hydraulic fluids. It is also a good choice for HF acid and strong Alkali where glass reinforced PTFE's would be unsuitable.

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