

# DMR Material PTGVF-GRD63

## Green Special Mineral Reinforced PTFE



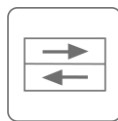
### MATERIAL DATA SHEET (Version 5.1 – 05.2019)



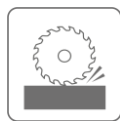
High Temperature



Chemical Resistance



Low Friction



Wear Resistance

### Description

DMR PTGVF-GRD63 is special mineral reinforced PTFE that provides increased durability through its excellent wear, temperature and pressure resistance.

PTGVF-GRD63 is recommended for high wear components in dynamic reciprocating, rotating and oscillating applications requiring a PTFE material with low cold-flow ability.

### Physical Properties

Property	Test method	Unit	Typical value
Colour			Green
Hardness	DIN 53505	Shore D	62-64
Tensile Strength (23°C)	DIN 53455	N/mm <sup>2</sup>	16-20
Elongation at break (23°C)	DIN 53455	%	240-280
Tensile Modulus	DIN 53457	N/mm <sup>2</sup>	1200
Density	ISO 12086	g/cm <sup>3</sup>	2.22-2.26
Coefficient Of Thermal Expansion (20-150°C)	-	1/K.10 <sup>-5</sup>	9.4
Coefficient Of Thermal Expansion (150-260°C)	-	1/K.10 <sup>-5</sup>	12.8
Deformation after 24h @ 23°C 15 N/mm <sup>2</sup>	ASTM-D621	%	7.5
Wear K.10 <sup>-8</sup>	DIN 53481	cm <sup>3</sup> .min/kg.m.h	7.7

### Main Characteristics

- Excellent wear resistance
- Capable of high PV values
- Extreme low friction properties
- Does not abrade mating surfaces
- Excellent in dry or poorly lubricated applications
- FDA Compliant material

### Typical products

- Spring energised seals
- Wear rings
- Bearing rings / guide rings
- Packing set V rings
- Valve stem seals
- Rotary seals

### Typical Applications

Due to its excellent durability and low cold-flow ability PTGVF-GRD63 is commonly used as a bearing and sealing material in various applications where resistance to pressure and wear are of the utmost importance.

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