

M SEALS PTGVF-TQD63

Turquoise Special Mineral Reinforced PTFE

MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PTGVF-TQD63 is special mineral reinforced PTFE that provides increased durability through its excellent wear, temperature and pressure resistance.

PTGVF-TQD63 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			Turquoise
Hardness	DIN 53505	Shore D	62-64
Tensile Strength (23°C)	DIN 53455	N/mm ²	16-20
Elongation at break (23°C)	DIN 53455	%	240-280
Tensile Modulus	DIN 53457	N/mm ²	1200
Density	ISO 12086	g/cm ³	2.22-2.26
Coefficient Of Thermal Expansion (20-150°C)	-	1/K.10 ⁻⁵	9.4
Coefficient Of Thermal Expansion (150-260°C)	-	1/K.10 ⁻⁵	12.8
Deformation after 24h @ 23°C 15 N/mm ²	ASTM-D621	%	7.5
Wear K.10 ⁻⁸	DIN 53481	cm ³ .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-TQD63 is commonly used as a bearing and sealing material in various applications where resistance to pressure and wear are of the upmost importance.

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