

DMR Material PTE10-CRD57

Polymer Reinforced PTFE



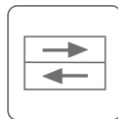
MATERIAL DATA SHEET (Version 5.1 – 05.2019)



High Temperature



Chemical Resistance



Low Friction



Wear Resistance



FDA Compliant

Description

DMR PTE10-CRD57 is a proprietary polymer reinforced PTFE that has outstanding wear and temperature resistance and does not wear metallic surfaces, it is commonly referred to as Ekonol® filled PTFE.

PTE10-CRD57 resists self-wear better than most other filled PTFE materials, it has good chemical resistance, self-lubricating properties, very low thermal expansion and FDA compliance making it a unique filled grade of PTFE.

PTE10-CRD57 is recommended for use with soft (un-hardened) metals and applications involving gases, high temperature or where its FDA compliance is required. It should **not** be used in any applications where steam, concentrated Sulphuric acid and strong Alkalis are present.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Beige
Density	ASTM D792	g/cm ³	1.96 – 2.06
Hardness	ASTM D2240	Shore D	>55
Tensile Strength	ISO 527	N/mm ²	>14
Elongation at break	ISO 527	%	>220
Deformation under load *	ASTM D621	%	<13
Permanent deformation **	ASTM D621	%	<8
Coefficient of Linear Thermal Expansion ***	ASTM D696	10 ⁻⁵ (mm/mm)/ °C	8 - 10
Dynamic coefficient of friction	ASTM D3702	Points	0.13
Service temperature ****		°C	-200 to +260

* (24 Hours @ 13.7 N/mm² @ 23°C)

** (After 24h relaxation)

*** (+25 to +100°C)

**** (Individual testing in application conditions is mandatory)

Ekonol® is a registered trademark of SOHIO Co

Main Characteristics

- Good compressive strength
- Good sliding ability
- Lower creep rate compared to unfilled / Virgin PTFE
- Good wear properties
- Does not abrade surfaces

Typical products

- Spring energised seals
- Wear strip
- Bearing rings / guide rings
- Bushes
- Valve seat seals

Typical Applications

PTE10-CRD57's unique anti wear properties make it an excellent material choice for rotary seals or high frequency dynamic applications working on soft / un-hardened metals.

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