

M SEALS PTV-WD57

Virgin PTFE Fluoropolymer Material



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



High Temperature



Chemical resistance



FDA Compliant

Description

M Seals material PTV-WD57 is a standard unfilled/virgin PTFE compound (commonly referred to as Teflon™). PTV-WD57 has excellent chemical resistance and low friction properties making it an ideal choice for a wide range of sealing applications. Virgin PTFE presents high elastic deformation and poor rebound under load, so generally requires an energising element to help improve these properties, such as an O-Ring or metallic spring energiser.

Physical Properties

Property	Test method	Unit	Typical value
Colour			White
Density	ASTM D792	g/cm ³	2.15-2.18
Hardness	ASTM D2240	Shore D	≥51
Tensile strength	ISO 527	N/mm ²	≥24
Elongation at break	ISO 527	%	>250
Deformation under load *	ASTM D621	%	≤17
Permanent deformation**	ASTM D621	%	≤9
Coefficient of linear thermal expansion ***	ASTM D696	10 ⁵ (mm/mm)/ °C	12-13
Minimum service temperature ****		°C	-200
Maximum service temperature ****		°C	+260

* (24 Hours @ 23°C – 13.7N/mm²)

** (24 Hr relaxation @ 23°C)

*** (25 to 100°C)

**** (Testing in application is mandatory)

Teflon™ is a registered trademark of the Chemours company.

Main Characteristics

- Excellent chemical resistance
- Excellent low friction properties
- Excellent temperature range
- FDA compliant
- Wide range of uses

Typical Products

- Soft seat seals
- Spring energised seals
- Gaskets
- Static Seals & O-Rings
- Back-Up Rings

Typical Applications

Due to its excellent low frictional properties, temperature and chemical resistance PTV-WD57 is a good choice for soft seat seals, spring energised seals and back-up rings commonly used in the sealing industry.

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