

Technical data sheet

Material: VIRGIN P.T.F.E. (polytetrafluoroethylene)

<u>Properties</u>	<u>Method</u>	<u>Units</u>	<u>Specification</u>
Specific gravity	ISO 13000-2	g/cm ³	2,130 - 2,180
Tensile strenght	ISO 13000-2	MPa	≥ 20
Elongation	ISO 13000-2	%	≥ 200
Hardness	ISO 13000-2	Shore D	≥ 54
Ball Hardness	ISO 13000-2	MPa	≥ 23
Compression strength at 1% deformation		Kg/cm ²	≥ 70
Deformation under load (140 Kg/cm ² for 24 hrs. at 23°C)	ASTM D621	%	10 - 13
Permanent deformation (after 24 hrs. relaxation at 23°C)	ASTM D621	%	6 - 7,5
Coefficient of static friction	ASTM D1894		0,08 - 0,10
Coefficient of dynamic friction	ASTM D1894		0,06 - 0,08
Thermal conductivity	ASTM C177	W/m.K	0,24
Dielectric constant (ε) at 60 Hz to 2 GHz	ASTM D150		2,1
Dielectric Strenght	ASTM D149	KV/mm	20 - 70
Volume Resistivity	ASTM D257	Ohm cm	10 ¹⁸
Flamability	UL 94		VE-0
Water absorption	ASTM D570	%	0,01

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Service Temperature:

Excellent resistance to continuous service temperatures up to 260°C and, for limited periods, even to higher temperatures; the low temperature resistance of the product allows satisfactory performance at as low -200°C.

Chemical resistance:

PTFE possesses a high inertness towards nearly all known chemicals. It is only attacked by elemental alkalimetals, chlorine trifluoride and elemental fluorine at high temperature and pressures.

Solvents resistance:

PTFE is insoluble in all solvents up to temperatures as high as 300°C (572°F). Certain highly fluorinated oils only swell and dissolve PTFE at temperature close to the crystalline melting point.

FDA Approved:

(Code of Federal regulation 21 CFR Ch.1, revised as of April 1, 1999 Edition);
sections 175.105 - 175.300 - 176.170 - 176.180 - 177.1520 - 177.1550 - 177.2600 - 178.3570.
"Perfluorocarbon Resins" of the Food and Drug Administration/USA.P.

I dati qui riportati sono ricavati da misurazioni effettuate in laboratorio a cura del produttore.

Poiché le condizioni di impiego generalmente non corrispondono a quelle dei metodi di prova, questi valori dovranno essere considerati solo come una indicazione e non una base di calcolo per l'ottenimento di limiti specifici in fase di progettazione.

I dati di questo opuscolo sono forniti in buona fede ma senza garanzia e non implicano responsabilità da parte nostra.