Data sheet: VPTFE05 Revised: 30/1/2020



## **Virgin PTFE**

## Polytetrafluoroethylene

Standard Colour: White

Properties	Unit	Din Standard	Value
Hardness	Shore D	ASTM D2240	≥51
Density	g/cm²	ASTM D792	2.14-2.18
Elongation at break	%	IS0527	≥250
Tensile strength	N/mm <sup>2</sup>	IS0527	≥24
Compressive strength at 1% deformation	N/mm²	ASTM D695	4-5
Deformation under load at room temperature after 24h at 13.7 N/mm²	%	ASTM D621	≤17
Permanent deformation as above after 24h of rest at room temperature	%	ASTM D621	≤9
Deformation under load at 260°C after 24h at 41 N/mm²	%	ASTM D621	≤32
Permanent deformation as above after 24h of rest at room temperature	%	ASTM D621	≤19
Impact strength Izod	J/m	ASTM D256	153
Dynamic coefficient of friction		ASTM D1894 ASTM D3702	0.06
Wear factor K		ASTM D3702	2.90
PV limit at 3 m/min	N/mm <sup>2</sup> *		2.4
at 30 m/min	m/min		4.2
at 300 m/min	90		5.7
Min service temperature	°C °C		-200
Max service temperature	10 <sup>-5</sup>	Cimilar to ACTM	+260
Thermal expansion coefficient (linear) 25 -100°C	(mm/mm)/°C	Similar to ASTM D696	12-13
Dielectric strength (specimen 0.5mm thick)	KV/mm	ASTM D419	≥40
Dielectric constant at 60Hz and 10 <sup>6</sup> Hz		ASTM D150	2.05-2.10
Volume resistivity	Ω* cm	ASTM D257	10 <sup>18</sup>
Surface resistivity	Ω	ASTM D257	10 <sup>17</sup>

The data we are herewith providing are all based on laboratory testing and are proposed to technical designers as possible and useful advice. Deviations from the values hereabove indicated may occur, but they do not constitute themselves either detriment of quality or reason for rejection.

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