

Virgin PTFE Sheet Gasketing

Commonly incorrectly referred to Teflon™ (Teflon™ is a trademark name), **PTFE** (polytetrafluoroethylene) is a chemically resistant material with an extremely low coefficient of friction. It is ideal for making gaskets for chemical applications, and for temperatures up to 450°F (continuous). Below are the specifications of Virgin PTFE.

PTFE is resistant to: acids, alkalis, solvents or corrosives

Property	Standard	Value
Density	ASTM D792	2.16 - 2.20 g/cm ³
Water Absorbtion	ASTM D570	<0.01 %
Tensile Strength	ASTM D638	≥200 kg/cm ²
Elongation	ASTM D638	≥300 %
Impact Strength, Izod ,23°C	ASTM D256	1.6 J/cm
Hardness	ASTM 785	50 – 55 Shore D
Compressive strength at 1% def	ASTM D695	40– 50 kg/cm ²
Thermal conductivity	ASTM D2214	0.2 W/m. K
Coefficient of Thermal Expansion, 25 to 100 °C	ASTM E831	16 x 1-5 °C-1
Volume resistivity, at 50% RH	ASTM D257	≥1018Ohm cm
Surface resistivity , at 50% RH	ASTM D257	≥1017Ohm
Dielectric strength	ASTM D149	≥ 55 KV/mm
Safe Operating temperatures	-	- 50 to 200°C(biological, pharma, food applications) - 50 to 260°C (Non-bio/food/ pharma applications)
Coefficient of friction, static	ASTM D3028	≤0.09
Coefficient of friction, dynamic	ASTM D3028	≤0.05
Moisture / solvent absorption	-	Negligible
Combustibility	-	Non-combustible
Weather resistance	-	Excellent
Chemical resistance	-	Excellent, except for highly fluorinating agents