

PTFE - Polytetrafluoroethylene

Mechanical Properties

Property	Unit	Standard	Virgin PTFE Value
Density	g/cm ³	ISO 1183	2.18
Tensile Strength / Elongation at break	N/mm ² / %	ISO 527	25-36 / 280-300
Compressive Strength (1% def.)	N/mm ²	ASTM D 695	4-4.5
Shore D Hardness	-	ISO 868	55-57
Dynamic Friction Coeff. (on steel)	-	-	0.05-0.09
Elastic Modulus	MPa	ISO 527	40

Thermal Properties

Property	Unit	Value
Continuous Operating Temperature	°C	-200/+260
Maximum Temperature (short term)	°C	+300
Crystalline Melting Point	°C	327
Thermal Conductivity	W/(m·K)	0.20-0.23
Linear Expansion Coefficient	°C ⁻¹ × 10 ⁻⁵	16

Electrical and Chemical Properties

Property	Value
Dielectric Constant	2.1
Dissipation Factor	< 0.0002
Volume Resistivity	10 ¹⁷ Ω·cm
Chemical Resistance	Inert to almost all known acids and bases
Food Compliance	FDA EC 10/2011
Flammability	Self-extinguishing

Note: The indicated values are reference average values. They are not to be considered guaranteed values for every application. For tight tolerances or critical conditions, please request the specific batch technical data sheet.