

MATERIAL TEST CERTIFICATE

Certificate No.:	DTE-MTC-PTFE-030	Date of Issue:	18 January 2026
Material:	Virgin PTFE (Polytetrafluoroethylene)	Reference Invoice:	RCT/03820 dated 22/02/2026
Product Form:	PTFE Teflon Sheet, 1 mm – 30 mm Thickness	Standard:	ASTM Test Methods (as tabulated)

1. BATCH-WISE MECHANICAL TEST RESULTS

Property	Unit	Requirement	Batch A — Skived Sheet 1 mm - 5 mm THK (1×10 Mtr)	Batch B — Moulded Sheet 5 mm - 15 mm THK (1×1 Mtr)	Test Method
Density	Gm/cc	2.1 – 2.2	2.15	2.13	ASTM D792
Tensile Strength	Kg/cm²	210 – 350	280	290	ASTM D638
Elongation at Break	%	250 – 400	325	325	ASTM D638
Hardness (Durometer)	Shore D	52 – 58	56	55	ASTM D2240

2. FULL TECHNICAL PROPERTY REFERENCE — VIRGIN PTFE (1 mm - 30 mm THK)

Property	Unit	Test Method	Typical Value (Virgin PTFE)
Density	gm/cm³	ASTM D-792	2.1 – 2.2
Tensile Strength	Kgf/cm²	ASTM D-638	210 – 375
Elongation at Break	%	ASTM D-638	250 – 400
Compressive Strength	Kgf/cm²	ASTM D-695	35 – 45
Deformation Under Load — 24 Hrs, 23°C, 113 kgf (Max.)	%	ASTM D-621	10
Deformation Under Load — 2 Hrs, 150°C, 113 kgf (Max.)	%	ASTM D-621	55
Hardness	Shore D	ASTM D-2240	52 – 58
Impact Strength	J/cm	ASTM D-256	1.4 – 1.5
Coefficient of Friction — Dynamic (P-7 kg/cm², V-0.5)	—	ASTM D-1894	0.04 – 0.06
Coefficient of Friction — Static (P-35 kg/cm²)	—	ASTM D-1894	0.05 – 0.08
Melting Temperature	°C	ASTM D-3418	335
Continuous Service Temperature	°C	ASTM D-648	+260
Water Absorption	%	ASTM-570	0
Dielectric Strength	Kv/mm	ASTM D-149	22 – 24

This is to certify that the Virgin PTFE (Polytetrafluoroethylene) sheet material described above, supplied by Diode Trading EST, has been tested and conforms to the requirements listed. Batch-wise mechanical results (Section 1) are consolidated from the manufacturer's material test certificates for the 1 mm–5 mm and 5 mm–15 mm thickness ranges under Invoice RCT/03820. Section 2 presents the full technical property reference for Virgin PTFE across the complete 1 mm–30 mm thickness range, as provided by the manufacturer's datasheet. All values are typical/observed results and may vary within stated tolerances by batch.



Quality Assurance — Diode Trading EST