

Adtech Technical Data — PTFE

	Properties	DIN or ASTM Standard	Unit	PTFE
Physical	Specific Gravity	53479	g/cc	2.14-2.19
	Maximum Working Temperature		°C	260
	Flame Rating		UL-94	94 V-O
	Water Absorption	53495	%	<0.01
Mechanical	Ultimate tensile strength at 23°C	53455		29-39
	Ultimate tensile strength at 150°C		Mpa	14-20
	Ultimate tensile strength at 250°C			n.kn.
	Yield point at 23°C	53455	N/mm ²	10
	Elongation at break, at 23°C	53455	%	200-500
	Modulus of elasticity in tension at 23°C	53457	N/mm ²	400-800
	Maximum bending stress at 23°C	53452	Mpa	18-20
	Flexural Modulus	53457	N/mm ²	600-800
	Ball Hardness 132-60	53456	N/mm ²	25-30
	Rockwell Hardness R	ASTM-D-785		
	Shore Hardness D	53505		55-72
	Coefficient of friction (dry with steel)			0.05-0.20
	Thermal	Melting temperature	ASTM 2116	°C
Heat deflection temperature @ 18.5 Kp/sq.cm		53461	°C	50-60
Heat deflection temperature @ 4.6 Kp/sq.cm		ISO R 75	°C	130-140
Coefficient of expansion			1/K.10 ⁻⁵	10-16
Thermal conductivity at 23°C		52612	W/K.m	0.23
Specific heat at 23°C			Kj/Kg.K	1.01
Oxygen index			%	>95
Electrical	Relative permittivity at 10 (3) Hz	53483		2.0-2.1
	Relative permittivity at 10 (6) Hz			2.0-2.1
	Surface resistivity	ICE 93+167	Ohms	10 (17)
	Arc resistance	ASTM 495	sec	>360
	Dielectric strength	53481	KV/mm	40-80

IMPORTANT NOTE: The above data is intended as a guide and is taken from resin manufacturers data. Adtech cannot take responsibility for the accuracy of the data.

Customers must evaluate the material under the relevant conditions if the properties are critical to their applications.