

PTFE Sheet & Rod

PTFE is a low friction fluoropolymer with outstanding chemical and weathering resistance. The working temp range is -28°C to 260°C. PTFE has the lowest coefficient of any solid and it has no slip-stick characteristics; static and dynamic coefficients are equal. Nothing sticks with any strength of PTFE to unheated surfaces. Both virgin and mechanical grades are UV stabilized. Virgin material meets FDA standards.

Properties:

- Approved for food Industries
- Maximum service temperature of 260°C/500°F
- Chemically resistant to all common solvents
- Maintains mechanical strength at high temperatures



Applications:

Petrochemical and chemical processing: PTFE is the material of choice for gaskets, vessel linings, pump interiors, washers, rings, seals, spacers, dip tubes and well-drilling components because it is corrosion resistant and chemically inert; it is unaffected by virtually all acids and caustics and functions in environments to 500 degrees F..

Electrical applications: PTFE is one of the best insulators known. In thin sections, it will insulate to 500 volts per mil. There are grades of PTFE which have even greater dielectric strength. It is frequently used in wire and cable wrap, and to separate conductive surfaces in capacitors. Thick walled close-tolerance extruded tubing is the PTFE shape of choice where machining or drilling long lengths to close tolerances is impossible. Multi-hole tubing can be extruded. PTFE can be machined into standoff insulators, and many different types of high voltage encapsulation devices for electrical components.

Semi-Conductor Industry: PTFE is inert, and its operating temperature range is from minus 350 degrees Fahrenheit to 550 degrees Fahrenheit. When made to ultra pure standards it is the material of choice for various items used in chip manufacturing, including encapsulation devices for quartz heaters, and the like.

Food, Beverage and Pharmaceutical industries: Virgin PTFE is approved by the Food and Drug Administration for use in the food, beverage, cosmetics and pharmaceutical industries. Thin Film and sheets make an inert, no-toxic slide surface without microscopic depressions where microbes can grow. Conveyancing components - profiles, guide rails and slides - can withstand high temperatures inside baking and drying ovens and other heated segments of the food, cosmetics or pharmaceuticals manufacturing processes.

Properties of PTFE Sheet

PROPERTIES	UNIT	ASTM	PTFE
		TEST METHOD	
Melting Point	°C	-	327
Specific Gravity	-	D792	2.14-2.20
Elongation	%	D638	200-400
Coefficient of Dynamic friction	-	0.69MPa	0.1
		{7kgf/cm ³ }	
		3m/min	
Max. Service Temperature	°C	Unloaded	260
Dielectric breakdown strength (Short term)	MV/m	D149	19
	kV/mm(3.2mm thickness)		
Anti arcing property	sec	D495	>300
Water absorption (24h)	%	D570	0
Oxygen index	-	D2863	>95
Effect of direct sunlight	-	-	No
Effect of weak acid	-	D543	No
Effect of strong acid	-	D543	No
Effect of weak alkali	-	D543	No
Effect of strong alkali	-	D543	No

Size Available *(Note: other sizes can be made upon request)*

Sheet

Thick (mm)	Length (m)	Width m
0.05	10	0.30
0.08	10	0.14
0.1	10	0.50
0.2	10	1.00
0.3	10	1.00
0.5	10	1.20
0.6	10	0.50
0.8	10	1.20
1	10	1.20
1.5	10	1.20
2	10	1.20
3	10	1.20
4	10	1.20
5	10	1.20
6	10	1.20

Thick mm	Length m	Width m
1	1.2	1.2
1.5	1.2	1.2
2	1.2	1.2
3	1.2	1.2
4	1.2	1.2
5	1.2	1.2
6	1.2	1.2
8	1.2	1.2
10	1.2	1.2
12	1.2	1.2
15	1.2	1.2
16	1.2	1.2
20	1.2	1.2
25	1.2	1.2

Rod

Dia mm	Dia mm	Dia mm
3.2	30	95
3.8	32	100
4	35	110
5	38	120
6	40	125
8	45	130
10	50	140
12	55	150
13	60	160
14	65	170
15	70	
16	75	
20	80	
25	85	
28	90	

