

## PTFE Sheet

Material type: Virgin and Filled

## PTFE Sheet

The full name for PTFE is Polytetrafluoroethylene, it is a low friction fluoropolymer (Low coefficient of friction (measured against polished steel)) with outstanding chemical and weathering resistance. The working temp range is -180° C to 260° C, and melting point is 327 °C. It has no slip-stick characteristics; static and dynamic coefficients are equal. Even gecko cannot stick. The best properties makes PTFE has a numerous applications.

Shenzhen Dechengwang Technology Co., Ltd has the ability to produce PTFE Sheet to high-precision Machined parts, like Gasket washers, O-ring, valve seat and so on, what more, Based on our Rich knowledge and experience on PTFE material, we capable of producing according to your Drawing, Design and Samples.

*Always professional, Always on time. Under Promise, Over Deliver.*

### PTFE Performance benefits:

- Temperature Resistance(-180°C~+260°C), melting: (327 °C).
- Non-Stick.(Even gecko cannot stick)
- Low coefficient of friction(measured against polished steel)
- Superior chemical and thermal properties.(Good gasket material)
- Slippery
- Self-lubrication
- High insulate

### Typical PTFE Applications are:

- Seals and gaskets
- Valve and fitting components
- Pump parts
- Scientific equipment
- Medical equipment
- Chemical resistant
- High insulate electric industry.
- Aerospace

Material Data Sheet for PTFE

PROPERTY	Unit	Test Method Reference	Virgin PTFE
Density	gm/cc	ASTM D-792	2.1-2.3
Tensile Strength	kgf/cm <sup>2</sup>	ASTM D-638	210-375
Elongation of Break	%	ASTM D-638	250-400
Compressive strenght	kgf/cm <sup>2</sup>	ASTM D-695	40-50
Hardness	Shore D	ASTM D-2240	52-58
Coefficient of Friction	Dynamic P-7 kg/cm2 V-0.5	ASTM D-1894	0.04-0.06
	Static P-35 kg/cm2		0.05-0.08
Continous Service Temp. at Atmospheric pressure	°C	ASTM D-648	From- 250 To + 260
Thermal Conductivity (max)	10 <sup>-1</sup> cal cm S°C	ASTM D-5930	6
Dielectric Strength	Kv/mm	ASTM D-149	22-24
Volume Resistivity	ohm cm	ASTM D-257	>10 <sup>18</sup>
Surface Resistivity	ohm	ASTM D-258	>10 <sup>15</sup>
Permeability	%	ASTM D-543	0.01
Dissolution			0.01

*High Precision PTFE Machined Parts.Tailor-Made For You!*



Shenzhen Dechengwang Technology Co., Ltd

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ISO 9001:2008

FDA, RoHS, SGS

**Specification table of PTFE Molded Sheet:**


PTFE Sheet is processed by Molded method, The regular size is 600\*600/1000\*1000mm(Width\*Lenght), thickness range from 1 to 70mm.  
It's wide use in lining, sealing and sliding application.

Project name	Thickness (mm)	Tolerance (mm)	Lenght*width (mm)	Remarks
PTFE Molded Sheet	1~70	±0.30~±0.50	250×250	Standing stock Specs: 600*600MM, 1000*1000MM, Can be cut into smaller sheet based on existing one.
	1~70	±0.30~±0.50	300×300	
	1~70	±0.30~±0.50	500×500	
	1~70	±0.30~±0.50	600×600	
	1~70	±0.30~±0.50	800×800	
	2~60	±0.30~±0.50	1000×1000	
	2~60	±0.30~±0.50	1200×1200	
	3~60	±0.30~±0.60	1200×1800	
	3~60	±0.30~±0.60	1500×1500	
	3~60	±0.30~±0.60	1000×2000	

**Specification table of PTFE Skived Sheet:**

Skived sheet are made from PTFE molded tubular blank processed into rolled plate by peeling machine . it is widely applied as it has good corrossion rersistance aging resistance, very low coefficient of friction .

Product name	Thickness ( MM )	Width (MM)	Remark	
PTFE skived sheet	0.5~6.0	100	Skived sheet can cut into various widths according to the requirement	
		200		
		300		
		500		
		1000		
		1200		
		1500		
		2000		

Length, diameter and color may depending on manufacturer, You can feel free to Email: [info@ptfedf.com](mailto:info@ptfedf.com)



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## PTFE Film

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**Specification table of PTFE Film:**

PTFE Film is skived from the PTFE blank, we capable to produce as thin as 0.03mm, the width of PTFE film is related to it thickness, the thinner, the more narrow. It also can be Oriented to make the film more flat.

Project Name	Unit	SFM-1	SFM-2		SFM-3	
		direct	semi-direct	Non-direct	direct	Non-direct
Tensile Strength $\geq$	Mpa	30.0	20.0	10.0	30.0	10.0
Ultimate Elongation $\geq$	%	30	60	100	30	100
Dielectric Loss( $\leq 10\mu$ m)	-	$3.0 \times 10^{-4}$	-	-	$3.0 \times 10^{-4}$	-
Dissipation factor( $>10\mu$ m)	-	$2.5 \times 10^{-4}$	-	-	-	-
1MHz Dielectric Constant	%	1.8~2.2	-	-	1.8~2.2	-
DC breakdown Strength (normal) $\geq$	KV/mm	Average 200	60	40	60	30
		Min 40	6	4	-	-

Product Name	Thickness (MM)	Thickness tolerance(MM)	Width(MM)
Direct Film	0.03~0.10	$\pm 0.02$ mm	10~120
Skived Film	0.10~0.49	$\pm 0.03$ mm	10~300
Skived Film	0.50~1.0	$\pm 0.05$ mm	10~1000
Skived Tape	1.10~5.0	$\pm 0.1$ mm	10~1200



*Length, diameter and color may depending on manufacturer, You can feel free to Email: [info@ptfedf.com](mailto:info@ptfedf.com)*



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