



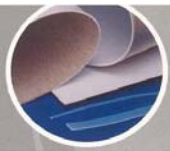
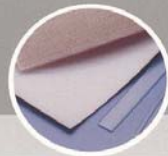
# **TEFPASS<sup>®</sup> SHEET**

Fluoroplastic Laminates and Plain Sheets



# ALLIED SUPREME CORP.

# TEFPASS<sup>®</sup> SHEET



## Specification of TEFPASS<sup>®</sup> Laminated Sheet

Sheet Material	Backing	Thickness (mm)	Width (mm)
PTFE	Plain Glass Fabric	2.0	1,200
	Carbon Fabric	3.0	1,500
Modified PTFE	Knit Glass Fabric	2.5	1,200
	Plain Glass Fabric	3.0	1,500
	Carbon Fabric		
PFA		1.5	1,200
		2.0	
		2.3	
		3.0	
PFA 451HP	Knit Glass Fabric Plain Glass Fabric Carbon Fabric	1.5	
		2.0	
		2.3	
		3.0	
PFA 951HP Plus		1.5	
		2.3	
FEP		1.5	1,500
		2.3	1,850
PVDF	Knit Glass Fabric Plain Glass Fabric	1.5	
		2.0	
		2.3	
		3.0	
	Polyester Fabric	4.0	
		2.0	
		2.3	
		3.0	
	4.0		

- Thickness according to ASME RPT-1, M12B-200(b) Fiber Free Thickness.
- Bonding strength of fluoroplastic and fabric according to ASTM D1781 Climbing Drum Test (at least 50 in-lb/in), or ASTM D903 Peel and Stripping Strength Test (at least 2 Kgs/cm).
- Special thickness is available upon request.



# TEFPASS<sup>®</sup> SHEET

## PTFE / Modified PTFE Skived and Etched Sheet

### Specification

Thickness (mm)	Thickness Tolerance	Width (mm)	Width Tolerance (mm)
0.05	±15%	1,200	+50, - 0
0.1			
0.25	±12%	1,500	
0.5			
0.75	±10%		
1.0			
1.5			
2.0	+0.2, - 0.1(mm)	1,200	
2.5		1,500	
3.0		2,000	
4.0	+0.25, - 0.15(mm)		
5.0	+0.3, - 0.15(mm)		
6.0			

● Special thickness and width are available upon request.



## Specification of TEPASS® Plain Sheet

Sheet Material	Thickness (mm)	Width (mm)	Weight (Kgs/m <sup>2</sup> )
PFA	1.5	1,200 1,500 2,000	3.30
	2.0		4.40
	2.3		5.06
	3.0		6.60
PFA 451HP	1.5		3.30
	2.0		4.40
	2.3		5.06
	3.0		6.60
	4.0		8.00
FEP	1.5		3.30
	2.3		5.06
	3.0		6.60

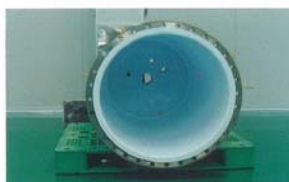
- Thickness tolerance: -0.1, +0.2mm.
- Special material and thickness are available upon request.

## Welding Rod

Material	Diameter (mm)	Roll length (m)	Weight (g/m)
PFA	3.0	100	15.2
	3.5		19.4
	4.0		26.8
	5.0		41.9
FEP	3.0		15.2
	3.5		19.4
	4.0		26.8
PVDF	3.0		12.6
	3.5		16.1
	4.0		22.2

## Welding Cap Strip

Material	Thickness (mm)	Width (mm)	Roll length (m)	Weight (g/m)
PFA	2.5	14	50	74.9
	2.7	14.7		84.7
FEP	2.5	14		74.9
	2.7	14.7		84.7



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## Comparison Chart of Fluoroplastic Materials

Property		UNIT	ASTM Standard	PTFE	Modified PTFE	FEP	PFA	PVDF
Mechanical	Specific gravity		D792	2.14-2.20	2.16-2.19	2.12-2.17	2.12-2.17	1.70
	Tensile strength	Kgf/cm <sup>2</sup>	D638	280-350	250-350	250-350	250-350	400
	Elongation at break	%	D638	200-400	250-450	300	300	50-250
	Compression strength	kgf/cm <sup>2</sup>	D695	120	160	-	170	500
	Impact strength	kgfcm/cm	D256A	16.3	-	-	-	-
	Rocks well hardness	-	D785	-	-	-	-	-
	Shore hardness	-	D2440	D50-55	D58	D55	D60	D70
	Bending elasticity	-	D790	5.6	-	-	6.7-7.0	14
	Tensile elasticity	10 <sup>3</sup> kgf/cm	D638	4.1-5.6	-	-	-	8.4
	MIT Flex life	Cycles	D2176	>1,000,000	-	80,000	10,000-500,000	-
	Coefficient of friction (Static)		D1894	0.02	-	-	0.04	0.60
Coefficient of friction (Dynamic)	7kgf/cm <sup>2</sup> 3m/min	D1894	0.10	0.18	-	0.20	0.40	
Thermal	Melting point	°C	-	327	327	255	310	165
	Thermal conductivity	10 <sup>-4</sup> cal/cm <sup>2</sup> sec/°C	C117	6.0	6.0	-	6.0	1.2
	Specific heat	Cal/°C/g	-	0.25	0.25	-	0.25	0.46-0.47
	Linear expansion	10 <sup>-4</sup> /°C	D696	10	12	-	12	12.5
	Deformation under load							
	18.5kgf/cm <sup>2</sup>	°C	D648	55	-	-	47	74
	4.6kgf/cm <sup>2</sup>	°C	D648	121	-	-	74	104
	Oxygen index	%	D2863	>95	96	>95	>95	30
	Flame rating		UL-94	V-0	V-0	V-0	V-0	V-0
	Max. temperature (Continuously)	°C	-	260	260	205	260	130-150
Electrical	Dielectric constant		D150/1MHz	2.1	2.1	2.1	2.1	7.5
	Dissipation factor		D150/1MHz	0.0001	0.00007	0.0002	0.0001	0.15
	Volume resistivity	Ohm-cm	D257	>10 <sup>18</sup>	-	>10 <sup>16</sup>	>10 <sup>18</sup>	1.5 x 10 <sup>16</sup>
	Surface resistivity	Ohm/cm <sup>2</sup>	D257	>10 <sup>18</sup>	-	-	>10 <sup>17</sup>	>10 <sup>14</sup>
	Arc resistivity	Sec.	D495	>300	-	-	>180	75





Plain Glass Fabric

Plain Glass Fabric

Carbon Fabric

Polyester Fabric

Knit Glass Fabric

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