

# Jiangsu FreChem Co., Ltd

## Frechem®PVDF film

### Characteristic

Physical properties	Specification	Routine test	Aging test	Test standard
Appearance		White/black/transparent		
Melting point(°C)	165-172	172	172	ASTM D3418-99
Density(g/cm <sup>3</sup> )	1.77 ~ 1.79	1.79	1.78	ASTM D792-00
Water absorption (%)	≤0.2	0.15	0.15	ASTM D570-98
<b>Mechanical properties</b>				
Tensile strength(Mpa)	≥30	52	48	GB 13022-91
Elongation at break (%)	≥100	160	92	GB 13022-91
Tear strength (%)	≥20	120	118	GB 11999-89
<b>Surface properties</b>				
Surface tension- Corona surface (mN/m)	≥42	46	48	GB/T 14216-93
Surface tension- Non-corona surface(mN/m)	≥32	36	36	GB/T 14216-93
Dynamic friction coefficient -membrane to membrane	≤0.4	0.35	0.35	GB 10006-88
Dynamic friction coefficient -membrane to metal	≤0.4	0.35	0.35	GB 10006-88
<b>Thermal properties</b>				
Thermal shrinkage (%)	≤0.5	0	0	Internal
<b>Gas permeability</b>				
Water vapor permeability (g/m <sup>2</sup> ·day)	≤80	32	42	ASTM F1249-06
<b>Aging properties</b>				
Yellowing index(Δb)	≤2	-	1.2	ASTM E313-10

All above is only for reference.

Aging conditions: LV-B 3000hrs.

Thermal shrinkage test conditions: 120°C\*10min

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Specification table-Solar PV film

Model	Thickness (um)	Luster	Color	Width (mm)	Length (m)
FR20GW	20	Glossy	White	815/830/1040/1100/1260	500/2000/3000
FR20MW	20	Matt	White	815/830/1040/1100/1260	500/2000/3000
FR25GW	25	Glossy	White	815/830/1040/1100/1260	500/2000/3000
FR25MW	25	Matt	White	815/830/1040/1100/1260	500/2000/3000
FR37GW	37	Glossy	White	815/830/1040/1100/1260	500/2000/3000
FR37MW	37	Matt	White	815/830/1040/1100/1260	500/2000/3000
FR60GW	60	Glossy	White	815/830/1040/1100/1260	500/2000/3000
FR25GB	25	Glossy	Black	815/830	500/2000/3000
FR37GB	37	Glossy	Black	815/830	500/2000/3000
FR60GB	60	Glossy	Black	815/830	500/2000/3000

Specification table-Packaging film

Model	Thickness (um)	Color	Width (mm)	Length (m)
FR20PW	20	White	600/1000/1200	500/2000/3000
FR40PT	40	Transparent	600/1000/1200	500/2000/3000
FR40PW	40	White	600/1000/1200	500/2000/3000
FR50PT	50	Transparent	600/1000/1200	500/2000/3000
FR50PW	50	White	600/1000/1200	500/2000/3000
FR70PT	70	Transparent	600/1000/1200	500/2000/3000
FR70PW	70	White	600/1000/1200	500/2000/3000
FR90PT	90	Transparent	600/1000/1200	500/2000/3000
FR90PW	90	White	600/1000/1200	500/2000/3000

If there are not the specification that you need, please contact us.