

VINYFOIL[®]

■ Characteristics

1. Conformed to flame resistance standards. (UL-94VTM-0, V-0)
2. Excellent high-heat resistance.
3. Excellent anti-static properties and small dimensional.
4. Excellent procession properties for punching, bending, printing and forming.
5. Uniform embossing, resistant to scratches and fingerprint traces.
6. Containing no fire retarding chemicals, such as bromine.

■ Applications

1. Electrical insulation material
2. Office automation equipment
3. Nameplates

■ Specifications

Grade	Form	Thickness (mm)	Width (mm)	Length (m)	Code	Color	Anti-static	Mat	Use			
C-850	Roll	0.1~0.5	600	0.1 mm ^t : ~100	50	Natural	—	—	For Insulators, Base Material of Shield Plates			
				0.2 mm ^t : ~300	5B	Black	—	—				
				0.3 mm ^t : ~200	SO	Natural	○	—				
				0.4 mm ^t : ~150	SB	Black	○	—	For Insulators			
				0.5 mm ^t : ~100	SW	White	○	—				
					AWL	White	○	○				
					AB	Black	○	○				
				Sheet	0.2~0.8	1200	800(mm)	CB	Black	○	○	For Nameplates

* If you have any special requirements, please consult with us.

■ Physical Properties

Use				For Insulators	
Grade				C-850(50)	
Thickness				0.2 mm	
Test Items(Unit)	Test Methods	Temp(°C)	Orientation	Typical value	
Tensile Strength (Mpa)	JIS K6734-1995	at 23(°C)	MD	68.1	
Elongation(%)			TD	57.2	
			MD	129	
			TD	137	
Vicat Softening Point(°C)	JIS K7206	—	—	106	
Heat Distortion Temperature(°C)	JIS K7207	—	—	87	
Softening Temperature(°C)	JIS K6734-1995	—	—	85	
Brittleness Temperature(°C)	ASTM D-1790	—	—	-47	
Impact Resistance [Charpy Type] (kJ/m ²)	JIS K7111	at 23(°C)	MD	10.6	
			TD	12.1	
		at -20(°C)	MD	4.5	
			TD	4.7	
Impact Resistance [Izod Type] (kJ/m ²)	JIS K7110	at 23(°C)	MD	7.4	
			TD	8.1	
		at -20(°C)	MD	4.8	
			TD	4.6	
Rockwell Hardness	JIS K7202	at 23(°C)	Scale R	112.4	
			Scale M	62.7	
Water Absorption(%)	JIS K7209	at 23(°C)	—	0.16	
Dielectric Breakdown Voltage (kV)	JIS C2318	at 23(°C)	—	21.0	
Surface Resistance(Ω)	JIS K6911	at 23(°C)	—	6.7 × 10 ¹⁶	
Volume Resistance(Ω/cm)	JIS K6911	at 23(°C)	—	1.6 × 10 ¹⁶	
Arc Resistance(sec)	JIS K6911	at 23(°C)	—	10.6	
Dielectric Constant	JIS K6911	at 23(°C)	—	1kHz	3.01
				10kHz	2.94
				100kHz	2.87
				1kHz	2.87
Dielectric Dissipation Factor	JIS K6911	at 23(°C)	—	1kHz	1.20 × 10 ⁻²
				10kHz	1.28 × 10 ⁻²
				100kHz	1.29 × 10 ⁻²
				1kHz	1.25 × 10 ⁻²
Linear Expansion Coefficient	JIS K7197(1/°C)	at 20~ 80(°C)	—	1.47 × 10 ⁻⁴	
Flame Resistance	UL-94	—	—	VTM-0	

* The Values mentioned above are typical ones, not guaranteed ones.

■ Properties of anti-static electricity grade

Test Items(Unit)	Test Methods		Data
The attenuation of Voltage Occurred by friction (V)	Friction Test Time 10sec.	MAX	110
		1 minute After friction	15
		3 minute After friction	10
		5 minute After friction	5
		10 minute After friction	0
Progressive Change of Surface Resistance	Blanc		6×10^{10}
	2 Months Later		2×10^{11}
	4Months Later		2×10^{12}
	6Months Later		5×10^{12}
	1 Year Later		8×10^{12}

* The Values mentioned above are typical ones, not guaranteed ones.

■ Chemical resistance

Chemicals	Results
Alkali	○
Acid	○
Cyclo hexanone	△
Methyl ethyl ketone	×
Ethyl alcohol	○
Methyl alcohol	○
Isopropyl alcohol	○
Ethyl acetate	×
Tetra hydrofuran	×
Benzene	△
Xylene	×
Cyclo hexane	×

*The results listed above are reference only and are not guaranteed.

○:No remarkable change

△:Small change

×:Change

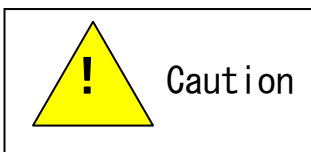
■ Important Safeguards

Directions for safe use are prepared for the purpose of maintaining the safety of customers and your clients and property. The products carrying warning and caution, please read following details.



If this product is mishandled in defiance of this sign, you may have a risk of death or serious injury.

- Absolutely do not implant, insert in the body in the body.
- Never use for any applications for which the material will be left in the body.
- In case of using for medical devices, foodstuff, other special purpose applications, please test and make certain that you can do so safely.



If this product is mishandled in defiance of this sign, you may have a risk of serious injury and property damage.

- When disposing of VIYNIFOIL, since VINYFOIL emits noxious gasses (main component :hydrogen chloride, carbon, dioxide, carbon monoxide, etc.) upon burning. Therefore do not burn them.
- VIYNIFOIL is quite heavy in sheet and roll form. Should be careful to avoid back injuries when handling.
- The cut edge of VIYNIFOIL is very sharp and therefore can cause cut injuries if not handled with caution.