

## UVTPF-FL Flame Retardant Polycarbonate Film

UVTPC-FL is the code of UVPLASTIC flame-retardant polycarbonate films, they totally meet the standard of V-0 or VTM-0/UL94.

UVTPC-FL polycarbonate films offer a variety of surfaces including gloss, matte and velvet. The colors can be clear/transparent, translucent, black/opaque. It is easily thermoformed, molded, die-cut, folded and bent.

It is an environment-friendly film for a wide applications such as printed circuit board insulation, backlit aircraft in-flight panels and display, computer rack partition, battery cell pack, TV, monitor insulation, etc.

### Products Range

Model	Description	Thickness Range
UVTPC-FL	Flame-retardant rating is V-0, VTM-0, Non-halogenated (no chlorine or bromine) films	0.05mm to 1mm
UVTPC-FLH	Flame-retardant rating is V-0	0.1mm to 1mm

### Surface Type and Color

Model	Surface Type	Clear Transparent	Translucent	Black Translucent
FL21	Matte / Polished		○	
FL41B	Velvet / Polished			○
FL42	Velvet / Matte		○	
FL42B	Velvet / Matte			○
FLH11	Polished / Polished	○		



FLH21	Matte / Polished	○
FLH41	Velvet / Polished	○
FLH42	Velvet / Matte	○
FLH42B	Velvet / Matte	○

### Dimension

Thickness mm	Length m	FL21	FL41B	FL42	FL42B	FLH11	FLH21	FLH42	FLH42B
0.1	500	○							
0.125	400	○		○	○	○	○		
0.15	400			○	○				
0.175	350	○		○	○	○	○		
0.2	300	○		○					
0.25	300	○	○	○	○	○	○	○	○
0.3	250	○		○					
0.375	200	○	○	○	○	○	○	○	○
0.43	175	○	○	○	○		○	○	○
0.5	150	○	○	○	○	○	○	○	○
0.76	100	○	○	○	○	○	○	○	○
1	80	○		○		○	○		

The standard width is 935mm and 1224mm. Cutting to size is available.

## Physical Properties

Properties	Value	Unit	Test Method
Density	1.32	g/cm <sup>3</sup>	ISO 1183
Haze	<0.5	%	ASTM D1003
Light Transmission	89	%	ASTM D1003
Tensile Strength	60	MPa	ISO 527
Elongation	<50	%	ISO 527
Bend Strength	90	MPa	ISO 178
Tensile Modulus	2300	MPa	ISO 178
Surface tension	≥34	dyn/cm	Test fluid
Dielectric Constant	3	-	IEC60250
Resistant Puncture Voltage	30	MV/mm	IEC 60243
Surface resistivity	1.00E+16	Ω/square	IEC 60093
Volume resistivity	1.00E+17	Ω-cm	IEC 60093
Coefficient of Thermal Expansion	5.8	×10 <sup>-5</sup> /°C	ISO 11359
Thermal Conductivity Rate	0.2	W/(m*K)	ASTM D5470
Thermal Shrinkage	0.5~0.7	%	ASTM D1204
Tg	152	°C	ISO306
Grade of resistant flame	V-0, V-2, VTM-0, VTM-2	/	E249605

## **Main Benefits**

Excellent fire retardant property and fireproof performance;

Good heat resistance, electrical and mechanical properties;

Non-halogenated (no chlorine or bromine) and environment-friendly films;

Great machinability and can be die-cut, drilled, screwed, vacuum formed, thermoformed, molded;

Excellent elasticity at a large temperature range;

Great electrical insulation;

## **Contact Us**

### **UVPLASTIC Material Technology Co., Ltd**

Add: No. 205 Suzhou West Avenue, Suzhou Industrial Park, Suzhou City, China

P: +86 512 85186727

Email: [info@uvplastic.com](mailto:info@uvplastic.com)

Website: [www.uvplastic.com](http://www.uvplastic.com)