

ETFE Fluoropolymer melt extruded film

VitaFlon™ is a professional film brand by PLUSXTECH CO.,LTD., offering high-quality fluoropolymer film like ETFE, FEP, PFA to meet the demands of high-end customers in industries such as electronics, medical industry, aerospace, and photovoltaics. With an exclusive formula and advanced technology, VitaFlon™ ETFE film optimizes performance while maintaining its original excellence. It serves as an ideal material for aviation, solar energy, and composite materials.

ETFE Film Characteristics

- Excellent resistance to high and low temperatures
- Continuous service temperature range from -80°C to 165°C
- Maximum service temperature up to 230°C
- Excellent non-stick properties and low coefficient of surface friction
- Chemically inert to most chemicals and solvents
- High dielectric strength
- Free of plasticizers, processing aids or additives
- Low permeability to liquids, gases, moisture and organic volatile
- Excellent electrical performance over a wide range of frequencies and temperatures
- Excellent light transmission and clarity, high transmittance of ultraviolet and far infrared wavelengths (>92%)

ETFE Film Specifications

- Thickness range from 12µm to 500µm
- Standard width up to 1600mm
- Any syncoated widths available upon request
- Adhesive surface: plasma treatment and chemical etching treatment

ETFE Film Applications

- Release film for high-end composite materials in the field of aviation and aerospace
- Chemical Industry
- Hot encapsulation/welding/hot melt adhesive
- Semiconductor ● Electrical / Electronics
- Photovoltaic / Solar ● Protection and interior Industry
- Medical / Pharmaceutical Industry

ETFE Film Classification

ETFE HP (High Performance Grade)

- Manufactured from 100% high-purity grade ETFE resin
- High dielectric properties or optical transparency often used in applications
- A unique combination of transparency, high light transmission and long-term aging resistance
- ETFE's unique combination of high light transmission, clarity, and durability make it an invaluable material for applications such as semiconductors and integrated circuits
- Made into clear, one-side matte or double-side matte styles

ETFE MR (Mold Release Grade)

- High elongation and excellent fit softness to complex contoured molds
- Standard colors include red, light blue, matte and white/Custom colors available upon request
- Available in a variety of perforated patterns
- ETFE MR film is the good release film, surface area weight lower than 20% of FEP film.

Reliable Fluoroplastics X Innovative Future

			ETFE HP	ETFE MR
Basic Performance	Unit	Test method		
Specific Gravity		ASTM D792	1.74	
Flame Retardant Property		UL-94	V-0	
Water Absorption	%		<0.03	
Mechanical Properties				
Tensile Strength	MPa	ASTM D882	48	
Elongation Of Break	%	ASTM D882	300	
Tensile Modulus	MPa	ASTM D882	965	
Initial Tear Strength (50µm)	N	ASTM D1004	4.2	
Tensile Tear Strength (50µm)	N	ASTM D1922	2.9	
Thermal Properties				
Continuous Use Temp	°C	UL-746 B	165	
Melt Point	°C	ASTM D3418	260	
Optical Properties				
Solar Transmittance	%	ASTM E424	>90	n/a
Product Size				
Width	mm		25-1600	
Thickness	µm		12.7 - 500	
Standard Colors			Clear, Matte	Clear, Matte, Red, Blue
Available Surface Treatments				
Chemical Etching			Chemical Treatment	
Plasma Treatment			Plasma Treatment	

Represent typical performance properties and should not be used for specification purposes
 Contact PLUSXTECH film sales representative for appropriate values.