

PCTFE

PCTFE Fluorine plastic melt extruded film

PCTFE film is a melt-extruded cast film made from PCTFE resin (polychlorotrifluoroethylene). It exhibits excellent gas barrier properties and superior electrical insulation. Additionally, it has good optical properties, mechanical strength, and chemical resistance. PCTFE film is widely used in fields such as packaging, chemical engineering, medical, electrical and electronic, vacuum technology, and optics.

PCTFE Film Characteristic

- Continuous service temperature range from -196°C~130°C
- Maximum service temperature up to 212°C
- Resistant to high and low temperature
- Excellent mechanical properties, with outstanding elastic recovery
- Chemically inert to most solvents
- Free of plasticizers, aids or additives
- Chemical corrosion resistance
- Block the permeation of various gases, water vapor, and organic volatile
- Excellent electrical insulation properties, maintaining a low dielectric constant and low dielectric loss factor over a wide range of frequencies
- Excellent light transmission and clarity

PCTFE Film Applications

- Gas Sealing Bag
- Medical Devices
- Solar Film
- Optical Film
- Pharmaceutical Packaging
- Vacuum process
- Chemical Equipment liner
- Electrical and Electronic

PCTFE Film Specification

- Thickness range: 12μm~500μm
- Standard Width: Maximum to 1600mm
- Any synopated widths available upon request
- Adhesive surface: Plasma treatment and chemical etching treatment



Reliable Fluoroplastics X Innovative Future

PCTFE

PCTFE Fluorine plastic melt extruded film

Basic Performance	Unit	Test Method	PCTFE
Specific Gravity		ASTM D792	2.13
Flame Retardant Property		UL-94	V-0
Water Absorption	%		< 0.01
Water Vapor Permeability	g·m ² /day (50μm)		0.07-0.09
Mechanical Properties			
Elongation at Break	%	ASTM D638	150
Tensile Strength	MPa	ASTM D638	36.5
Flexural Strength	MPa	ASTM D790	59
Tensile Modulus	MPa	ASTM D638	1427
Flexural Modulus	MPa	ASTM D790	1241
Compression Strength	MPa	ASTM D695	38
Friction Coefficient			—
Thermal Properties			
Continuous Use Temp	°C	UL-746 B	132
Brittleness Temp	°C		-240
Point	°C	ASTM D3418	212
Electrical Properties			
Volume Resistivity	Ω·cm	ASTM D257	10 ¹⁸
Surface Resistivity	Ω·cm	ASTM D257	10 ¹⁵
Optical Properties			
Solar Transmittance	%	ASTM E424	>90
Product Size			
Width	mm		25-1600
Thickness	μm		12.7-500
Color			Clear,Matte
Available Surface Treatments			
Chemical Etching			Chemical Etching
Plasma Treatment			Plasma Treatment

Represent typical performance properties and should not be used for specification purposes

Contact PLUSXTECH film sales representative for appropriate values.