



High-Performance Films for Gaskets & Flexible Sealing Applications

## UNCOMPROMISING SEALING SOLUTION FOR EXTREME ENVIRONMENTS

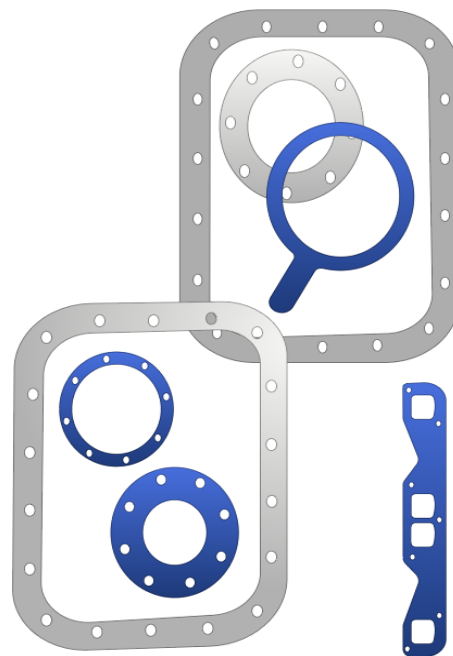
When system integrity is non-negotiable, you need gasket and sealing solutions engineered for unmatched reliability—even in the most extreme conditions.

TCI's high-performance fluoropolymer films provide exceptional sealing power, ensuring durability, chemical resistance, and performance in critical applications. Our portfolio includes:

- 100% PTFE CrossFilm™
- Cast PTFE Film
- FEP, PFA, and ETFE Films

Designed to withstand everything from cryogenic freezing to high-temperature exposure, TCI's fluoropolymer gaskets maintain chemical inertness and structural integrity, optimizing your equipment's efficiency and reducing costly downtime.

Available in thermo-bondable or adhesive-bondable options, our films are custom-slitted to meet your exact specifications, delivering sealing solutions that last.



### **SUPERIOR CHEMICAL RESISTANCE:**

Fluoropolymer gaskets are impervious to corrosive gases, vapors, acids, and solvents, making them the ideal sealing solution for harsh chemical environments. They provide long-term protection against corrosion, ensuring system reliability.

### **HIGH-TEMPERATURE STABILITY:**

Engineered to perform in extreme conditions, fluoropolymers maintain their sealing integrity from cryogenic temperatures to high-heat environments, preventing degradation under thermal stress.

### **ELECTRICAL INSULATION:**

With high insulation resistance and a low dielectric constant, fluoropolymer gaskets do not conduct electricity, making them ideal for applications requiring superior electrical insulation.

### **REDUCED CONTAMINATION RISK:**

Fluoropolymers are inherently non-reactive and non-leaching, ensuring purity and contamination-free performance in industries where material integrity is critical.

### **UNMATCHED FLEXIBILITY:**

Designed for optimal adaptability, fluoropolymer gaskets bend without breaking, enhancing sealing performance in applications that require flexible, long-lasting solutions.

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## UNCOMPROMISING SEALING SOLUTION FOR EXTREME ENVIRONMENTS

			CrossFilm™	PTFE Cast Film
			100% PTFE	CF
General Properties	Units	Test Method		
Specific Gravity		ASTM D792	2.15	2.15
Area Yield	ft <sup>2</sup> /lb/mil		90	90
Flammability		UL-94	V-0	V-0
Water Absorption	%		<0.03	<0.01
Mechanical Properties				
Tensile Strength	psi	ASTM D882	4,300	4,500
Elongation at Break	%	ASTM D882	>400	400
Folding Endurance	cycles	ISO 7854:1984	36,000	4,000
Thermal Properties				
Continuous Use Temp	°F (°C)	UL-746 B	600 (316)	600 (316)
Melt Point	°F (°C)	ASTM D3418	620 (327)	620 (327)
Coeff. of Lin. Thermal Expansion	in/(in °F)	ASTM D696	5.5x10 <sup>-5</sup>	5.5x10 <sup>-5</sup>
Product Offering				
Thickness	mils (µm)		2-60 (51 - 1524)	1 - 5 (25 - 127)
Standard Colors			Black, Blue, Gray	Red, Blue, White
Surface Treatments Available				
Thermo-bondable				Y
Adhesive Bondable				Y

			TCI Melt Extruded Films		
			PFA	FEP	ETFE
General Properties	Units	Test Method			
Specific Gravity		ASTM D792	2.15	2.15	1.74
Area Yield	ft <sup>2</sup> /lb/mil		90	90	110
Flammability		UL-94		V-0	
Water Absorption	%		<0.01		<0.03
Mechanical Properties					
Tensile Strength	psi	ASTM D882	5,000	3,500	7,000
Elongation at Break	%	ASTM D882	500	300	300
Tensile Modulus	psi	ASTM D882		70,000	140,000
Folding Endurance (MIT)	cycles	ASTM D2176	100,000	10,000	>50,000
Thermal Properties					
Continuous Use Temp	°F (°C)	UL-746 B	500 (260)	400 (205)	330 (165)
Melt Point	°F (°C)	ASTM D3418	575 (320)	500 (260)	500 (260)
Coeff. of Lin. Thermal Expansion	in/(in °F)	ASTM D696		5.5x10 <sup>-5</sup>	4x10 <sup>-5</sup>
Product Offering					
Thickness	mils (µm)			0.5-10 (12.5-250)	
Standard Colors				Clear	
Surface Treatments Available					
Thermo-bondable				Y	
Adhesive Bondable				Y	

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TEXTILES COATED INTERNATIONAL | Manufacturer of High-Performance Fluoropolymer Films, Composites, and Laminates

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