



High-Performance Extruded Films - ECTFE

			ECTFE 500 LC	ECTFE 700 HC
General Properties	Units	Test Method		
Specific Gravity		ASTM D792	1.68	1.70
Area Yield	ft ² /lb/mil (m ² /kg/25μ)		115 (23.5)	114 (23.3)
Flammability		UL-94	V-0	
Water Absorption	%		<0.01	
Mechanical Properties				
Tensile Strength	psi	ASTM D882	6,500	5,800
Elongation at Break	%	ASTM D882	300	
Tensile Modulus	psi	ASTM D882	200,000	190,000
Initial Tear Strength (2 mil film)	g	ASTM D1004	500	420
Propagation Tear Strength (2 mil film)	g	ASTM D1922	1200	n/a
Folding Endurance (MIT)	cycles, ave.	ASTM D2176	>250,000	n/a
Thermal Properties				
Continuous Use Temp	°F (°C)	UL-746 B	330 (165)	300 (150)
Melt Point	°F (°C)	ASTM D3418	465 (240)	392 (200)
Coeff. of Lin. Thermal Expansion	in/(in °F)	ASTM D696	9x10 ⁻⁵	
Electrical Properties				
Dielectric Strength (1 mil film)	volts / mil (kV/mm)	ASTM D149	5,500 (215)	
Dielectric Contant 1kHz		ASTM D150	2.6	
Optical Properties				
Refractive Index		ASTM D542	1.4	n/a
Solar Transmission	%	ASTM E424	90	95
Haze (2 mil (50 μm) film)	%		4.0	0.9
Product Offering				
Width	inches (mm)		Up to 60" (1,524)	Up to 61" (1,550)
Thickness	mils (μm)		1- 10 (25 - 250)	5, 10 (250, 500)
Standard Colors			Clear	
Surface Treatments Available				
Chemical Etching			•	
Plasma Treatment			•	•
Applications, Markets				
Composite Molding Process: Release Films			•	
Chemical Process / Equipment			•	•
Medical			•	
Optical /Photovoltaics			•	•
Protective/Decorative			•	•