

CHEMFILM®  ETFE Film — Typical Physical Properties\*

Property	ASTM Method	Metric Value	Metric Units	English Value	English Units
<b>General</b>					
Specific Gravity	D-792	1.70-1.76		1.70-1.76	
Yield (1 mil film)		22.5	m <sup>2</sup> /kg	110	ft <sup>2</sup> /lb
Flammability	UL-94	V-0		V-0	
Water Absorption, 24 hrs		<0.03	%	<0.03	%
<b>Mechanical</b>					
Tensile Strength @ Break	D-882	48	MPa	7000	psi
Elongation @ Break	D-882	300	%	300	%
Tensile Modulus	D-882	965	MPa	140000	psi
Propagating Tear Strength, 1 mil	D-1922	>2.9	N	0.65	lb <sub>f</sub>
<b>Electrical</b>					
Dielectric Strength, 1 mil	D-149	215	kV/mm	5500	V/mil
Dielectric Constant, 1 kHz	D-150	2.6		2.6	
Dissipation Factor, 1 kHz	D-150	<0.0008		<0.0008	
<b>Thermal</b>					
Melt Point	D-3418	250-270	°C	482-518	°F
Continuous Service Temperature		165	°C	330	°F
Specific Heat		2000	J/(kg•°K)	0.46	BTU/(lb•°F)
Coefficient of Thermal Conductivity		0.238	W/(m•°K)	1.65	BTU•in/(hr•ft <sup>2</sup> •°F)
Limiting Oxygen Index	D-2863	30	%	30	%
<b>Optical</b>					
Refractive Index	D-542	1.40		1.40	

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

Contact your Saint-Gobain Performance Plastics representative for appropriate values.



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