



## Material Data Sheet

<b>Product:</b> Ethylene Trifluoroethylene	<b>Base Material:</b> Film
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### Description

Ethylene Trifluoroethylene (ETFE) is a high performance resin that can be processed at relatively high rates compared to fluorocarbon resins. ETFE is inert to most solvents and chemicals, hydrolytically stable and weather resistant. Recommended upper service temperature is 150 °C (302 °F). Useful properties are retained at cryogenic ranges. The level and stability of dielectric ranges are excellent and the flame rating is V-0 by the UL-94 method.

### Typical Properties

<u>Thermal Properties</u>	<u>Test Method</u>	<u>Unit</u>	<u>Value</u>
Nominal Melting Point	ASTM D-3159	°C	267.5
<u>Mechanical Properties</u>			
Tensile Strength, 23 °C (73 °F)	ASTM D-3159	MPa (psi)	45 (6,500)
Specific Gravity	ASTM D-792		1.7
Ultimate Elongation, 23 °C (73 °F)	ASTM D-3159	%	300
Flexural Modulus, 23 °C (73 °F)	ASTM D-790	MPa (psi)	1,200(170,000)
Impact Strength, 23 °C (73 °F)	ASTM D-296	J/m (ft-lb/in.)	No Break
<u>Electrical Properties</u>			
Dielectric Strength, 0.25 mm (0.010 in.)	ASTM D-149	kV/mm (V/0.001 in.)	70(1,800)
Dielectric Constant, 1 Mhz, 23 °C (73 °F)	ASTM D-1531		2.55
Volume Resistivity	ASTM D-257	ohm•m (ohm•cm)	$1 \times 10^3$ ( $1 \times 10^{17}$ )
<u>General Properties</u>			
Water Absorption, 24 h	ASTM D-570	%	0.007
Limiting Oxygen Index	ASTM D-2863	%	31

The information presented in this publication is believed to be accurate and is not intended to constitute a specification. The values given reflect average material characteristics and may vary slightly between base suppliers. Users should evaluate the material to determine the suitability for their own particular application.

Base on terms and conditions

Seller's only obligation shall be to replace such quantity of the product proven to be defective. Seller shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use, or inability to use the product for his/her use, and the user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be changed, except by an agreement signed by an officer or seller. We hereby certify that goods covered by this quotation have been produced in compliance with the Fair Labor Standards Act of 1983, as amended. Any credit memos to purchaser shall expire if not used within one year from date of credit memo.