

# ETFE Plain Weave Gauze

**Formula:** ETFE

**Thickness:** 1mm

**Length 1:** 250mm

**Length 2:** 250mm

**Product Shape:** Plain Weave

**Type:** Plain Weave

**Threads/cm:** 6.7

**Open Area:** 44%

**Nominal Aperture (Microns):** 1000

**Monofilament Diameter:** 500 $\mu$ m

**CAS Number:** 25038-71-5

**UOM Code:** 079-988-12

**SKU:** 1000011439-group

**Product Code:** FP36-MS-000110

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Good
Acids - dilute	Good
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good
Halogens	Good
Ketones	Good

### Electrical Properties

Element	Value
Dielectric constant @ 1MHz	2.6
Dissipation factor @ 1MHz	0.0005
Dielectric strength( kV mm <sup>1</sup> )	25
Surface resistivity( Ohm/sq )	>10 <sup>12</sup>

<b>Element</b>	<b>Value</b>
Volume resistivity( Ohmcm )	10 <sup>12</sup>

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Flammability	V0
Radiation resistance	Fair
Refractive index	1.403
Resistance to Ultra-violet	Excellent
Limiting oxygen index( % )	30-32
Water absorption( % )	0-0.03
Density( gcm <sup>3</sup> )	1.7

## **Mechanical Properties**

<b>Element</b>	<b>Value</b>
Hardness - Rockwell	R50
Elongation at break( % )	250-350
Tensile modulus( GPa )	0.8
Izod impact strength( J m <sup>-1</sup> )	1000
Tensile strength( MPa )	28-48

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 0.45MPa( C )	105
Heat-deflection temperature - 1.8MPa( C )	70
Lower working temperature( C )	-100
Upper working temperature( C )	150-160
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	1900-2000
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.24@23°C
Coefficient of thermal expansion( x10 <sup>-5</sup> K <sup>-1</sup> )	90-170