Mylar ®

polyester film

Type EL 48-500 Gauge

Product Information

Information below was created by Dupont Teijin Films.

Product Description

Mylar® Type EL films, typically 48 through 500 gauge, are strong, tough, general-purpose films for electrical/electronic uses. Heavier gauges of Type EL films are similar to Type MO films. Available in grades from clear to hazy,Type EL films offer chemical inertness, good dielectrics, high temperature durability, and good handling characteristics.

Typical Properties

The good electrical, mechanical, thermal, and chemical inertness characteristics of Mylar® Type EL films make them ideal for electrical and electronic applications.

Applications

The outstanding strength, flexibility, and electrical properties of Type EL films make them well suited

For many electrical and electronic applications. The good handling and winding characteristics make them especially suitable for coating, die cutting, embossing, and laminating operations.

Typical Values for Major Properties

Nominal Thickness um (Gauge)	*Tensile Strength MD/TD,* kg/mm2 (kpsi)*	*Elongation MD/TD,* %*	*Dimensional Stability MD/TD,* % Shrinkage*	*Haze, %*	*Dielectric Strength (AC), kV (Min.)*
12 (48)	18/22 (26/32)	110/70	2.0/1.0	4	2.8
19(75)	20/24 (28/34)	110/90	2.0/1.1	15	3.5
23 (92)	20/24(28/34)	110/90	1.9/1.1	16	4.0
36 (142)	20/24 (28/34)	125/100	1.5/1.0	18	5.5
50 (200)	20/23 (28/33)	135/110	1.3/0.8**	24	7.7
75 (300)	19/22 (27/31)	135/110	1.2/0.8**	29	10.0
100 (400)	18/21 (26/30)	140/115	1.1/0.7**	37	11.7
125 (500)	19/21 (27/30)	140/115	1.1/0.7**	43	13.5

***** MD = Machine Direction, TD = Transverse Direction.

** Type EL films with lower shrinkage levels are available as Type EC.

Mylar ®

polyester film

Type EL-21 750-1400 Gauge

Product Information

Information below was created by Dupont Teijin Films.

Product Description

Mylar® polyester films are flexible, strong, and durable films with an unusual balance of properties, making them suitable for a variety of industrial applications. The excellent dielectric strength, moisture resistance, and physical toughness make Mylar® a very versatile and functional insulating material.

Applications

Type EL-21 films, similar to type MO films, are heavy gauge insulating films designed for general purpose electrical/electronic applications, such as transformers, laminates, bus bars, and punched parts.

Typical Properties

Mylar® polyester films are flexible, strong, and Mylar® films offer high dielectric strength, durable films with an unusual balance of properties, good chemical resistance, and exceptional making them suitable for a variety of industrial durability in high-temperature environments.

Typical Values for Major Properties

Nominal Thickness um(Gauge)	*Tensile Strength MD/TD,* kg/mm2 (kpsi)*	*Elongation MD/TD,* %*	*Dimensional Stability MD/TD,* % Shrinkage*	*Opacity, %*	*Density g/cm3*	*Dielectric Strength (AC), kV (Min.)*
188 (750)	19/21 (27/30)	140/115	1.6/0.9	38	1.3928	17.5
225 (900)	19/20 (27/29)	150/130	1.6/1.1	41	1.3920	18.4
250 (1,000)	19/20 (27/29)	150/140	1.5/1.1	42	1.3925	19.0
350 (1,400)	18/17 (26/25)	170/170	1.3/0.8	46	1.3925	20.0

*MD = Machine Direction, TD = Transverse Direction

Mylar ®

polyester film

Type MO, 500 Gauge and Type MO 21, 750-1400 Gauge

Product Information

Information below was created by Dupont Teijin Films

Product Description

Mylar® Type MO films are strong, heavy gauge films that have excellent electrical properties. These films offer exceptional cut-through resistance, low shrinkage, low moisture absorption, and high thermal durability. Type MO films are used as insulation in systems that have been given Class B ratings by UL. Low extractables make these films suitable for insulation in sealed motor/compressor units. They also offer product uniformity that enhances processing on automatic slot and wedge inserting equipment.

Applications

Mylar® Type MO films are being widely used for electrical insulation in slot liners, wedges, and phase insulation for motors and generators. Type MO films are also frequently used in hermetic motor/compressor sealed units, fractional horse power motors, diaphragms, and industrial laminations.

Typical Properties

The inherent mechanical durability of Mylar ® Type MO films and their good dielectric and thermal durability characteristics endow these films with multiple advantages in motors and generators.

Typical Values for Major Properties

Nominal Thickness um(Gauge)	*Tensile Strength MD/TD,* kg/mm2 (kpsi)*	*Elongation MD/TD,* %*	*Dimensional Stability MD/TD,* % Shrinkage*	*Opacity, %*	*Density g/cm3*	*Dielectric Strength (AC), kV (Min.)*
125 (500)	19/21 (27/30)	140/115	1.1/0.7	14	1.3923	13.5
188 (750)	19/21 (27/30)	140/115	1.6/0.9	38	1.3928	17.5
225 (900)	19/20 (27/29)	150/130	1.6/1.1	41	1.3920	18.4
250 (1,000)	19/20 (27/29)	150/140	1.5/1.1	42	1.3925	19.0
350 (1,400)	18/17 (26/25)	170/170	1.3/0.8	46	1.3925	20.0

*MD = Machine Direction, TD = Transverse Direction

These values are typical performance data for Mylar® polyester film; they are not intended to be used as design data. We believe this information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience is gained. DuPont Teijin Films makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information. This publication is not a license to operate under, or intend to suggest infringement of, any existing patents.

Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see “DuPont Medical Caution Statement,” H-50102.

Rev. 06.07.13