

Mylar® A polyester film is a flexible, strong and durable film with unusually well balanced properties which make it suitable for many industrial applications. The combination of good electrical, mechanical and thermal properties make the film an ideal insulation material for motors, generators and transformers.



## Typical applications

Electrical insulation such as insulation of motors generators and transformers, including slot insulation where demands for toughness and durability are decisive, and as insulation barriers within the areas of electronics/power electronics, etc. However, applications also span a much wider spectra ranging from shirt collar inserts to drum skins.

## Properties

- Approved for insulation Class B (130°C) in electrical applications.
- Max working temperature (recommended) +150°C
- Test data accessible -70°C to +200°C.
- Melting point 254°C.
- Very good dielectric properties.
- Very good mechanical properties.
- Very low moisture absorbency.
- Very good durability. Material does not become brittle over time because it does not contain plasticizers.
- Can be easily formed and shaped, both hot and cold.
- Can be punched or cut.
- We have selected Mylar® A as a standard film to ensure the highest quality. Experience has shown Mylar® A to be very resistant to tearing when fixing coil ends with yarn in automatic machinery and installations.
- Flammability class in accordance with UL94, see UL-file #E93687.

## Composition

A polyester film consisting of thinly stretched Polyethylene Terephthalate (PET) to obtain its good properties.

## Colour

Transparent with some "cloudiness" to almost milky white, depending on the thickness (see technical data).

## Dimensions

Mylar® A is manufactured in thicknesses 23–500 µm. Supplied in standard widths of 500mm alt. 914 mm.

Can be slit to desired widths up to ca 1 000 mm.

Can be punched or cut to desired form or shape. In the case of die-cutting a die tool is required (tools available at low costs).

We also offer slit-to-width polyester film in fringed executions.

## Packaging

Standard packaging width 500 mm in rolls of ca 6 kg and ca 30 kg.

Standard packaging width 900 mm in rolls of ca 30 kg.

Other slit widths on MOQ (minimum order quantity) in kg on request.

Punched and die-cut items: volume MOQ (minimum order quantity) by agreement (with die tool or cut).

## Article list Polyesterfilm Mylar® A

Item Number/ Grade	Dimensions			Weight/roll ca (kg)	Weight g/m <sup>2</sup> (nom.)	Lenght/roll ca (m)
	Thickness (mm)/tol	Width (mm)	Internal (mm)			
106008	0.100 +/- 10%	500	76	6	139	86
125456	0.125 +/- 10%	500	76	6	174	69
125457	0.190 +/- 10%	500	76	6	264	45
125459	0.250 +/- 10%	500	76	6	348	34
125460	0.350 +/- 10%	500	76	6	487	25
125461	0.500 +/- 10%	500	76	6	695	17

## Technical data

Polyester film Mylar® A properties	Standard							Unit
Thickness		23	30	36	50	75	100	µm
<b>Mechanical properties</b>								
Thickness tolerance		10	10	10	10	10	10	+/-%
Density	ASTM D1505	1,390	1,390	1,390	1,390	1,390	1,390	g/cm <sup>3</sup>
Weight/m <sup>2</sup> (ca at nominal thickness)		32	42	50	70	104	139	g/m <sup>2</sup>
Tensile strength MD/XMD	ASTM D882	210/230	230/260	230/260	190/210	190/200	190/200	N/mm <sup>2</sup>
Flexural modulus of elasticity	ASTM D882	4 100/4 300	4 100/4 300	4 100/4 300	3 800/4 100	3 800/4 000	3 700/3 900	N/mm <sup>2</sup>
Elongation MD/XMD	ASTM D882	130/110	120/100	130/110	140/120	140/120	150/120	%
Shrinkage at 150°C/30 min MD/XMD1.	ASTM D1204	1.3/1	2.5/1.7	2/1.7	1.2/1.1	1.1/1	1.1/1	%
Shrinkage at 200°C/30 min MD/XMD	ASTM D1204	4/3	8/7	7/6.5	2.8/2.5	2.5/2.3	2.5/2.3	%
Haze acc. to Gardner Hazemeter	ASTM D1003	15	20	22	29	36	39	%
<b>Thermal properties</b>								
Max working temperature (recommended)		150	150	150	150	150	150	°C
Electrical insulation class		B/130	B/130	B/130	B/130	B/130	B/130	klass/°C
Melting point		254	254	254	254	254	254	°C
<b>Electrical properties</b>								
Dielectric strength	ASTM D149	4	4.8	5.5	7.7	10	11.75	kV (min)

Polyester film Mylar A properties	Standard							Enhet
Thickness		125	190	250	300	350	500	µm
<b>Mechanical properties</b>								
Thickness tolerance		10	10	10	10	10	10	+/-%
Density	ASTM D1505	1,390	1,390	1,390	1,390	1,390	1,390	g/cm <sup>3</sup>
Weight/m <sup>2</sup> (ca at nominal thickness)		174	264	348	417	487	695	g/m <sup>2</sup>
Tensile strength MD/XMD	ASTM D882	180/200	190/220	190/200	190/200	190/190	150/170	N/mm <sup>2</sup>
Flexural modulus of elasticity	ASTM D882	3 600/3 800	3 300/3 700	3 100/3 500	3 000/3 200	2 950/3 200	2 600/2 800	N/mm <sup>2</sup>
Elongation MD/XMD	ASTM D882	150/130	190/140	210/170	210/180	240/200	270/240	%
Shrinkage at 150°C/30 min MD/XMD1.	ASTM D1204	1.1/1	1.3/1.3	1.3/1.3	1.3/1.3	1.3/1.3	0.9/0.9	%
Shrinkage at 200°C/30 min MD/XMD	ASTM D1204	2.5/2.3	3.5/3.3	3.5/3.3	3.5/3.5	3.5/3.3	2/1.7	%
Haze acc. to Gardner Hazemeter	ASTM D1003	43	82	90	92	96	97	%
<b>Thermal properties</b>								
Max working temperature (recommended)		150	150	150	150	150	150	°C
Electrical insulation class		B/130	B/130	B/130	B/130	B/130	B/130	klass/°C
Melting point		254	254	254	254	254	254	°C
<b>Electrical properties</b>								
Dielectric strength	ASTM D149	13.5	17.5	19	19.5	20	20	kV (min)

### How to contact BEVI

Contact details for all countries are continually updated on our website. Please visit [www.bevi.com](http://www.bevi.com) to access the information direct.

BEVI AB (Headquarters)  
Blomstermåla, Sweden  
Tel. +46 499 271 00  
[info@bevi.se](mailto:info@bevi.se)

