Mylar® Type A

Polyester Film

Profile

Thickness Range 50-125 µm

MYLAR® polyester film is a flexible, strong and durable film with an unusal balance of properties making it suitable for many industrial applications. Type A MYLAR® is a tough general purpose film which is translucent in 50 to 125μm thickness. Type A MYLAR® is primarily used for release applications, office supplies, electrical insulation and industrial laminations with other flexible materials. Type A MYLAR® is also available in 12 through 36μm and 190 to 500 μm thickness range.

Properties

Type A MYLAR® has a tensile strength that averages 190 MPa, has excellent resistance to moisture and most chemicals and can withstand temperature extremes from –70°C to 150°C. Because it contains no plasticiziers. Type A MYLAR® does not become brittle with age under normal conditions.

Typical values for major properties are as follows:

Property/Method			50A	75A	100A	125A	
Tensile Strength (MPa)	ASTM D 882	M	190	190	190	180	
		T	210	200	200	200	
Modulus (MPa)	ASTM D 882	M	3800	3800	3700	3600	
		T	4100	4000	3900	3800	
Elongation (%)	ASTM D 882	M	140	140	150	150	
		T	120	120	120	130	
Shrinkage	ASTM D 1204	M	1.2	1.1	1.1	1.1	
150°C for 30 min. (%)		T	1.1	1.0	1.0	1.0	
Shrinkage	ASTM D 1204	M	2.8	2.5	2.5	2.5	
200°C for 30 min. (%)		T	2.5	2.3	2.3	2.3	
Haze (%)	ASTM D 1003		29	36	39	43	
	Gardner Hazemeter		29	30	39	43	
Dielectric Strength	ASTM D 149		7.7	10	11.75	13.5	
(minimum) (kV)			1.1	10	11./3	13.3	

Mylar® Type A

Polyester Film

Profile

Thickness Range 12-36 µm

MYLAR® polyester film is a flexible, strong and durable film with an unusal balance of properties making it suitable for many industrial applications. Type A MYLAR® is a tough general purpose film which is translucent in 12 through 23μ and translucent in heavier thickness. Type A MYLAR® is primarily used for release applications, office supplies, electrical insulation and industrial laminations with other flexible materials. Type A MYLAR® is also available in 50 through 500 μm thickness range.

Properties

Type A MYLAR® has a tensile strength that averages 190 MPa, has excellent resistance to moisture and most chemicals and can withstand temperature extremes from –70°C to 150°C. Because it contains no plasticiziers. Type A MYLAR® does not become brittle with age under normal conditions.

Typical values for major properties are as follows:

Property/Method			12A	15A	19A	23A	30A	36A
Tensile Strength (MPa)	ASTM D 882	M	200	200	210	210	230	230
		T	220	220	230	230	260	260
Modulus (MPa)	ASTM D 882	M	4200	4200	4200	4100	4100	4100
		T	4200	4200	4300	4300	4300	4300
Elongation (%)	ASTM D 882	M	100	110	110	130	120	130
		T	100	100	110	110	100	110
Shrinkage	ASTM D 1204	M	1.5	1.3	1.3	1.3	2.5	2.0
150°C for 30 min. (%)		T	0.0	0.0	1.0	1.0	1.7	1.7
Shrinkage	ASTM D 1204	M	4.5	4.0	4.0	4.0	8.0	7.0
200°C for 30 min. (%)		T	1.5	1.0	3.0	3.0	7.0	6.5
Haze (%)	ASTM D 1003 Gardner Hazem	eter	5	7	11	15	20	22
Dielectric Strength (minimum) (kV)	ASTM D 149		2.5	2.7	3.0	4.0	4.8	5.5

Product Information



Mylar® A 190 - 500μm

Product Description

MYLAR® polyester film is a flexible, strong and durable film with an unusual balance of properties making it suitable for many industrial applications. Type MYLAR® A is a tough general purpose film available in $12\mu m$ to $500\mu m$ thickness range. In film thickness $12\mu m$ to $125\mu m$, MYLAR® A is slightly hazy. In film thicknesses $190\mu m$ and above, MYLAR® A is hazy. Type MYLAR® A is primarily used for release applications, office supplies, electrical insulation and industrial laminations with other flexible materials.

Film Properties (typical values)

Type MYLAR® A has a tensile strength that averages 210 MPa, has excellent resistance to moisture and most chemicals and can withstand temperature extremes from -70°C to 150°C. Because it contains no plasticisers MYLAR® A does not become brittle with age under normal conditions.

Property	Test Method		Value						
Thickness		micron	190	250	300	350	500		
Tensile Strength (Mpa)	ASTM D 882	MD	190	190	190	190	150		
		TD	220	200	200	190	170		
Modulus (Mpa)	ASTM D 882	MD	3300	3100	3000	2950	2600		
		TD	3700	3500	3200	3200	2800		
Elongation (%)	ASTM D 882	MD	190	210	210	240	270		
- " "		TD	140	170	180	200	240		
Shrinkage 150°C for 30 min (%)	ASTM D 1204	MD	1.3	1.3	1.3	1.3	0.9		
		TD	1.3	1.3	1.3	1.3	0.9		
Shrinkage 200°C for 30 min (%)	ASTM D 1204	MD	3.5	3.5	3.5	3.5	2		
		TD	3.3	3.3	3.5	3.3	1.7		
Haze (%)	ASTM D 1003		82	90	92	96	97		
	Gardner Hazemeter								
Dielectric Strength	ASTM D 149		17.5	19	19.5	20	20		
(minimum) (kV)						-	20.00		

1mm = 1 micron = 0.001 mm approx 4 gauge, MD = Machine Direction, TD = Transverse Direction

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DuPont Teijin Films makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.



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

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