



# Melinex®

polyester film

## Melinex® 406

### Product Description

Melinex® 406 is a clear film with excellent handling qualities which has been treated on both sides to promote adhesion to inks and lacquers. The film is supplied unknurled and is available in the thickness of 23, 36, 50, 71 and 96µ. The co-extruded structure of Melinex® 406 allows extremely low haze values whilst maintaining very good handleability – ease of conversion and reel formation is excellent even without a knurl.

### Typical Applications

Melinex® 406 is suitable for a wide range of applications including labels, overlamination and carton windows. The co-extruded structure of Melinex® 406 allows extremely low haze values whilst maintaining very good handleability - ease of conversion and reel formation is excellent even without a knurl. The chemical adhesion pretreat has a more permanent effect than corona treatment and does not modify the dyne level of the surface thus giving improved print definition. For more information on the printability of Melinex® 406 contact your DuPont Teijin Films Representative.

### General Information

Melinex® 406 can withstand a broad range of temperatures and has good resistance to moisture and most chemicals.

### Food Contact Advice

Melinex® 406 has been assessed with respect to Food Contact Legislation. Please contact your DuPont Teijin Films representative to receive the Regulatory Compliance documents, which give detailed information on individual country regulations, overall and specific migration limits and possible restrictions for specific applications).

## Film Properties

Property	Unit	Typical Values					Test Method
<b>General</b>							
Thickness	micron	23	36	50	71	96	DTF Method
Area Yield	m <sup>2</sup> /kg	31.1	19.8	14.3	10	7.4	DTF Method
Relative Density (23°C)		1.4	1.4	1.4	1.4	1.4	Based on ASTM D1505-79
<b>Electrical</b>							
Dielectric strength	Kv/mm	160					Based on ASTM D149-81
Surface resistivity	ohm	>1013					Based on ASTM D257-83
Volume resistivity	ohm/m	1015					Based on ASTM D257-83
<b>Mechanical</b>							
Tensile strength at break	kgf/mm <sup>2</sup>	MD 20	TD 28				Based on ASTM D882-83
Elongation at break	%	MD 170	TD 110				Based on ASTM D882-83
Stress at 5% elongation (F5)	kgf/mm <sup>2</sup>	MD 11	TD 10				Based on ASTM D882-83
Slip (coefficient of static friction)		0.44					Based on ASTM D1894-83
<b>Optical</b>							
Haze	%	0.7	0.8	0.9	1.0	1.4	Based on ASTM D1003-77
<b>Thermal</b>							
Shrinkage 150°C for 5 mins	%	MD* 1	TD* 0.3				Based on ASTM D1204-78
Coefficient of thermal expansion	ppm/K	19					Based on ASTM E831-06
Upper melt temperature	°C	255-260					Based on ASTM E794-85

## Standard Put-Ups

Reel Diameter in mm		Approximate Reel Length in Metres				
Core ID	Reel OD	23	36	50	71	96
152	na	9900	6300, 8400	3000, 4500, 6000	3000, 4200, 6300	2250, 3000, 4500
Reel Length rounded to nearest 25 metres						

## Disposal Advice

Disposal of Melinex® 406 does not present special disposal problems. Where waste occurs in a clean, uncontaminated form it can be recycled. In most circumstances, once Melinex® 406 has been laminated, coated, printed or metallised, incineration with Energy Recovery is the most environmentally efficient recovery route. Melinex® 406 can also be burned in an incinerator with normal refuse or can be buried as a relatively inert material in a landfill. The disposal method should comply with appropriate local and country regulations.

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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-50102-3-DTF and H-50103-3-DTF.

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