## **Product Information**



MXTD100 Issue 2

## Melinex® O and Melinex® OD

Melinex O is a sparkling clear film suitable for applications where very high transparency (or reflectivity when metallised) is more important than the best handling qualities. It is available in thicknesses of 125, 175 and 250 microns.

When supplied as a knurled reel the film is referred to as OD

## TYPICAL VALUES OF PROPERTIES

Property	Test Method	Unit	Value		
General			125µm 175µm 250µm		
Area Yield		m²/kg	5.7 4.0 2.9		
Relative Density (at 23°C)	ASTM D 1505-79		1.4		
	(modified to Melinex test method)				
Thermal					
Upper Melt temperature	ASTM E794-85	°C	255 - 260		
Coefficient of thermal expansion		(cm/cm deg C)	19 x 10 <sup>-6</sup> (MD)		
(between 20 and 50°C)		(cm/cm deg C)	16 x 10 <sup>-6</sup> (TD)		
			MD TD		
Shrinkage (after 5mins at 190°C)		%	3 3		
Mechanical			MD* TD**		
Tensile strength at break	ASTM D 882-83	kgf/mm²	20 20		
	(23°C at 50% RH Strain Rate 50% min)				
Elongation at break	As above	%	125 80		
Optical					
			125µm 175µm 250µm		
Haze	ASTM D1003-77	%	0.4 0.7 1.5		
	(Measured on Gardner Hazemeter)				
Total luminous transmission (TLT)	As Above	%	89.5 89.2 88.7		

Electrical			125µm	175µm	250µm
Dielectric strength	ASTM D 149-81	Kv/mm	125	105	no data avail
Surface resistivity	(6.35 electrodes in dry air at 25°C) ASTM D 257-83	ohm/		>10 13	
Volume resistivity	(500V dc at 20°C an 54% rh) ASTM D 257-83	ohm m		10 15	
	(100V dc at 25°C and 1000s)				
Permittivity					
23°C, 50Hz	ASTM D 150-81		3.26		
23°C, 1kHz			3.24		
23°C, 10kHz			3.21		
0°C, 50Hz			3.26		
50°C, 50Hz			3.27		
100°C, 50Hz			3.35		
150°C, 50Hz			3.65		
Power factor					
23°C, 50Hz	ASTM D 150-81		0.002		
23°C, 1kHz			0.0055		
23°C, 10kHz			0.011		
0°C, 50Hz			0.004		
50°C, 50Hz			0.0015		
100°C, 50Hz			0.01		
150°C, 50Hz			0.006		

 $1\mu m = 1 \text{ micron} = 0.001 \text{ mm approx. 4 gauge}$ 

Enquiries should be addressed to:

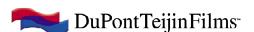
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**Caution:** Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Teijin Films Medical Caution Statement", H-50102-DTF.

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<sup>\*</sup>MD = Machine Direction

<sup>\*\*</sup>TD = Transverse Direction

Melinex®
Only by DuPont Teijin Films