

Innovation Partnerships Sustainability

#### Melinex® D784

**Product Information** 

### **Product Description**

Melinex® D784 is an optically clear film which has been treated on one side to promote adhesion to inks and lacquers. The film is suitable for use in Film-Insert-Moulding processes, and can be drawn and formed to give precise geometries, eliminating the rounding of corners seen with standard polyester films. The higher stiffness of Melinex® D784 compared to other polymeric films used in FIM processes offers the opportunity to downgauge film thickness, providing material cost benefits. Melinex® D784 is available in thicknesses of 200 $\mu$  and 250 $\mu$ 



# **Typical Applications**

Melinex® D784 is suitable for use in FIM processes to produce modules for application areas such as Automotive, White Goods, Consumer Electronics, and In-Mould Electronics. The co-extruded structure of Melinex® D784 allows good formability whilst maintaining excellent chemical resistance and flexibility. The chemical adhesion pre-treatment 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® D784 and suitable inks and lacquers contact your DuPont Teijin Films Representative.



### **General Information**

Melinex® D784 can withstand a broad range of temperatures and has good resistance to moisture and most chemicals. It contains no plasticisers and will not become brittle with age under normal conditions. As per Article 3(3) of the REACH regulation (EC) No 1907/2006 Melinex® D784 film is classified as an article. There are no substances intended to be released from the above film under normal, reasonably foreseeable conditions of use, as defined by Article 7(1). Advice on thermoforming conditions for Melinex® D784 can be obtained from your DuPont Teijin Films Representative.

# **Food Contact Advice**

Melinex® D784 has not been assessed against Food Contact Legislation

### **Film Properties**

Property	Unit	Туріса	l Values	Test Method
General		200	250	
Thickness	micron	200	250	DTF Method
Area Yield	m²/kg	3.57	2.86	DTF Method
Chemical		200	250	
Chemical Resistance	Alcohols	Good	Good	
	Ketones	Good	Good	
	Hydrocarbons	Good	Good	
	Esters	Good	Good	
	Suncream F30	Good	Good	
Mechanical		200	250	
Tensile Strength at Break (MD)	kgf/mm²	14	14	ASTM D888
Tensile Strength at Break (TD)	kgf/mm²	14	14	ASTM D888
Elongation at Break MD	%	160	160	ASTM D888
Elongation at Break TD	%	160	160	ASTM D888
Optical		200	250	
Haze	%	1.5	1.7	ASTM D1003
Total Luminous Transmission (TLT)	%	90	89	ASTM D1003
Thermal		200	250	
MD Shrinkage (30mins/150°C	%	2.0	2.0	ASTM D1204
TD Shrinkage (30mins/150°C	%	<1.0	<1.0	ASTM D1204
MD Shrinkage (5mins/190°C	%	4.0	4.0	ASTM D1204
TD Shrinkage (5mins/190°C	%	2.0	2.0	ASTM D1204
Glass Transition Temperature Tg	°C	76	76	
Melt Temperature		255 - 260	255 - 260	ASTM E794

### **Disposal Advice**

Disposal of Melinex® D784 does not present special disposal problems. Where waste occurs in a clean, uncontaminated form it can be recycled. In most circumstances, once Melinex® D784 has been laminated, coated, printed or metallised, incineration with Energy Recovery is the most environmentally efficient recovery route. Melinex® D784 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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DuPont Teijin Films Contacts			
Continental Europe	United Kingdom	United States	China
DuPont Teijin Films (Luxembourg) SA BP-1681 L-1016 Luxembourg Telephone +352 2616 4004 Fax +352 2616 5000	DuPont Teijin Films (UK) Ltd The Wilton Centre Redcar, TS10 4RF England, UK Telephone +44 (0) 1642 572000 Fax +44 (0) 1642 572075	DuPont Teijin Films USA 3600 Discovery Drive Chester, VA 23836 Telephone 804-530-4076 Toll Free 800-635-4639	DuPont Teijin Films China Limited Room 702, 7th Floor, China Life Center, Tower A, One Harbour Gate, No. 18 Hung Luen Road, Hung Hom, Kowloon, Hong Kong Telephone +852-2734 5345 Fax +852-2724 4458
			jianan.wang@dupont.com
http://www.dupontteijinfilms.com	e-mail: europe.films@dupont.com		

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