Product Information

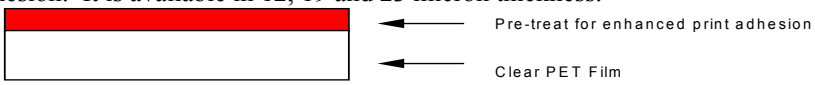
DuPont Teijin Films™

Polyester Films For Packaging

Mylar® 813

Product Description

Mylar® 813 is a biaxially oriented polyester film which is chemically pre-treated on one side to give improved ink adhesion. It is available in 12, 19 and 23 micron thickness.



Typical Applications: Mylar® 813 is typically used as part of a laminate in flexible packaging, usually on the outside of the structure where the excellent print quality it produces, makes products stand out on retail display. The most common structures are the duplex (Fig.1) where the film is usually reverse printed, the triplex (Fig. 2) where the film is reverse printed and adhesively laminated to aluminium foil and polyethylene, and the metallised duplex (Fig. 3) where the film is usually surface printed.

Fig.1

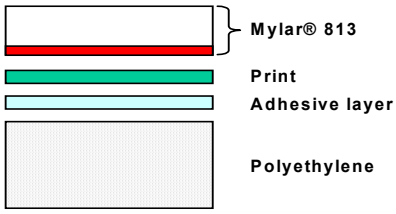


Fig.2

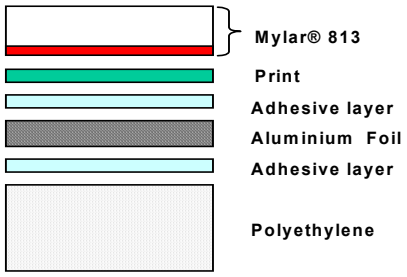
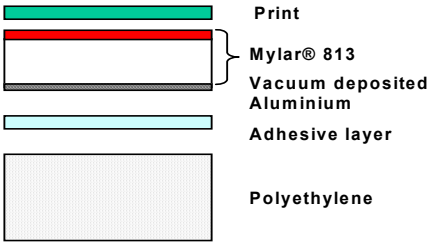


Fig.3



Practical Information: Mylar® 813 is typically used with vinyl and modified nitro-cellulose inks however we would recommend trialling of the selected ink system to ensure compatibility with the specific adhesive/lamination process and final application requirements. Further information on inks suitable for printing Mylar® 813 and contact details for a range of ink suppliers are contained in the data sheet "Printing of Mylar® - Choice of Inks and Adhesives". Mylar® 813 is chemically pre-treated, and does not deteriorate with age unlike corona treatment. There is very little difference in surface energy or "dyne level" between the treated and non-treated surfaces. The pre-treated surface is always wound on the outside of the reel. Special pens which can be used to identify which side of the film is treated are available from DuPont Teijin Films. The film is often metallised on the non pre-treated side. Metallising on the pre-treated side is not recommended. Mylar® 813 can withstand temperature extremes from -70°C to 220°C (although exposure to 220°C for several months will cause some deterioration)

Food Contact Advice: Mylar® 813 is compliant with European Union food contact legislation Directive 2002/72/EC (which is consolidated Directive 90/128/EEC and amendments). For individual country and specific application information please contact your DuPont Teijin Films representative. All gauges of Mylar® 813 comply with the Food and Drug Administration regulation 21 CFR 177.1630 -- Polyethylene phthalate polymers, Sections (f) and (g). This regulation describes films which may be safely used in contact with all types of food, excluding alcoholic beverages, at temperatures not to exceed 121ºC (250 °F).

Disposal: Disposal of Mylar®813 does not present special disposal problems. Where waste occurs in a clean, uncontaminated form it can be recycled into polyester fibre. In most circumstances, once Mylar®813 has been laminated, coated, printed or metallised, incineration with Energy Recovery is the most environmentally efficient recovery route. Mylar®813 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.

Typical Properties

Property	Test Method	Unit	Value
General			
Film Thickness	---	micron	12
Area Yield	---	m^2/kg	59
Unit Weight	---	g/m^2	17
Oxygen permeability	Oxtran 23°C,60/70% RH	$cm^3/m^2/day/atm$	140
Water vapour tramsmission rate	Lyssy 38°C,90% RH	$g/m^2/day$	32
Thermal			MD TD
Shrinkage	190°C for 5 minutes	%	3 1
Coefficient of thermal expansion (between 30 and 50°C		ppm/K	35 28
Upper melt temperature	ASTM E794-85	°C	255-260
Mechanical			MD TD
Tensile strength at break	ASTM D882-83	Mpa	200 260
Elongation at break	as above	%	120 80
Slip (coefficient of static friction)	ASTM D1894-88		0.4
Optical			12µ
Haze	ASTM D 1003-77	%	4.5
Total Luminous Transmission	as above	%	87.9

Standard Put-ups

Film	Standard Reel Length (metres)	Multiples of Standard Reel Length Available
Mylar® 813O.12µm	3000	4, 6, 8, 12, 16
Mylar® 813O.19µm	2000	4, 6, 8, 12,
Mylar® 813O.23µm	1650	4, 6, 8, 12,
Maximum available slit width: 2200mm Minimum available slit width: 306mm Standard core size: 152mm. Other core sizes available on request		

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DuPont Teijin Films Contacts	
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