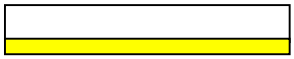
Product Information

DuPont Teijin Films™

Polyester Films For Packaging

Mylar® 850

Product Description: Mylar® 850 is a co-extruded, one side heat sealable polyester film. It can be heat sealed to itself and heat seals well to thermoformed APET/CPET trays and APET coated board. It also heat seals to various other substrates including PVdC, PVC, paper and aluminium foil, but will not seal to polyolefines. The plain (non heat-sealable) surface of Mylar® 850 exhibits the properties of a standard polyester film. Mylar® 850 is available in thicknesses of 15 and 20 micron. Mylar® 850AF available in a thickness of 30 micron, please see separate datasheet.



Typical Applications: Mylar® 850 is an excellent film for lidding to APET/CPET trays, either as a single web (Fig.1) or as part of a laminate (Fig. 2). Such packages are often used for dual ovenable ready meals. Mylar® 850 can also be used on Form-Fill-Seal machines and blister packs; its excellent aroma barrier properties make it ideal for packaging aromatic products such as air fresheners and toilet blocks.

Fig.

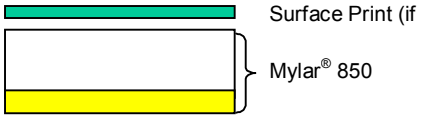
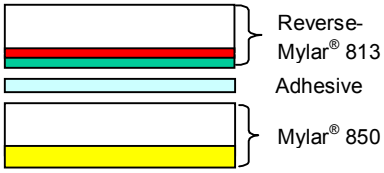


Fig.



Practical Information: Mylar® 850 has an exceptionally wide heat seal range, from 140°C to 220°C, with outstanding hot tack properties. Either fin seals or overlap seals may be made on conventional packaging equipment. The sealable surface of Mylar® 850 also acts as an excellent 'prime' for water-based latices. The film can thus be PVdC coated from an aqueous dispersion by converters without a primer to produce a high barrier laminating film. The plain surface of Mylar® 850 can be printed or metallised in the same way as plain polyester film, although the sealable surface makes handling of the film during conversion more critical. Mylar® 850 can withstand temperatures down to -70ºC and food can be heated/cooked in this film at typical heating conditions of 220ºC for 30 minutes. The heat seal surface of the film is normally wound on the inside of the reel (Mylar® 850i).

Special Features Available: Anti-fog: Mylar® 850 is available in 30 micron with anti-fog (Mylar® 850AF). This is specifically designed to minimize fog during freezing, chilling and cooking operations and also to aid clarity during packaging of 'breathable' products.

Food Contact Advice: Mylar® 850 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® 850 comply with the Food and Drug Administration regulation 21 CFR 177.1630 -- Polyethylene phthalate polymers, sections (f), (g) and (h). This regulation describes films which may be safely used in contact with all types of food excluding alcoholic beverages. Uncoated films such as Mylar® 850 can be used to contain foods during oven cooking or oven baking at temperatures above 121ºC (250 °F).

Disposal: Disposal of Mylar® 850 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® 850 has been laminated, coated, printed or metallised, incineration with Energy Recovery is the most environmentally efficient recovery route. Mylar® 850 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	15	20
Area Yield	---	m^2/kg	48	36
Unit Weight	---	g/m^2	21	28
Oxygen permeability	Oxtran 23°C,60/70% RH	$cm^3/m^2/day/atm$	112	84
Water vapour tramsmission rate	Lyssy 38°C,90% RH	$g/m^2/day$	26	19
Thermal			MD	TD
Coefficient of thermal expansion (between 20 and 50°C)		ppm/K	35	28
Shrinkage (5 minutes at 190°C)	ASTM D1204-78 190°C for 5 minutes	%	3	3
Upper melt temperature (non heat sealable layer)	ASTM E794-85	°C	255-260	
Heat seal strength:				
Seal to Seal	140°C, 40psi, 1sec	g/25mm	800	
Seal to plain	140°C, 40psi, 1sec	g/25mm	400	
Heat seal to APET/CPET tray.	180°C, 80psi, 1 sec	g/25mm	1000	
Sealing temperature range		°C	140-220	
Mechanical			MD	TD
Tensile strength at break	ASTM D882-83	Mpa	165	230
Elongation at break	as above	%	120	80
Slip (coefficient of static friction)	ASTM D 1894-88	Seal / Plain	0.4-0.6	
		Plain / Plain	0.4	
Optical				
Haze	ASTM D1003-52	%	3.1	3.3
Total Luminous Transmission	As above	%	88	88

Standard Put-Ups

Film	Standard Reel Length (metres)	Multiples of Standard Reel Length Available
Mylar® 850.15µm	2500	2, 4, 6, 8
Mylar® 850.20µm	2000	2, 4, 6, 8
Maximum available slit width: 2200mm Standard core size: 152mm. Other core sizes available on request		

(07/01/04) updated 26/09/05

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CERTIFICATE No. 94 – LON – AQ – 215