



DuPont Teijin Films™

MYLAR® BK52

Product Description

MYLAR® BK52 is a biaxially oriented polyester (OPET) film with an ethylene vinyl acetate (EVA) heat seal layer. It is used as a heat sealable lidding film in frozen and refrigerated foods. MYLAR® BK52 is commercially available in nominal 100 gauge.

MYLAR® BK52 is designed to seal to a broad range of container substrates including amorphous polyester (APET, also PETG), semicrystalline polyester (CPET), polyester coated paperboard, polyvinylchloride (PVC), polyethylene (HDPE), polypropylene (PP), and polystyrene (HIPS). Designed to be more peelable than BK2 sealant films.

MYLAR® BK52 produces more ductile seals under refrigerated or frozen conditions and seals better to polystyrene containers than other products. MYLAR® BK52 has a lower seal initiation temperature than lidding films with an amorphous polyester heat seal layer. This allows good seals to be made at higher line speeds (or using lower sealing temperatures).

MYLAR® BK52 can withstand freezing temperatures down to -40°F, and foods can be heated or cooked in contact with this film at temperatures up to 400°F. The oriented polyester base film will begin to distort in the range of 425 - 450°F.

Table 1 - Heat Seal Strength (grams/inch) to Various Container Substrates

Container Substrate	Ambient: 72°F (23°C) 50% RH			Refrigerator: 32°F (0°C)			Freezer: 0°F (-18°C)		
	Seal Bar Temperature			Seal Bar Temperature			Seal Bar Temperature		
	300°F (149°C)	350°F (177°C)	400°F (204°C)	300°F (149°C)	350°F (177°C)	400°F (204°C)	300°F (149°C)	350°F (177°C)	400°F (204°C)
APET	++	++	++	++	++	++	++	++	++
CPET	++	++	++	+	+	+	+	+	+
PVC	+++	+++	+++	+++	+++	+++	++++	++++	++++
HDPE	++	+++	+++	++	+++	+++	++	+++	+++
PP	+	+	+	+	+	+	+	+	+
HIPS	++	++	++	++	++	++	++	++	++

Legend: + is 100 to 650 g/in; ++ 700 to 1250 g/in; +++ is 1300 to 1850 g/in; ++++ is > 1900 g/in

* Seals made with a SENTINEL® heat sealer at 20 psi bar pressure with a 0.5 second dwell time and a 1 inch seal bar

NOTE: These values are typical data for this Mylar® polyester film and are not intended for use as limiting specifications. For additional information contact your DuPont Teijin Films Representative

Approvals

FDA Food Contact Status - All gauges of MYLAR® BK52 comply with the Food and Drug Administration regulation CFR 177.1630 -- Polyethylene Phthalate Polymers and 21 CFR 177.1350 -- Ethylene-vinyl acetate copolymers, subject to the limitations and requirements therein. These regulations describe films that can safely be used in contact with all types of foods excluding alcoholic beverages. The films listed above may be used under 21 CFR 176.170 (c) table 2 Conditions of Use A ("High temperature heat-sterilized (e.g., over 212 °F)") through H ("Frozen or refrigerated storage: Ready-prepared foods intended to be reheated in container at time of use"), including reheating and cooking in the microwave oven and in a conventional oven.

Disposal

Disposal of MYLAR® BK52 does not present special disposal problems. It can be buried as a relatively inert material in a landfill or burned in an incinerator with normal refuse. The incinerator should have sufficient draft to exhaust all combustion products through the stack to avoid exposure to irritating fumes. The disposal method should comply with local, state, and federal regulations.

Typical Properties

Available Thickness [Gauge]
100

Property	Thickness	Value	Units	Test
BARRIER				
Gas Permeability - O ₂ , 24 hr	100	5	cc/100 in ²	ASTM D3985 22°C/50% RH/1 ATM
WVTR	100	1.3	g/100 in ² /day	ASTM F1249 38°C / 90%RH
PHYSICAL				
Elongation at Break MD	100	110	%	ASTM D882A
Elongation at Break TD	100	80	%	ASTM D882A
Modulus	100	550	kpsi	ASTM D822
Tear (Graves)	100	1.1	lb	ASTM D1004
Tensile Strength MD (break)	100	25	kpsi	ASTM D882A
Tensile Strength TD (break)	100	35	psi	ASTM D882A
Yield (nominal)	100	17,700	in ² /lb	

Contact Info

DuPont Teijin Films U.S. Limited Partnership
 3600 Discovery Drive
 Chester, VA 23836 USA
 Tel: (800) 635-4639
 Fax: (804) 530-9867

Disclaimer

Note: These values are typical performance data for DuPont Teijin Films' polyester film; they are not intended to be used as design data. We believe this information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience is gained. DuPont Teijin Films makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information. This publication is not a license to operate under, or intended to suggest infringement of, any existing patents.

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