# **Bicor<sup>™</sup> 15MB840 film** delivers ultra-high gas barriers for transparent MAP applications

Bicor™ 15MB840 clear, biaxially oriented polypropylene (OPP) film from Jindal Films delivers an outstanding gas barrier for modified atmosphere packaging (MAP) applications.

Featuring a polyvinyl alcohol (PVOH) coating on one side and a PE-compatible heat-sealable layer, Bicor 15MB840 film delivers excellent performance for dry product applications requiring MAP, including:

- dry fruits and nuts
- sensitive cereals
- pet foods and treats
- sensitive snacks
- roasted coffees
- and many other oxygen sensitive products

Typically, the PVOH coating is reverse printed and laminated to a hermetic sealant film to provide ultra-high oxygen protection for sensitive dry foods. For MAP applications, the pack is flushed with gases, such as nitrogen or carbon dioxide, for prolonged shelf life.





# Jindal Films



#### Benefits

- ultra-high gas barrier for MAP applications
- flavor and aroma barrier keeps products tasting and smelling fresh
- Lap-sealable for reduction in packaging
- non-halogenated (chlorine-free), clear barrier film
- high clarity and gloss for product promotion and shelf-appeal
- excellent print-receptivity due to high surface tension PVOH coating

#### Protection

- the ultra-high gas barrier makes it ideal for MAP applications, providing a superior alternative to halogenated (chlorine-based) polymers
- PVOH coating provides flavor and aroma barrier to keep products tasting and smelling fresh, and prevent unwanted external odor or pack-to-pack contamination

### Promotion

- high clarity and stiffness provide brand visibility on the store shelf
- use reverse printed in lamination to protect, and enhance package graphics

#### Performance

- replaces EVOH/PE coex films as a barrier solution
- replaces PVdC coated polyethylene terephthalate (PET) as a barrier solution
- the outside surface provides stable slip characteristics for reliable machinability
- lap seals to PE, PP and CPP films, and can seal side gussets for stand-up packaging

# **Structure Comparison**

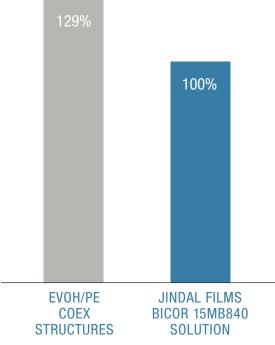
Film Structure (adhesive laminations)	Outer Layer	15MB840	0.70 mil OPP
	Inner Layer	1.5 mil mLLDPE	2.0 mil EVOH/PE coex
OTR-100°F, 0% RH (cc/100in²/day)		0.02	*0.21
WVTR-100°F, 90% RH (g/100in²/day)		0.22	*0.20
Lap Sealable to mPE		Yes, 500 g/in	No

\* Barrier based on sampling of commercial packages.

# Value-in-Use Comparison

- Bicor 15MB840/mPE lamination enables downgauging by replacing thick EVOH coex
  - -2.1 mil Jindal solution versus 2.7 mil EVOH/PE coex structure = 22% lower weight per package
- Bicor 15MB840 with PE-compatible skin enables lap seals
  Lap sealing reduces film required per package by ~7%
- Because of the total reduction in film usage of 28% compared to EVOH/PE coex, the Jindal solution delivers:
  - $-\operatorname{more}$  impressions/roll, fewer changeovers, improved uptime
  - -lower trucking costs & reduced warehouse storage costs
  - -reduced scrap with sustainability benefit
  - potential to reduce heats and/or increase line speeds (due to gauge reduction)

#### **Overall Structure Costs\*\***



\*\* Film costs based on market survey.

#### **Count on Jindal Films**

Jindal Films is a leading global OPP film supplier with the broadest range of aqueous coated film solutions for the flexible packaging market. If you're looking to develop innovative flexible packaging solutions, try Bicor films from Jindal Films.

#### Contact us for more information and details about Bicor^M 15MB840 film

#### www.jindalfilms.com

#### or email us at info@jindalfilms.com

© 2015 Jindal Films, Jindal Films, the Jindal Films logo, and other product or service names used herein are trademarks of Jindal Films, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without Jindal Films' prior written authorization. To the extent Jindal Films authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to, or reproduce it in whole or in part on, a website. Jindal Films does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do na represent, warrant, or otherwise guarantee the accuracy, reliability, fitness for a particular purpose, freedom from patent infringement, or suitability of the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of, or related to, anyon using of rules are each used for convenience, and may include Films Americas LLC, Jindal Films, Neither the use of these terms of convenience, nor anything else in this document is used to so other or outerary implication. The terms "we," "our," "Jindal Films", Neither the use of these terms of convenience, nor anything else in this document, is intended to override or supersed the legal separateness of those affiliated companies and responsibility for local action and accountability remains with them.