

# BOPE PLATFORM

**Jindal**  
Films

## RECYCLABLE MONO-MATERIAL BOPE PACKAGING SOLUTIONS

CREATING THE FUTURE TOGETHER



Ethy-Lyte™

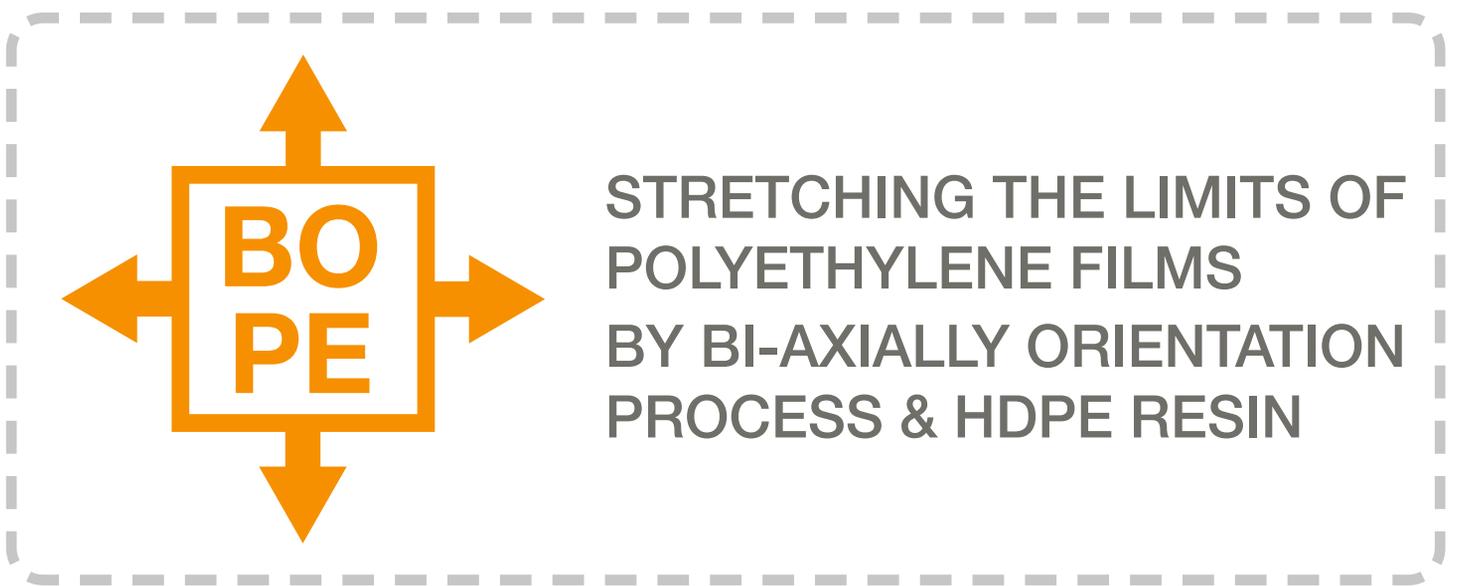
# DESIGNED TO PERFORM & TO BE RECYCLED

## Ethy-Lyte™ Innovations

Jindal Films has introduced a range of high performance bi-oriented Polyethylene film, which can be used as a printing or high barrier lamination film for substituting non-recyclable components in PE laminates, like Polyester, Polyamide or Paper.

With Ethy-Lyte™ BOPE films it's easy to generate recycle friendly Mono PE laminates which can be used for most applications in flexible packaging.

### The BOPE Technology for creating high quality films



- ✦ OUTSTANDING MECHANICAL STABILITY IN BOTH DIRECTIONS MD,TD
- ✦ GOOD OPTICAL PROPERTIES AND HIGH CLARITY
- ✦ HOMOGENEOUS SURFACE AND FLATNESS, LIKE OPP OR OPET
- ✦ IMPROVED THERMAL STABILITY AND HEAT RESISTANCE OF HOPE FILM
- ✦ GOOD MOISTURE BARRIER

The bi-axially orientation process combined with advanced PE resins provide homogeneous and mechanical stable BOPE films with excellent performance in converting and packaging processes. The high quality BOPE films also possess all characteristics for generating high barrier and ultra high barriers films, by using metallization and coating technology.

### FULLY RECYCABLE MONO PE PACKAGING

## FACTSHEETS & PRODUCT DATA SHEETS



## MARKET SEGMENTS



Dry Food



Petfood



Frozen Food



Processed Food



Detergents



Personal care



Non-food



Coffee



Fresh Product



Cheese

Suitable for all standard pack formats, like HFFS, VFFS, Stand up pouches, lid film, premade pouches & bags up to 20kg

# PRINTING & DESIGN SOLUTIONS

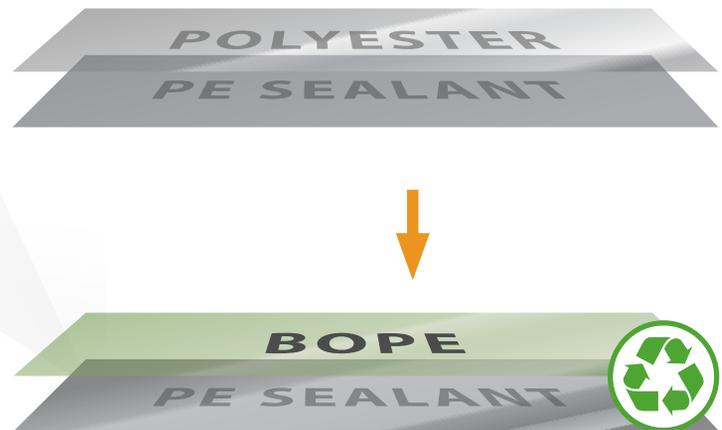
## Ethy-Lyte™

### Broad feature range for high end print designs

Ethy-Lyte™ BOPE films are designed for best performance in printing:

- suitable for all printing processes like Flexo, Rotogravure, Digital and Offset printing.
- good efficiency in printing and lamination processes
- excellent print results, even with challenging designs

Generating recycle friendly Mono PE laminates by replacing PET, OPA, OPP or Paper printing materials.



Ethy-Lyte™ printing films are following the latest design trends in flexible packaging. Ethy-Lyte provides suitable base films for several optical effects, like matt finish & paper look, matt-gloss designs.

BOPE film	VISUAL ASPECTS	GAUGE (µm)	HEATSEAL
HD200	Gloss	20, 25, 40	
HD230	Matt finish & paper look	25	X
HD213	for matt-gloss effects (two side treated)	25	
HD240	Gloss	25, 35	X

# HIGH BARRIER SOLUTIONS

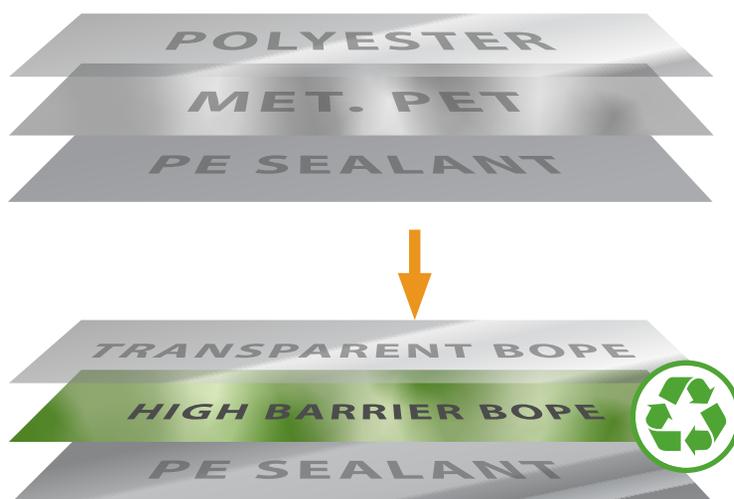
## Ethy-Lyte™

### Best protection for sensitive products

Ethy-Lyte™ barrier films are developed to substitute metallised Polyester films or Aluminium foil in mixed material laminates, to create fully recyclable Mono PE solutions. The films provide excellent oxygen and water vapour barrier as well as aroma protection.

Ethy-Lyte™ high barrier films can be used for duplex or triplex Mono PE high barrier laminates. Transparent high barrier printing film are used in 2 ply laminates with options for window prints. The high barrier metallized films are 2 side process able and can be used as a mid-layer in 3 ply laminates for challenging applications.

### Replacing met. PET, Alu foil or extruded EVOH in laminates with PE sealing films



Mono PE high barrier solutions include well established PE sealing films and provide high seal integrity and seal strengths. It can be used for many challenging applications like coffee, nuts, powder products, fresh food, Pet food and others.

BOPE film	DESCRIPTION	WVTR 38°C 90%RH	OTR 23°C 0%RH	AROMA & MO
<b>25HD800</b>	clear high barrier printing film	5	1	+++
<b>25HD285</b>	Metallised high barrier lamination film	0.2	1	+++
<b>25HDTSPM</b>	Metallized lamination film	0.2	na	+

# OUR SUSTAINABILITY APPROACH

## PROVEN RECYCLABILITY OF ETHY-LYTE™ solutions

The Cyclos Institute verified the recyclability of all Ethy-Lyte™ films laminated with PE sealing films: triple AAA recyclability // excellent performance in mechanical recycling processes.



## The Mono-Material Technology Change

The introduction of Mono-PE packaging solutions has to be considered as an overall Technology change within the flexible packaging industry.

The innovative EthyLyte™ films are the basic building blocks for creating Mono-PE laminates. However, to fully close the loop, involvement and interactions of all stakeholders along the whole supply chain is needed:



This technology transition is a big step forward towards circular economy.

## Close the loop with fully recyclable Mono-PE packaging



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