

# RECYCLABLE PP MONO-MATERIAL SOLUTION WITH HIGH BARRIER & HIGH SEAL PERFORMANCE OPP films

Delivering high performance for VFFS block bottom bags

## MONO-MATERIAL SOLUTION

**PRINT WEB:** BICOR 12MB100 – heat stable OPP film

**BARRIER WEB:** METALLYTE 16MM883 – Ultra high barrier vacuum metallized OPP film

**INNER WEB:** 70µm Low SIT cast PP film

**CONVERSION:** Hatzopoulos  **hatzopoulos**  
FLEXIBLE PACKAGING EXCELLENCE SINCE 1931

## PACKAGING MACHINE

**SUPPLIER:** SYNTEGON Packaging Solutions B.V.

**SYNTEGON**  
PROCESSING & PACKAGING

**FORMAT:** VFFS – Block bottom bag

**TYPE:** SVX Agile model

## Features

- Mono-material compositions (>90% PP)
- Conforms to CEFLEX recycling guidelines
- Outstanding barrier to light, H<sub>2</sub>O, gases, (WVTR 0.1, OTR 0.1), aromas and MO
- Improved heat resistant OPP outer web with low SIT CPP sealant
- Much reduced packaging weight than most 3-ply non- recyclable solutions (e.g. PET/ALU/PE)
- Improved mechanical properties (e.g. puncture resistance)

## Benefits

- Full compatibility for mechanical recycling in PP or mixed PO streams
- ALU-FREE, PET-FREE, PAPER-FREE
- Great barrier keeps product safe while tasting & feeling fresh!
- Provides outstanding protection for sensitive foods
- Robust VFFS performance for demanding application using Modified Atmospheric Packaging (MAP)
- Delivers double-digit percent packaging weight reduction



**SYNTEGON**  
PROCESSING & PACKAGING

**Jindal**  
Films

**BICOR™ MB100** is a very thin transparent non heat sealable OPP film with improved heat stability (low shrinkage) and very high Modulus for optimal machinability during conversion (e.g. rotogravure print) and on VFFS machines

**Metallyte™ MM883** is a transparent ultra high barrier (UHB) vacuum metallized film with high optical density delivering great moisture barrier (WVTR 0.1) and great oxygen barrier (OTR 0.1) along with excellent light protection (OD 2.8)

A low SIT cast PP film is recommended in combination with an improved heat stable outer web to help transition away from more heat stable PET-ALU based structures

An **MB100/MM883/CPP** 3-ply laminate is ideal for most VFFS applications for most demanding food or beverage applications requiring a recyclable PP mono-material solution that was previously in non-recyclable constructions (e.g. PET/ALU/PE, PET/Met-PET/PE, Paper/ALU/PE).

Demanding VFFS formats usually resort to 3-ply non-mechanically recyclable laminates. They can be replaced with 3-ply laminates using higher performance PP films to deliver improved recyclability and conform to CEFLEX design guidelines in Europe.

| VFFS3-PLY HIGH BARRIER LAMINATES | MECHANICALLY RECYCLABLE | REALATIVE RECYCLABLE | MOISTURE BARRIER (WVTR) | GAS BARRIER (OTR) | PUNCTURE RESISTANCE |
|----------------------------------|-------------------------|----------------------|-------------------------|-------------------|---------------------|
| 12 MB100/16 MM883/70 CPP         | ✓                       | 78%                  | ++++                    | ++++              | ++++                |
| 12 PET / 7 ALU FOIL / 80PE       | ✗                       | 100%                 | +++++                   | +++++             | ++                  |
| 12 PET / 12 Met-PET / 80PE       | ✗                       | 100%                 | +++                     | +++               | ++++                |

Jindal Films data

In some instances machine modifications are required as PP-based laminates do not have the same folding properties (i.e. dead-fold) and sealing delivered by Aluminum foil based structures.

For use in market segments typically using VFFS with block bottom formats

- Nuts and dry fruits
- Sensitive snacks
- Potentially any segment where high barrier with long shelf life is required



Laminate made by Hatzopoulos: 12MB100/16MM883/70CPP

Contact your Jindal Films representative for more information

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