


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

## PP-based 3-ply high barrier laminates for multi-lane machines

### MONO-MATERIAL SOLUTION

<b>PRINT WEB:</b>	BICOR 12MB100 – heat stable OPP film
<b>BARRIER WEB:</b>	METALLYTE 16MM883 – Ultra high barrier vacuum metallized OPP film
<b>INNER WEB:</b>	Low SIT cast PP film – 38 µm
<b>CONVERSION:</b>	FLESSOFAB  <b>Flessofab</b> your flexible packaging

### PACKAGING MACHINERY

<b>SUPPLIER:</b>	MARCHESINI GROUP SCHMUCKER
<b>FORMAT:</b>	VFFS multi-lane stick pack
<b>TYPE:</b>	Model MT1500



### Features

- Mono-material compositions (>90% PP)
- Outstanding barrier to light, moisture, Oxygen (WVTR 0.1, OTR 0.1), aromas and mineral oils
- Improved heat resistant OPP outer web combined with low seal initiation temperature CPP
- Reduced packaging weight compared to current 3-ply non-recyclable solutions (e.g. PET/ALU/PE)
- Improved mechanical properties (e.g. puncture resistance, tear propagation)
- Easy tear from a notch

### Benefits

- Conforms to CEFLEX recycling guidelines
- Full compatibility for mechanical recycling in PP or mixed PO streams
- ALU-free, PET-free, Paper-Free
- Great barrier keeps products dry and safe Provides outstanding protection for sensitive powdered foods & dry beverages
- Robust VFFS performance for demanding multi-lane applications
- Delivers up to 20% packaging weight reduction over current Alu foil structures



**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 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/OPP 3-ply laminate is ideal for applications for most demanding powder 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 such as PET/ALU/PE. They can now be replaced with 3-ply PP-based laminates using higher performance OPP films to deliver improved recyclability and conform to CEFLEX design guidelines in Europe.

VFFS 3-PLY HIGH BARRIER LAMINATES	MECHANICAL RECYCLABLE	RELATIVE PACK WEIGHT	MOISTURE BARRIER (WVTR)	GAS BARRIER (OTR)	PUNCTURE RESISTANCE
12MB100 / 16MM883 / 38CPP	✓	75%	++++	++++	++++
12PET / 7ALU / 50PE	✗	100%	+++++	+++++	++
12PET / 12Met-PET / 50PE	✗	98%	+++	+++	++++

Jindal Films data

For use in market segments typically using multi-lane single portion of dry powders with stick packs or 4-side sealed flat sachets formats:

- Sensitive powder beverages such as dry powder milk or dehydrated beverages (instant coffee, milk, powder juice, mixes, nutraceuticals ...)
- Sensitive powdered foods such infant formulas or dehydrated soups
- Potentially any application where high barrier with long shelf life is required



**Flessofab**  
your flexible packaging

Laminate made by Flessofab: 12MB100/16MM883/38Cast PP

Contact your Jindal Films representative for more information

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