

# RECYCLABLE PET FOOD BAG

Made with a Functional Barrier Coating during the Printing Process





## Why a Recyclable Pet Food Bag?

With our **barrier coated** pet food bag, we are demonstrating a proven circular economy film concept. This pet food bag is designed for recyclability, the highest efficiency and packaging performance.

- Stretched, wide and stiff MDO PE-film
- MDO PE-film was coated with PVOH barrier on our MIRAFLEX" printing machine with inliner technology
- Laminated onto a PE sealing film

### Our partners









Solvent Free

## Your advantages

- Add barrier functionality to MDO PE-film with printed **PVOH barrier**
- Excellent production efficiency of MDO PE-film produced on 3200 mm VAREX" with inline MDO
- Proven recyclability
- Fastest bag making speeds
- Optimized packaging concept for the complete value chain

## **Recipes**

MDO P	E-Film				
Amount	Resins		Layer thickness	Functions	
70% 30%	HDPE HDPE	Elite Elite AT	12 µm	Thermal resistance	
100%	MDPE	Elite	26 µm	Mechanical properties	
70% 30%	MDPE LLDPE	Elite Elite	52 μm	Mechanical properties	
100%	MDPE	Elite	26 µm	Mechanical properties	
70% 30%	HDPE HDPE	Elite Elite AT	12 µm	Thermal resistance	

The primary film thickness is 128  $\mu m$  and stretched down by the MDO unit to a secondary film of 25  $\mu m$ 

Thermal resistance stretched down by the MDO unit

### Sealing Film in 145 µm

Amount	Res	sins	Layer thickness	Functions
100%	LLDPE	Innate ST	25 µm	Mechanical properties
100%	LLDPE	Innate ST	20 µm	Mechanical properties
100%	LLDPE	Innate ST	13 µm	Mechanical properties
70% 30%	MDPE MB	Elite Masterbatch White	10 μm	Mechanical properties Color
70% 30%	MDPE MB	Elite Masterbatch White	9 μm	Mechanical properties Color
70% 30%	MDPE MB	Elite Masterbatch White	10 μm	Mechanical properties Color
100%	LLDPE	Innate ST	13 µm	Mechanical properties
100%	LLDPE	Innate ST	20 µm	Mechanical properties
60% 40%	POP LLDPE	Affinity Innate	25 μm	Sealing







# MIRAFLEX" WITH INLINER

Sustainable Printing made easy - Printed Barrier Solutions



Freshness and quality are important, especially for packaged food products. To achieve these, the barrier properties of the packaging used are crucial. W&H has been working with various market leading partners to further develop barrier coating technology for packaging products as a sustainable and flexible alternative to multi-layer packaging material.

## Why MIRAFLEX"?

### Best print quality

The robust print deck design, drying capabilities and web handling are the base for the superior print quality of the MIRAFLEX".

#### • Efficient inline processes

Choose between flexo and gravure inline solutions with high-capacity drying systems, especially for water-based coatings.

#### • Fast changeovers

Integrated EASY modules for impression and register setting allow quick, **waste-minimizing** set-up and job changes. TURBOCLEAN with diaphragm or electric pumps guarantees exceptional cleaning results and **most efficient ink** and **solvent usage.** W&H's approach on **sustainable flexo production.** 

## Your advantages

- Superior print quality with high throughput and productivity
- ✓ Water-based flexo technology available
- Fast and easy adaption of barrier coatings (type, application weight, ...)
- Flexibility to apply PVOH to a wide range of materials (MDO-PE, OPP, paper, ...)
- Competence in inline applications with flexo and gravure solutions

Technical Data					
	MIRAFLEX" M	MIRAFLEX" L			
Color decks	8 or 10	8 or 10			
Printing width	820 – 1450 mm (32.25" – 57")	1000 – 1450 mm (39.3" – 57")			
Repeat length	max. 800 mm (31.5")	max. 1130 mm (44.5")			
Press speed	400/500/600 m/min. (1300/1640/1960 ft/min.)	400/500/600 m/min. (1300/1640/1960 ft/min.)			



