FauxFoil™

Ampacet FauxFoil™ is an alternative solution to aluminium foil & metalized films, designed for flexible structures.

Background

Aluminum is the most widely used metal in the packaging world, for drink & food cans, aerosol cans, but also in the flexible packaging where aluminum foil or vacuum deposited aluminum bring enhanced aesthetics as well as barrier properties to the packaging.

The manufacture of aluminum brings environmental impacts associated with each stage of its production, from extraction to processing. The entire process is highly energy consuming, requires large amounts of electricity & water and leads to strong greenhouse gas emissions as well as acid rains.

Companies using Aluminum foil in their products and process become more and more conscious about these related environmental concerns and look for Aluminum substitutes. This trend is further amplified by the new circular economy policies as recycling of flexible packaging containing aluminum foil or vacuum deposited aluminum film in their structure appears challenging.

Benefits

Giving a lot of importance to environmental issues and circular economy, Ampacet **FauxFoil™** technology represents a sustainable alternative solution to conventional aluminum foil and to metallized films used in flexible structures offering opportunities for packaging simplification and higher recyclability.

Ampacet **FauxFoil™** technology is primarily used to mimic the look of aluminum foil and metallized films offering significant key attributes to the flexible packaging produced, such as:

- High reflective silver appearance with high gloss and shine for foil-like aesthetics
- Similar light blockage as foil or metallized film
- Softer packaging with no noise
- Eliminates the need to flood print, metallize or laminate with aluminum foil
- Good heat seal properties
- Low carbon footprint

When packaging requires barrier properties, Ampacet **FauxFoil™** technology can be used in combination with polar barrier polymers (e.g. EVOH, Polyamide, …) in barrier film structures and:

- Eliminates the risk of pin holes occurring in metallized films, avoiding loss of barrier properties
- Allows easier recyclability thanks to the simplified flexible packaging structures

Compatible with conventional extrusion process, Ampacet **FauxFoil™** doesn't require any machine change or process parameter adjustments.

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End Products

Ampacet **FauxFoil™** technology is advised for use in:

- Silver-like applications such as automotive liquids packaging, merchandise packaging, labels…
  where only aesthetics matters

- Barrier packaging applications like coffee pouches, pet food packaging, snack food packaging, single-serve
  juice and beverage pouches… where used in combination with barrier polymers

Performances

Used in 3-layers blown film structures, Ampacet **FauxFoil™** technology allows to provide film properties as described in Table N°1.

50 µm Blown Film	Outer Layer	Core Layer	Inner Layer	Gloss @ 45°	Light Transmission [%]	Optical Density
Control Film	20%	60%	20%			
	LLDPE	LDPE	LDPE			
Film #1	20%	60%	20%	70	7.3	1.22
	LLDPE	**10% FAUXFOIL 054**	10% 111413			
Film #2	20%	40%	40%	70	13.5	0.94
	LLDPE	**20% FAUXFOIL 054**	10% 111413			
Film #3	20%	40%	40%	70	10.1	1.20
	LLDPE	**20% FAUXFOIL 054**	20% 111413			

Table N°1: Properties of 50 µm 3-layers blown films.

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Value Proposition

Ampacet **FauxFoil™** technology is an innovative Masterbatch technology that mimics the aesthetics of Aluminum foil and metalized films. It represents a proactive solution to environmental issues related to aluminum production, reducing significantly the carbon footprint and the risk of forming of acid rains.

Ampacet FauxFoil™ technology provides:

- Foil-like aesthetics with possible customer color options
- Good light blockage for content protection
- Simplicity through coextrusion eliminating the need to laminate with aluminum foil or metallized film
- High and easy recyclability making it a good solution towards Circular Economy
- Compatibility with barrier polymers offering no loss of barrier properties as free of pin holes

Technical Specifications

		FAUX FOIL 054, 1201054-EE
Carrier Polymer		LLDPE
Specific gravity	g/cm^3	1.14
Melt Index @ 190°C / 2.16 kg	g/10 min	16.5*
Bulk Density	g/l	530*
Pellets per gram	Pellets/g	60*

*The ultimate value will be determined after several industrial productions.

Handling & Storage

- Store in dry and cool conditions
- It should not be stored outside
- Always reseal opened package after use
- Shelf life after production: 12 months in appropriate conditions

For more information on **FauxFoil™,** its uses and complete Regulatory Status,
contact your Ampacet Account Executive or visit **www.ampacet.com.**

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