FLEXIBLE FILMS 101: GLOSSARY OF TERMS

EVOH - Ethylene-Vinyl Alcohol copolymer is used in coextruded plastic films to improve oxygen barrier properties. It is, however, a poor water vapor barrier. Even its otherwise excellent OTR (oxygen transmission rate) is sensitive to high humidity. Therefore, for packaging applications, it is usually the core layer of co-extruded plastic films where it is shielded from moisture by protective layers of polyethylene. It's OTR also depends on its VOH (vinyl alcohol) content.

LDPE - Low density polyethylene is used mainly for heat-sealability and in bulk packaging.

LLDPE - Linear low density polyethylene is tougher than LDPE and has better heat-seal strength. LLDPE has higher haze than LDPE.

Nylon - The nylon family is made up of polyamide resins with very high melting points, excellent clarity, and stiffness. Two types are used for films: nylon-6 and nylon-66. The latter has much higher melt temperature thus a better temperature resistance, but the former is easier to process and is less expensive. Both have good oxygen and aroma barrier properties, but they are poor barriers to water vapor. In addition, nylon films can be cast.

PP - Polypropylene has a higher melting point, and thus better temperature resistance, than PE. Two types of PP films are used for packaging: cast and oriented.

PE - Polyethylene is a family of addition polymers based on ethylene. It can be different densities based on its structure.

PET - Polyester (Polyethylene Terephthalate) is a tough, temperature resistant polymer. Biaxially oriented PET film is used in laminates for packaging where it provides strength, stiffness, and temperature resistance. It is usually combined with other films for heat-sealability and improved barrier properties.

WE'VE GOT YOU COVERED

Your product doesn't just need a package. It requires a package that works. One that captures a consumer's attention. A package so convenient that it instills loyalty.

At Flair, we understand that packaging becomes a solution when it combines innovation, impeccable quality, and impact delivered on time. Even if you never have us reverse-engineer a structure or never use our award-winning design group, you still benefit from the big-picture approach to all we do at Flair.

Flexible Packaging Solutions...From Start to Finish.

Seafood

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Seafood Packaging Solutions with Flair

Proper packaging of seafood products can be challenging. Seafood can require different oxygen permeability rates and film strength properties depending on the specific processing method and storage conditions the product undergoes. When the need for ultimate quality is coupled with the need for appealing, eye-catching graphics and consumer convenience features, it's time for a true packaging partner. Flair Flexible Packaging provides flexible packaging solutions from start to finish.

MAKE A SPLASH WITH FLAIR FILMS AND POUCHES

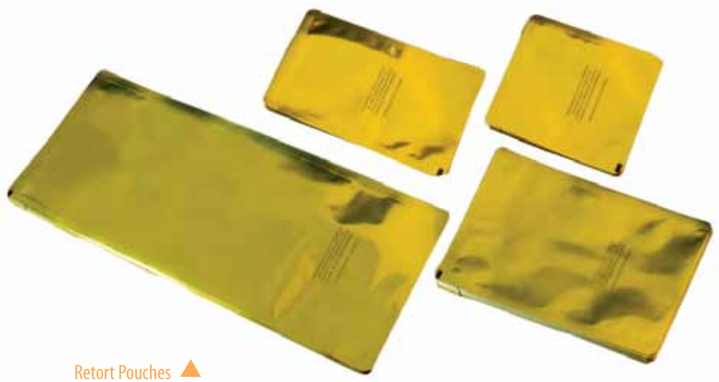
Flair Flexible Packaging offers nearly unlimited custom engineering and/or custom printing capabilities to make your packaging idea a reality. In addition, we provide a comprehensive stock program to allow for lower-cost options, to create unprinted packaging ready-for-labeling, or to accommodate faster turn-around times. Our stock program includes:

FILMS Flair stocks both high and standard barrier nonforming (2.8 and 4 mil) and forming films (4,5,6,7 and 9 mil). Custom structures are available for peelable applications, alternative seal layers, or rotogravure printing.

Our lidding films include peelable structures for C-PET, A-PET, PVC, PS, PE and PP containers as well as nonpeelable structures for PP and HDPE containers or trays. We can also produce custom printed lidding films or individual die cuts made from foil, metallized structures, and paper laminations.

POUCHES Flair's modern production facilities use state-of-the-art equipment to produce:

- FlairPak 300, 350, 400, and 500 premium vacuum pouches (3-side seal, constructed from 9-layer cast coextrusion film)
- Prezippered pouches (made from FlairPak 350 that opens at the bottom for filling)
- High Barrier Clear Front/Printed Back pouches
- Retort Pouches (available in gold with product safety warning printed in black)



Retort Pouches ▲

DID YOU KNOW?

Proper seafood packaging should reduce dehydration and fat oxidation, decrease bacterial and chemical spoilage, eliminate drip, prevent odor permeation, reduce handling damage, and increase shelf life. Here's how we do it:

- Seafood product shelf life can be extended using modified atmosphere packaging (MAP) with a proper $CO_2/O_2/N_2$ ratio.
- The experts at Flair Packaging can help you select the proper oxygen transmission rate (OTR) for your fish packaging. Fresh fish packaging that reduces residual oxygen levels may increase growth of Clostridium botulinum, which is anaerobic bacteria that produces a lethal toxin.
- The best choice for fresh fish is oxygen permeable or "breathable" packaging to provide a profitable shelf life while allowing for natural spoilage before bacteria growth and toxin production. Look for packaging that provides an oxygen transmission rate (OTR) of 10,000 cc/m^2/24 hours.
- Lower temperatures retard C. botulinum growth, so always keep fish cold (under 38° F or 3.3° C).
- Some processing methods – such as pasteurization – can destroy C. botulinum spores.

FRESH IDEAS ADD CONVENIENCE

Increasingly, consumers make choices based on convenience. Is the package easy to open? Easy to use? Is it resealable? Microwavable?

At Flair, we strive to find ways for simple, useful packaging to help set your product apart from the crowd. Talk to your Flair Sales or Customer Support Representative for expert advice on packaging options, such as handles, spouts, shapes, microwavable convenience, and more.

◀ We are able to slit custom sizes on short notice, as well as supply sample rolls for testing.