

Flexible Packaging Solutions

Products

Stand-Up Pouches



Plain or Pre-printed



Spout Pouches



Side Gusseted



Laminated Roll Stock



Let Us Help:

- ▶ Size your bag.
- ▶ Select the best Barrier Film.
- ▶ Provide a Die Line
- ▶ Provide Sample Bags.

Film Type

- High Barrier (Foil, KPET, EVOH)
- High Strength (Nylon)
- Matte Finish (Natural Look)
- Biodegradable
- Recyclable
- Kraft

Services

- Bag Design (Size, Style & Barrier)
- Die Lines
- Artwork
- Rotogravure Printing (12 Color)
- Bag Samples & Prototypes
- Midwest & West Coast Shipping
- Standard Delivery: 8 Weeks
- Express Delivery: 5 Weeks

Equipment Incentives

Buy our bags ▶ Save on Machine Cost!!

Call us for details

Flexible Facts

Are You Flexible?

- Flexible Packaging use 75% less plastic than their rigid counter parts.
- Packaging weight is reduced by 70% which means lower shipping costs.
- Empty Pouches occupy up to 95% less space.
- Flexible Pouches cost less.

Being Flexible Saves you Green and Makes you Green.

Understanding Film

Stand up pouches are typically made from 2 or more films laminated together. Films can be laminated by using an adhesive or by heat and pressure. One of the more common laminated structures is

PET/Ink/LLDPE.

Here is what it means:

PET or Polyester (or Mylar) is the outside layer. It provides strength and has a high melting point.

Ink is the printing that occurs on the inside of the PET layer and will get sandwiched with the next layer of film.

LLDPE or Poly is the inside layer. It provides a moisture barrier and has a low melting point. This is the layer that melts together to form the seal.

Printing

To protect the ink and to keep it from coming in contact with the product, **Reverse Trap Printing** is used. This is a process where the reverse image is printed on the inside of the outer film layer and is then sandwiched between the next layer.

Surface print is when printing is done on the outside of the film. This is normally required if the film used is not transparent.

Film Thickness

A pouch is specified as being so many Mils thick. A typical thickness ranges between 3 Mil and 5 Mil. A Mil is sometimes called a Thou and should not be confused with a millimeter (Metric).

Mil (Thou) = .001 inch
 Gauge (ga) = .00001 inch = .01 Mil
 Micron(μ) = .00003937 inch = .03937 Mil

When describing the thickness of the individual film layers, a few different measurements are sometimes intermixed just to keep us on our toes.

48 ga PET / Ink / 115μ LLDPE

The outside layer (PET) is .48 Mil thick and the inside layer (LLDPE) is 4.5 mil thick for an overall bag thickness of 5 mil.

Breaking all the Barriers

It is the job of packaging to provide a sufficient barrier to Light (UV), Oxygen and Moisture. Packaging should contain the aroma of the product and prevent Oxygen and Moisture from passing through the bag for maximum shelf life.

The air we breath is 20% Oxygen and 78% Nitrogen. Each film has an Oxygen Transfer Rate (OTR) which is the amount of Oxygen that passes through a defined area of film over a 24 hour period. The lower this number the better the barrier. Foil is the best at 0. Other good barriers are Saran coated Polyester (KPET), MPET and EVOH. To increase shelf life, Oxygen can be removed by purging with Nitrogen before sealing.

Film also has a Moisture Vapor Transfer Rate (MVTR or WVTR). While LLDPE (Poly) is known as a "Screen Door" to Oxygen, it has a pretty good MVTR.

Barrier Characteristics

Film	Description	OTR (cc/m ²)*	MVTR (cc/m ²)*
Foil	Aluminum	0	0
EVOH	Ethylene Vinyl Alcohol	0.6	100
MPET	Metalized Polyester	0.95	1.2
KPET	Saran Coated PET	7.8	7.55
PET	Polyester	85	55
Nylon	Nylon	95	260
OPP	Polypropylene	2000	8
LLDPE	Polyethylene	2500	17








* Values vary based on thickness and manufacturer.

Biodegradable

Most plastic films take several hundred years to decompose in a landfill. Scientists have discovered that by adding starch to Poly it will begin to decompose in months. While this sounds great, its uses are limited for food packaging since Poly isn't a very good barrier and this film is designed to decompose when exposed to heat, moisture and light (UV). All of these exist in a landfill, but also, to some degree, in the supply path. Florescent lights on the store shelf and heat and humidity in shipping and warehousing all have to be controlled to maintain the integrity of the package.

Recycle Codes

We've all seen the recycle codes on plastic packaging. This symbol refers to a Resin Code which is assigned to a particular plastic (Polymer). Most laminated pouches don't display a Resin Code. The individual film layers that make up the laminated structure will have a code of 1 to 5, but once they are laminated, they become a 7 (Other).

Resin Code	Description	Uses
	PET, PETE (Polyester)	Plastic bottles (Water, Juice, Soda, Catsup...) Oven Bags, Microwaveable food trays
	HDPE (High Density Polyethylene)	Non-food bottles (Shampoo, Cleaners, Motor oil) Plastic Lumber, Flower Pots, Recycling bins...
	PVC [Vinyl] (Polyvinyl Chloride)	Shrink Wrap, Deli & Meat Wrap, Pipe, Siding, Window Frames, Decking, Flooring...
	LDPE (Low Density Polyethylene)	Bags (Bread, Produce, Garbage, Frozen Food...) Toys, Squeezable Bottles, Container Lids...
	PP (Polypropylene)	Containers (Yogurt, Margarine, Deli Foods...) Medicine Bottles, Bottle Caps, Carpeting...
	PS (Polystyrene)	Cups, Plates, Bowls, Meat Trays, CD Cases, Packing Peanuts, Insulation,...
	OTHER (Other or Multi-layer resin)	Reusable water bottles, Barrier Layers, Oven Backing Bags, Custom Packaging

