

PLASTIC BASE MATERIALS

POLYETHYLENE (PE) -	Available in low and high density.
Low density (LDPE) –	Smooth, glossy finish, good strength factor, easy to print and convert. Clear finish.
Linear Low Density (LLDPE) -	Smooth , glossy finish. Stronger then conventional LDPE. Easy to print and convert. Used for applications needed for extra strength. Clear finish.
Hi density (HDPE) –	Smooth ,Matte finish with a crinkly feel. Clear frosted finish excellent strength factor. Not as easy to print specifically in 4 color process and screens converts easily into most bag styles.
Polypropylene (PP) -	Smooth, crystal clear finish. Good strength factor may have weakness in directional tear. Excellent print quality. Converts into limited styles.
Polypropylene Blended (PP/LDPE)	Smooth, clear glossy finish. Good strength Factor. Excellent printability. Limited to specific style bags.
Water cooled Polypropylene -	Newest type of extruded film- Extremely clear. Prints very well Has some weakness in directional tear and seals (see MAC bag)
Vinyl -	Brushed smooth surface, Extremely clear with a great strength Factor. Prints well- limited to specific styles.
Acetate -	Extremely clear material- excellent printability- Limited In converting to very specific products.
Korea blend -	(4 or five separate resins) (our Guess bag) Sam Heung-OPP"SM", Gloss or Matte (laminated).
PEVA -	New silky-soft blend- has a clear frosted matte look. Prints well converts into limited styles.
Co extruded blends -	Combination of HDPE & LDPE blown as 2 separate films and blended together as one film- can be ALL clear or Color outside and Color inside - Good printability and strength. Can be used in most Constructions.
CO-EX PP/LDPE -	Shinny outer side and low density Polyethylene (shinny) inside- Not as strong as regular LDPE or HDPE of the same gauge. Prints well, limited to specific styles.
Synthetic Paper - (PEPA)	Sheet fed- looks like paper, feels like paper. Prints extremely well and has good strength factor. Only converts as a shopper style.
Non Woven Polyethylene -	Soft textured polypropylene material, water resistant, incredibly Strong. Prints either by silk screen or flexo. Limited to certain Shopping bag constructions.

MIL - INCHES - MICRON CONVERSION CHART

CHOOSING FILM THICKNESSES - Your decision regard the thickness of film is dependent on how much weight your bag will be holding. The following are some rules of thumb regarding this issue:

- EXTRA HEAVY – Consider using a 6 mil for supporting the heaviest of content usage.
- HEAVY - A 3 or 4mil bag is suggested for supporting heavy and rough objects.
- MEDIUM - Everyday usage can be accommodated with a 1.5 or 2mil bag.
- LIGHT - Lightweight objects such as t-shirts can be safely packaged using a 1 or 1.25mil bag. These are also most often what are used for produce in grocery stores.

FILM THICKNESS CONVERSION CHART

INCH	MIL	MICRON		INCH	MIL	MICRON
0.0003	0.30	7.26		0.001	0.95	24.13
0.00035	0.35	8.89		0.001	1.00	25.40
0.0004	0.40	10.16		0.0015	1.50	38.10
0.00045	0.45	11.43		0.002	2.00	50.80
0.0005	0.50	12.70		0.0025	2.50	63.50
0.00055	0.55	13.97		0.003	3.00	76.20
0.0006	0.60	15.24		0.0035	3.50	88.90
0.00065	0.65	16.51		0.004	4.00	101.60
0.0007	0.70	17.78		0.0045	4.50	114.30
0.00075	0.75	19.05		0.005	5.00	127.00
0.0008	0.80	20.32		0.0055	5.50	139.70
0.00085	0.85	21.59		0.006	6.00	152.40
0.0009	0.90	22.86		0.007	7.00	177.80

Plastic Identification Codes

As part of our plastics education campaign we've decided that it's important to be aware of all the different types of plastics out there. We always see those numbers 1-7 on the bottom of our plastic packaging, but rarely really know what they mean. We've decided to put these in order for you. The list below won't be numerical (1-7) but instead, most preferred plastic to least preferred environmentally. Pass it on.



High-Density Polyethylene (HDPE)



Low-Density Polyethylene (LDPE)



Polyethylene Terephthalate (PET)



Polypropylene (PP)



Polystyrene (PS)



Other - Junk Plastic



Polyvinyl Chloride (PVC) **Never use. Prohibited**