

# FLOWPACK FILMS

Estiko-Plastar's choice of flowpack films offers a very wide range of sophisticated packaging materials for nearly all your packaging needs.

Our main aim is to offer a high quality product that has a downgauging potential that is combined with great sealing performance which will together reduce the amount of material used and decrease energy consumption. We offer different printed and unprinted laminated flowpack films that are mainly based on BOPA, BOPET, BOPP and PE materials. You can find many different options down below that fit your industry and specific requirements. Among the list we have films for vertical and horizontal lines with very different sealing, mechanical, optical and barrier properties. EVOH can be incorporated into the PE structure to give high gas barrier to the film when modified atmosphere is used (MAP). All materials have their own characteristics and functional properties that can be used to your advantage when combined correctly in different duplex and triplex laminated films . The range includes among others, films for retortable applications. As an extra, you have four main sealing layer options + two peelable options to choose from. Among those six you will find a new „seal through contamination“ layer that has proven to work very well even under most severe conditions. The list is complemented by one of our newest technological upgrades, the „cold-seal“, that gives many new possibilities.

For further puncture resistance and elasticity we can offer our Esttop coex films.

**PS.** Don't forget to read and ask about our **new laser- technology** and **sustainable packaging** options, to see the potential for added value for your products!

Outer Layer	Types	Common thickness (µm)	Middle layer	Common thickness (µm)	Inside/Sealing layer	Types	Common thickness (µm)	Sealing options
PE	Transparent; White; Tinted; Matte	30-100					30-200	K1; K2; K3
PE	Transparent; Matte				PE	Transparent; White; Tinted		
OPP	Transparent; Matte	15;20;30			OPP	Transparent ; White ; Tinted	15;20;30	Existing or Cold Seal
OPP					OPP_metallic			
OPP					PE			
OPP					PE/EVOH/PE			
OPP					PP			
OPP					PP/EVOH/PP			
OPP					PETmet			
OPP					PETmet			
				12	PE			
					PP			
PET	Transparent; Matte	12;36			PE	Transparent ; White ; Tinted	30-200	K1; K2; K3; PE PEEL; PP PEEL
PET					PE/EVOH/PE			
PET					PP			
PET					PP/EVOH/PP			
PET					PETmet			
PET					PETmet			
					PP			
OPA	Transparent	15			PE	Transparent ; White ; Tinted	30-200	K1; K2; K3; PE PEEL; PP PEEL
OPA					PP			
Esttop PA/PE	Transparent; White; Tinted	50-200						K1; K2; K3; PE PEEL
Esttop_RT PA/PE	Transparent; White; Tinted	50-200						K4; PP PEEL



## Extra options:

- **Tinting and coloring** – We can tint or color the PE materials in the tone you need. We have a choice of standard pigments but the tone can be changed by your preferences by using special masterbatched ordered specifically for your needs.
- **Sealing layers** – You can choose from six different sealing layers:
  - **Standard (K1)** – A very versatile sealing layer that has proven itself well over the years. It has low seal initiation temperature and excellent hot-tack. The sealing temperature can often be lowered compared to your regular film and you will still receive a fully hermetic package.
  - **Premium (K2)** – For more demanding products we have an enhancement of the standard layer which offers an even wider sealing window and better hot-tack. We suggest to use this one if you pack a hot product, have a very fast machine or need to reduce the sealing temperature even further.
  - **„Seal through contamination“ (K3)** – This new sealing layer has the lowest seal initiation temperature, has the highest hot-tack, gives the best seal integrity and as the name states, is perfect for sealing through contaminants like oil/grease and dust.
  - **PP sealing layer (K4)** – gives a tight lock-up seal for regular and retort applications.
  - **PE PEEL** – this easy-open solution is available for flowpack films that have a PE sealing layer. This sealing layers enables a fast seal with great easy-opening characteristics. Seal integrity will satisfy even the harshest needs.
  - **PP PEEL** – easy-open solution is available for flowpack films that have a PP sealing layer. This sealing layer allows a pasteurization and sterilisation treatment for the package.
- **Cold Seal** is an option for dry and some frozen products that are sensitive to heat. The main advantage of this technology is connected to the different sealing of the package which is done by cold electrodes, only by pressure. A pressure sensitive adhesive is applied on the surface in the sealing areas and it gives the product a peelable seal which needs minimal effort to open but at the same time gives a good seal integrity.