

Films for lamination – Barrier, Sealable and Peelable

The practical needs of the end consumer to preserve the food freshness for long periods, joined with an increasingly important ethic felt towards the reduction of food waste, have led us to satisfy the market with a complete range of barrier films to gases and oxygen for the food industry.

Our products are coextruded polyethylene or polypropylene films, up to 7 layers. They are corona treated and consequently suitable to the lamination to most of bi-oriented films.

According to the different needs and final applications, ITP's films for lamination show distinctive and peculiar features:

Barrier films



High gas barrier films allow the preservation of the modified atmosphere, with particular reference to oxygen O₂ and CO₂, N₂ and water vapour. Using different kinds of EVOH while applying the correct thickness, these films assure the level of protection necessary to guarantee a longer shelf life of the packaged product. Additional

properties can be combined to coextruded barrier films, such as sealability and peelability, including UV barrier (important for all products sensitive to UV radiation), anti-fog (preventing the formation of mist in refrigerated packages), and antistatic (useful for powdered products). Bariflex® films can also be reclosable onto the tray.

CHARACTERISTICS	METHOD	UNITS	VALUE*
Total thickness	IO CTR 109	µm	35-200
Grammage (for transparent films)	ITP	g/m ²	33-192
Density (for transparent films)	---	g/cm ³	0.935-0.960
Corona treatment	ASTM D-2578	dyne/cm	≥38
Oxygen transmission rate (O ₂ TR) 20°C 65%RH	ASTM D-3985 ASTM F-1927	cm ³ /(m ² ·24h·bar)	0.5 - 5 (according to thickness and type of EVOH)
Water vapor transmission rate 38°C 90%RH	ASTM F-1249	g/(m ² ·24h·bar)	2-11
Sealing Initiation temperature (SIT)		°C	110-120°C (depending on the type)
COF	ASTM D-1894	---	According to request: <0.25 ~0.5

Sealable films



These films allow a perfect sealability also in presence of contaminants on the sealing window, such as oil, grease and dust. A very high mechanical resistance guarantees

the protection of the product. High hot-tack and excellent transparency complete the performances of Sealflex® films. Available also in antifog and anti-UV version.





INNOVATIVE PACKAGING SOLUTIONS

CHARACTERISTICS		METHOD	UNITS	VALUE*
Total thickness		IO CTR 109	µm	30-200
Grammage (for transparent films)		ITP	g/m ²	27-185
Density (for transparent films)		---	g/cm ³	0.920-0.925
Corona treatment		ASTM D-2578	dyne/cm	>38
Sealing initiation temperature (SIT)		-----	°C	110- 120°C (depending on the type)
Water Vapor Transmission Rate	38°C - 90%RH	ASTM F-1249	g/(m ² ·24h·bar)	2-12
COF		ASTM D-1894	---	According to request: <0.25 ~0.5

Peelable films



For easy-open packages with guarantee of perfect integrity and air-tightness of the package. Different solutions are available for different kind of surfaces such as PE, PVC,

APET, PS, PP. Also in antifog version. Peelflex® films can also be reclosable onto the tray.

For peelable on PE

CHARACTERISTICS		METHOD	UNITS	VALUE*
Total thickness		IO CTR 109	µm	35-150
Grammage (for transparent films)		ITP	g/m ²	32-139
Density (for transparent films)		---	g/cm ³	0.924
Corona treatment		ASTM D-2578	dyne/cm	>38
Peelability on PE		IO CTR 033	N/15mm	~9
Water Vapor Transmission Rate	38°C - 90%RH	ASTM F-1249	g/(m ² ·24h·bar)	2-10
COF		ASTM D-1894	---	According to request: <0.25 ~0.5

Bariflex®



Sealflex®





INNOVATIVE PACKAGING SOLUTIONS

For peelable on PVC, APET, PP, PS

CHARACTERISTICS		METHOD	UNITS	VALUE*
Total thickness		IO CTR 109	µm	40-100
Grammage (for transparent films)		ITP	g/m ²	37-93
Density (for transparent films)		---	g/cm ³	0,930
Haze		ASTM D-1003	%	9 (for 50µm)
Corona treatment (outside the roll)		ASTM D-2578	dyne/cm	>38
Peelability on PET (190°C)		IO CTR 044	N/15mm	10
W.V.T.R.	38°C - 90%RH	ASTM F-1249	g/(m ² ·24h·bar)	3-10
COF		ASTM D-1894	---	0,50

Reclosable films



Reclosable peelable films suited for the sealing on PE, PET and PS trays. They allow the user to conveniently and easily reclose the package once opened for the first time thus limiting the gas exchanges of the food with

the external environment. The reclosing of the original package is made without the need of additional packaging material. High transparency.

CHARACTERISTICS		METHOD	UNITS	VALUE*
Total thickness		IO CTR 109	µm	50
Grammage (for transparent films)		ITP	g/m ²	47
Density (for transparent films)		---	g/cm ³	0,947
Corona treatment		ASTM D-2578	dyne/cm	≥38
Peelability on PE (160°C)		ITP	N/15mm	1^ 15,0 2^ 4,5 3^ 3,5
COF		ASTM D-1894	---	0,50

Reclosable®



Peelflex®





INNOVATIVE PACKAGING SOLUTIONS

Frozen food



Films for frozen food

Especially developed for high speed vertical machines, this film combines optimum sealability with a great tear resistance. Available in white and transparent version both for lamination and as a monofilm.

CHARACTERISTICS		METHOD	UNITS	VALUE*
Total thickness		IO CTR 109	µm	40-70
Grammage (for transparent films)		ITP	g/m ²	36-65
Density (for transparent films)		---	g/cm ³	0.912-0.926
Corona treatment		ASTM D-2578	dyne/cm	>38
Sealing temperature		-----	°C	Starting from 120°C
Water Vapor Transmission Rate	38°C - 90%RH	ASTM F-1249	g/(m ² ·24h·bar)	2- 12
COF		ASTM D-1894	---	<0.25

Bio-based films



Is a compostable film certified by Vincotte. Good mechanical resistance combined with high stiffness make this film very similar to the traditional plastics. Accordingly to EN13432 European requirements for compostable and biodegradable polymers, this film can be degraded by microorganisms. Available only in white version with excellent sealing properties, both for lamination and as a monofilm, also in printed version.

* these values are indicative but not limitative of the typical characteristics of the film. Exceptions to the reported range can be achieved.