

# PERLALUX® – Duplex

Our Duplex barrier films, with variable barrier properties to suit different requirements, are used across the globe. A modern PVdC coating technology coupled with our long experience have made PERLALUX® – Duplex the standard barrier film for pharmaceutical push-through packs. Even a small coating grammage provides a good barrier against moisture, oxygen and aromas.

PERLALUX® – Duplex films have very good handling properties and can be used on all common blister machines and packaging lines.

The base film production and the gentle, multi-layer, five station coating process are both carried out according to GMP standards, with certified manufacturing procedures and validated test procedures. As a result of the choice of a specific base film, homopolymer to high-copolymer, and of the

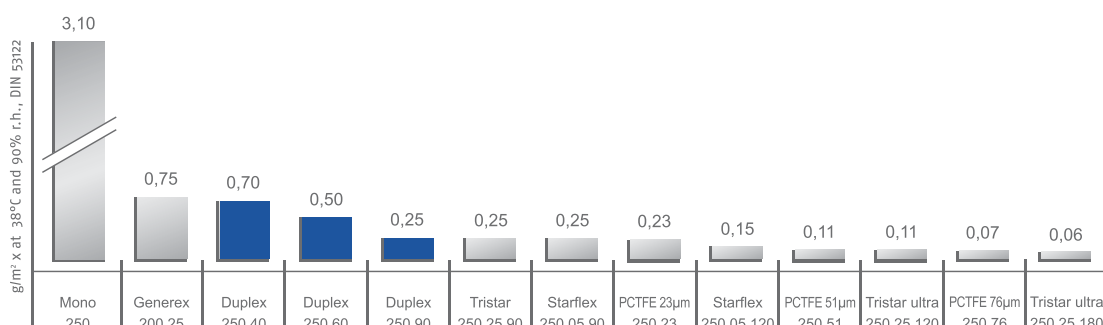


coating formulation, our Duplex films have excellent thermo-forming properties and are suitable for standard blister designs to the most complex mould configuration.

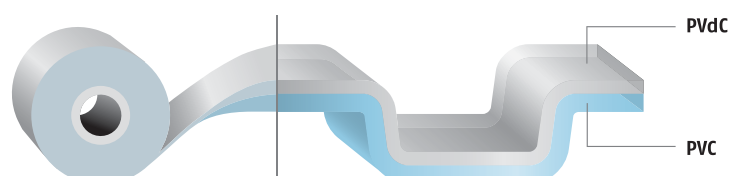
In terms of physical properties, protection and physiological harmlessness, our PERLALUX® – Duplex films comply with all the latest international guidelines, directives and standards for pharmaceutical packaging materials.

PERLALUX® – Duplex is available in transparent, opaque or colours, optional with UV light protection.

## Water vapour transmission rate (WVTR)



## Cross-section



## Technical data for the standard products

Characteristics	250.40	250.60	250.90	Test method
Total weight [g/m²]	380	400	428	DIN 53352
Total thickness [µm]	274	286	303	DIN 53370
Thickness PVC [µm]	250	250	250	DIN 53370
Coating weight PVdC [g/m²]	40	60	90	DIN 53352
Bond strength [N/60 mm]	35	35	35	AAU 9200.304
Shrinkage [%/140°C, 10 min]	- 6	- 6	- 6	DIN 53377
<b>Barrier Values</b>				
WVTR [38°C, 90% r.h.] [g/m² x d]	0.70	0.50	0.25	DIN 53122
O <sub>2</sub> -Barrier [23°C, 50% r.h.] [cm³/m² x bar x d]	1.10	0.70	0.60	ASTM D 3985










These standard executions are available with homopolymer and copolymer base films. Other combinations (PVC gauges, PVdC coating weights) are available.

r.h. = relative humidity

The figures given are reference values for standard executions and correspond to our current knowledge. No liability may be inferred for results that may be obtained in the application of our products.

## PERLALUX® – Full Range of Blister Films

International Registrations: FDA, USA (registered DMF No. 10686 and 9072) as well as SFDA (Chinese State Food and Drug Administration) our films comply with all the current international guidelines, directives and standards for pharmaceutical packaging materials.

	Structure	Coating	WVTR Barrier	O <sub>2</sub> Barrier
PERLALUX® – Mono	 PVC	–	Δ	Δ
PERLALUX® – Genex	 PVdC PVC	25g/m² PVdC	ΔΔ	ΔΔΔ
PERLALUX® – Duplex	 PVdC PVC	40g/m² PVdC 60g/m² PVdC 90g/m² PVdC	ΔΔ ΔΔ ΔΔΔ	ΔΔΔ ΔΔΔΔ ΔΔΔΔ
PERLALUX® – Tristar	 PVdC PE PVC	40g/m² PVdC 60g/m² PVdC 90g/m² PVdC	ΔΔ ΔΔ ΔΔΔ	ΔΔΔ ΔΔΔΔ ΔΔΔΔ
PERLALUX® – Starflex	 PVdC TE PVC	90g/m² PVdC 120g/m² PVdC	ΔΔΔ ΔΔΔΔ	ΔΔΔΔ ΔΔΔΔΔ
PERLALUX® – Tristar ultra	 PVdC PE PVC	120g/m² PVdC 180g/m² PVdC	ΔΔΔΔΔ ΔΔΔΔΔ	ΔΔΔΔΔ ΔΔΔΔΔ
PERLALUX® – PCTFE	 PVC PCTFE	PCTFE 23µm PCTFE 51µm PCTFE 76µm	ΔΔΔΔ ΔΔΔΔΔ ΔΔΔΔΔ	Δ Δ Δ
PERLALUX® – Suppo	 PVC / PE PVC / PVdC / PE	– 40g/m² PVdC	Δ ΔΔ	Δ ΔΔΔ
PERLALUX® – Liquid	 PE PVdC PVC	40g/m² PVdC	ΔΔ	ΔΔΔ

Δ low standard  
 ΔΔ middle standard  
 ΔΔΔ high standard  
 ΔΔΔΔ very high standard  
 ΔΔΔΔΔ extremely high standard

Other types available on request.