

Invercote GP + PE Coatings



Product description

Polyethylene (PE) coated paperboard is suitable for packaging applications where moisture barrier properties are important. The PE coating also provides a simple yet efficient way of sealing the package. PE coatings can be one or two-sided.

PE is the most frequently used product for frozen food. It provides a good combination of barrier and sealability characteristics. All PE coatings are available in white, brown or black pigmented versions.

Additional properties

The PE coating gives:

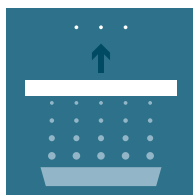
- Good sealability
- As one-side coated, good moisture barrier from the inside
- As two-sides coated, good moisture barrier from both sides

The reverse side is a NSO (non-set-off) surface for reduced ink set-off tendency and reduced blocking and friction.

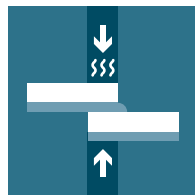
Typical end use areas



Deep freezing



Vapour



Heat sealing

One-side PE

Vegetables (packed pre-frozen)
 Fish and other seafoods (packed pre-frozen)
 Meat products (packed pre-frozen)
 Cups
 Ice cream
 Confectionery
 Chocolate

Two-sides PE

Fish and other seafoods (packed wet)
 Vegetables (packed wet)
 Cups
 Ice cream

Property	Printing side	Reverse side	Tolerance	Test method
Grammage (g/m ²)	15-25	15-25	± 5%	ISO 536
Added thickness (µm)	16-27	16-27	-	Calculated value
Surface smoothness (µm)	≤2.7 (typical)	5.0 (typical)	PS ≤3.5	ISO 8791
Surface tension (dynes/cm)	≥ 42 ¹⁾	≥ 42 ^{1, 2)}	-	ISO 8296
Adhesion (scale)	5 (typical)	6 (typical)	≥ 4	Internal ³⁾
Pin holes (number/m ²)	-	0 (typical) ⁴⁾	-	PTN 8-70 (modified)

¹⁾ When produced. After delivery the level can be affected by conditions beyond our control

²⁾ Valid only for 1-side coating

³⁾ Scale 1–6. (6 = the best possible adhesion on the concerned surface)

⁴⁾ Valid for PE grammages = 20 g/m²

Typical Baseboard PE Coating Combinations

PE coatings are available in the following combinations of baseboard and grammages (g/m²):

Printing side:	15-25 g/m ² PE coating, glossy, corona	15-25 g/m ² PE coating, glossy	15-25 g/m ² PE coating, matt	No coating
Invercote GP in chosen grammage				
Reverse side:	15-25 g/m ² PE coating, matt, no corona	No coating	No coating	15-25 g/m ² PE coating ¹⁾ , matt, corona

¹⁾ Corona treated if 1-side (reverse side) coated only.

Other PE grammages, polymer types, baseboards and pigments available on request.

Baseboard properties

Properties					
	Printing side		Reverse side		Methods/Remarks ¹⁾
		Tolerances		Tolerances	
Grammage (g/m ²)	210-350		210-350	± 5%	ISO 536
Colour					-
L* (%)	96.7		96.4	-	ISO 5631-2
a*	2.5		1.9	-	ISO 5631-2
b*	-7.3	±1.1	-4.3	-	ISO 5631-2
Whiteness (%)	124		110	-	ISO 11475
ISO Brightness (%)	94	-	90	-	ISO 2470
Surface roughness (µm)	1.5	≤ 2.0	-	-	ISO 8791-4
Board gloss 75° (%)	30	+20/-10	-	-	ISO 8254-1
Surface pH	8.5	+1/-1.5	-	-	¹⁾
Cobb (g/m ² 60 s)	30	≤ 40	30	≤ 40	ISO 535
Ply Bond (J/m ²)		160		≥ 110	TAPPI 569
Wick test (kg/m ²)		1.5		≤ 2.5	¹⁾

Grammage dependent properties								Tolerances	Methods/Remarks ¹⁾
Grammage (g/m ²)	210	230	250	270	300	330	350	± 5%	ISO 536
Thickness (µm)	275	305	330	360	400	440	470	± 5%	ISO 534
Thickness including PE (µm)	291	321	346	376	416	456	486		
Bending moment Taber 15° (mNm)									
MD	6.0	9.1	11.6	14.7	20.0	26.6	31.7	-15%	ISO 2493
CD	3.0	4.0	5.1	6.4	8.7	11.1	13.2	-15%	ISO 2493
Tensile strength (kN/m)									
MD	17.0	18.0	19.0	20.0	22.0	26.5	28.0	-	ISO 1924-2
CD	9.0	9.5	10.0	10.5	11.5	12.0	12.5	-	ISO 1924-2
Tearing resistance (mN)									
MD	2700	3100	3400	3700	4300	4700	4900	-	ISO 1974
CD	2900	3300	3600	4100	4500	5100	5300	-	ISO 1974

¹⁾ See section *General Technical Information*

Issued: 01.2019

All properties are measured in test climate 23°C/50% RH at Iggesund mill. Tolerances and max/min levels, when stated, are based upon 95% confidence limits within each production run.