

# 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:

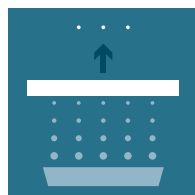
- Good sealability
- As one-side coated, good moisture barrier from the inside
- As two-sides coated, good moisture barrier from both sides

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

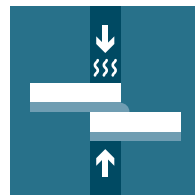
## Typical end use areas



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 <sup>2</sup> )	15-25	15-25	± 5%	ISO 536
Added thickness (µm)	16-27	16-27	-	Calculated value
Surface roughness (µm)	(typical)	≥ (typical)	PS ≤3.5	ISO 8791
Surface tension (dynes/cm)	≥ 42 <sup>1)</sup>	≥ 42 <sup>1), 2)</sup>	-	ISO 8296
Adhesion (scale)	(typical)	(typical)	≥ 4	Internal <sup>3)</sup>
Pin holes (number/m <sup>2</sup> )	-	(typical) <sup>4)</sup>	-	(modified)

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

<sup>2)</sup> Valid only for 1-side coating

<sup>3)</sup> Scale 1-6. (6 = full fibre tear/excellent on a fully clay-coated surface)

<sup>4)</sup> Valid for PE grammages = 20 g/m<sup>2</sup>

## Typical Baseboard PE Coating Combinations

PE coatings are available in the following combinations of baseboard and grammages (g/m<sup>2</sup>):

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

<sup>1)</sup> 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		
		Tolerances		Tolerances	Methods/Remarks <sup>1)</sup>
Grammage (g/m <sup>2</sup> )	210-370		210-370	± 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	-	-	<sup>1)</sup>
Cobb (g/m <sup>2</sup> 60 s)	30	≤ 40	30	≤ 40	ISO 535
Ply Bond (J/m <sup>2</sup> )		160		≥ 110	TAPPI 569
Wick test (kg/m <sup>2</sup> )		1.5		≤ 2.5	<sup>1)</sup>

Grammage dependent properties									Tolerances	Methods/Remarks <sup>1)</sup>
Grammage (g/m <sup>2</sup> )	210	230	250	270	300	330	350	370		
Thickness (µm)	275	305	330	360	400	440	470	500	± 5%	ISO 534
Thickness including PE (µm)	291	321	346	376	416	456	486	516		
Bending moment Taber 15° (mNm)										
MD	6.0	9.1	11.6	14.7	20.0	26.6	31.7	36.4	-15%	ISO 2493
CD	3.0	4.0	5.1	6.4	8.7	11.1	13.2	15.2	-15%	ISO 2493
Tensile strength (kN/m)										
MD	17.0	18.0	19.0	20.0	22.0	26.5	28.0	28.5	-	ISO 1924-2
CD	9.0	9.5	10.0	10.5	11.5	12.0	12.5	14.0	-	ISO 1924-2
Tearing resistance (mN)										
MD	2700	3100	3400	3700	4300	4700	4900	5300	-	ISO 1974
CD	2900	3300	3600	4100	4500	5100	5300	5800	-	ISO 1974

<sup>1)</sup> See section *General Technical Information*

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.