

Incada Exel + 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:

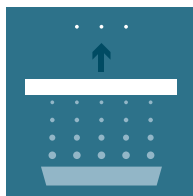
- Good sealability
- As one-side coated, good moisture barrier from the inside
- As two-sides coated, good moisture barrier from both sides

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

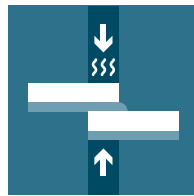
Typical end use areas



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)	-	6 (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 result 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
Incada Exel 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)	200-350		200-350	± 4%	ISO 536
Colour				-	
L* (%)	95.2	±0.8	95.0	-	ISO 5631-2
a*	1.4	±0.6	0.5	-	ISO 5631-2
b*	-7.2	±1.0	-2.0	-	ISO 5631-2
Whiteness (%)	120	±2.5	97	-	ISO 11475
ISO Brightness (%)	91.5	±2.0	86	-	ISO 2470
Surface roughness (µm)	0.9	≤ 1.3	-	-	ISO 8791-4
Board gloss 75° (%)	50	-10	-	-	ISO 8254-1
Cobb (g/m ² 60 s)	30	-	30	-	ISO 535
Surface strength IGT (m/s)					
blister/pick	1.0		≥ 0.85		ISO 3783
Ply Bond (J/m ²)	140		≥ 95		TAPPI 569
Robinson taint	Below the detection limit of 0.6				EN 1230, DIN 10955

Grammage dependent properties										Tolerances	Methods/Remarks ¹⁾
Grammage (g/m ²)	200	210	225	235	255	280	300	325	350	± 4%	ISO 536
Thickness (µm)	310	340	375	400	450	490	540	590	640	± 4%	ISO 534
Thickness including PE (µm)	326	356	391	416	466	506	556	606	656		
Bending moment Taber 15° (mNm)											
MD	8.5	10.6	13.6	15.2	19.6	24.9	30.3	38.7	45.5	-15%	ISO 2493
CD	3.7	4.6	5.9	6.6	8.5	10.8	13.2	16.8	19.8	-15%	ISO 2493

¹⁾ See section *General Technical Information*

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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.