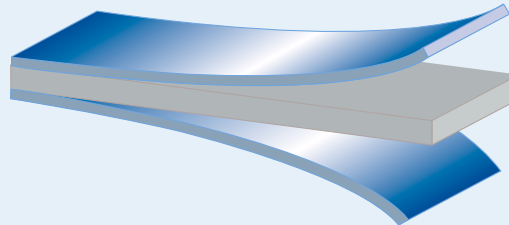


Encore NC23b30

Technical Data Sheet



NC b30 - Clear Biaxially Oriented Polypropylene Film with Bio-Sourced Renewable PP Resin for Tobacco Overwrap Applications.



- Very Low Heat-Seal Threshold, Good Hot Slip Layer
- Oriented Polypropylene Blend
- Very Low Heat-Seal Threshold Layer

Technical Features

- Heat-sealable both sides via low seal threshold coats
- Does not seal to coextruded films used in packet wrap provided recommended machine settings are used
- Good moisture and flavour barrier
- Optimised slip and anti-blocking both sides
- Strong seals for tamper evidence
- Very wide sealing range

Sustainable Features

- 30% certified renewable content
- ISCC certified via mass balance
- Contributes to reducing carbon footprint and the use of fossil resources

Applications

NC b30 is suitable for clear /naked collation of wrapped packs where exceptional pack appearance is required..

Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	NC b30
Thickness	Innovia Films test		micron	23
			gauge	92
Yield	Innovia Films test		m ² /kg	47.8
			in ² /lb	33600
			g/m ²	20.9
Permeability to: Water vapour	ASTM F 1249	38°C 90% RH 100°F 90% RH	g/m ² .24 hrs	5.3
			g/100in ² . 24 hrs	0.34
Oxygen	ASTM F 1927	23°C 0% RH 73°F 0% RH	cc/m ² .24 hrs	1650
			cc/100in ² . 24 hrs	106
Optical: Gloss	BS 2923	20°	units	125
Haze (wide angle)	ASTM D 1003	2.5°	%	1.5
Coefficient of friction (out to out)	ASTM D 1894	Static/ Dynamic		0.30
				0.25
Tensile strength	ASTM D 882	Strain rate 50% / min	MN/m ²	MD 170
				TD 210
			lb/in ²	MD 24700
				TD 30500
Elongation at break	ASTM D 882	Strain rate 50% / min	%	MD 120
				TD 80
Elasticity modulus (1% secant)	ASTM D 882	Strain rate 10% / min	MN/m ²	MD 3000
				TD 3600
			lb/in ²	MD 435100
				TD 522100
Sealing range	Innovia Films test	2 secs; 0.10MN/m ² 2 secs; 15 psi	°C	90-140
			°F	195-285
Operational sealing range for clear wrap*	Innovia Films test	2 secs; 0.10MN/m ² 2 secs; 15 psi	°C	100-115
			°F	210-240
Seal strength	Innovia Films test	130°C; 2 secs; 0.10MN/m ² 265°F; 2 secs; 15 psi	g(f)/25mm/ in	500
Shrinkage	Innovia Films test	60 secs at 120°C (250°F)	%	MD 4.5
				TD 3.5

MD Machine Direction TD Transverse Direction

All properties are tested under standard laboratory conditions: 23 ± 2°C, 50 ± 5% RH, (73 ± 4F, 50 ± 5% RH), unless otherwise stated. Where relevant, tests are based on international testing standards. Ref NC b30 - 1 of 2 - 0521

Encore NC23b30

Technical Data Sheet



Reel Specifications

Nominal Reel Diameters

Film	Length (metres)
NC23b30	3300

Film	Length (feet)
NC92b30	10827

Outside Diameter	
For 77mm / 3in core	330mm 13in
For 153mm / 6in core	355mm 14in

Film Winding

Encore™ NC b30 has differential hot slip properties for maximum wrap tightness. When overwrapping, it is advised to use the low slip (higher coefficient of friction) surface on the inside of the wrap, against the wrapped packs. Encore™ NC b30 is not recommended for printing applications.

Treated Surface	Ordering Code	Label Symbol
Inside	I	
Outside	O	

*For printing application consult an Innovia Films Technical Representative.

Film Storage and Handling

No special conditions are required for the storage of Encore™ NC b30 but it is recommended that dry conditions at temperatures below 30°C (85°F) are employed. Encore™ NC b30 is suitable for use for 6 months from the date of delivery and stocks should be used in rotation. Films should be allowed to reach operating room temperatures for 24 hours before use.

Food Contact

Encore™ NC b30 complies with the applicable EU and US legislation for most applications involving direct contact with foods. Full details are given on the Declaration of Compliance. Customers intending to use Encore™ NC b30 in a food contact application should request a copy of this document from Innovia Films. Details of compliance with food contact legislation in non-EU countries are also available upon request.

Health & Safety Guidelines

For Health & Safety information, please refer to literature reference B190.

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