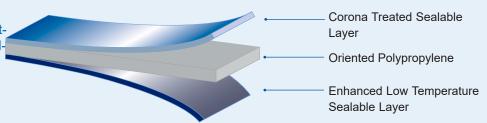
Encore REF30cn

Technical Data Sheet





REF30cn - Sustainable packaging film – Biaxially orientated polypropylene (BOPP) film with a low temperature heat-seal surface to allow high speed form-fill-seal and overwrap packaging



Technical Features

- · Heat sealable on both sides
- Low heat seal threshold
- Wide heat seal range
- Excellent hot-tack
- Treated for printing and lamination

Sustainable Features

- Carbon neutral (cradle to gate)
- Certified from bio-sourced renewable resins on a mass balance basis
- ISCC certified
- Contributes to reducing carbon footprint and reducing the use of fossil resources

Applications

REF30cn is suitable for use in high speed form-fill-seal and overwrap applications, giving excellent hot-tack and seal integrity. The film may be used as a single web or in lamination applications.

Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	REF30cn	
Thickness	Innovia Films test	micron		30	
Yield	Innovia Films test		m²/kg in²/lb g/m²	36.6 25800 27.3	
Permeability to: Water vapour	ASTM F 1249	38°C 90% RH 100°F 90% RH	g/m².24 hrs g/100in².24 hrs	5.0 0.32	
Oxygen	ASTM F 1927	23°C 0% RH 73°F 0% RH	cc/m².24 hrs g/100in².24 hrs	1600 103	
Optical: Gloss Haze (wide angle)	ASTM D 2457 ASTM D 1003	45° 2.5°	units %	85 1.0-2.0	
Coefficient of friction (film to film)	ASTM D 1894	Dynamic		0.25-0.40	
Corona Treatment	Innovia Films Test		dynes/cm	>38	
Tensile strength	ASTM D 882	Strain rate 50% / min	MN/m² MD TD Ib/in² MD TD	192	
Elongation at break	ASTM D 882	Strain rate 50% / min	% MD TD	90 125	
Elasticity modulus (1% secant)	ASTM D 882	Strain rate 10% / min	MN/m² MD TD Ib/in² MD TD	2100	
Sealing Range	Innovia Films test	2 secs; 0.10MN/m² 2 secs; 15 psi	°C °F	85-145 185-295 untreated to untreated	
Seal Strength	Innovia Films test	130°C; 2 secs; 0.10MN/m² 265°F; 2 secs; 15 psi	g(f)/25mm/in	>400 untreated to untreated	
Shrinkage	Innovia Films test	60 secs at 130°C (265°F)	% MD TD	4.0	

MD Machine Direction TD Transverse Direction

All properties are tested under standard laboratory conditions: 23 ± 2 °C, 50 ± 5 % RH, $(73 \pm 4$ F, 50 ± 5 % RH), unless otherwise stated. Where relevant, tests are based on international testing standards. Ref REF30cn - 1 of 2 - 0222



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Reel Specifications Nominal Reel Diameters

Film	Single Length (metres)	12x Length (metres)		
REF30cn	1250	15000		
Film	Single Length (feet)	12x Length (feet)		
REF120cn	4100	49200		

Other reel lengths are available in multiples of the single length as per the core diameter listed below.

Outside Diameter	1x	2x	4x	6x	8x	12x
For 77mm / 3in core	240mm 9½in	330mm 13in	450mm 18in	-	-	-
For 153mm / 6in core	-	-	475mm 18¾in	570mm 22½in	650mm 25½in	785mm 31in

Corona Discharge Treatment

Corona discharge treatment is available on either the inner or outer surface of Encore REF30cn. The treated surface is identified by a symbol on a label as below.

Treated Surface	Ordering Code	Label Symbol
Inside	I	Treated >>
Outside	0	Treated <<

Film Storage and Handling

No special conditions are required for the storage of Encore REF30cn but it is recommended that dry conditions at temperatures below 30°C (85°F) are employed to minimise any deterioration of surface discharge treatment level. Encore REF30cn 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 REF30cn complies with the applicable EU and US legislation for most applications involving direct contact with foods. Full details are given on the food contact certificate. Customers intending to use Encore REF30cn in a food contact application should request a copy of this document from Innovia Films. Details of compliance with food contact legislation in other countries are also available upon request.

Health & Safety Guidelines

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

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Regional Offices:

Europe (UK) Tel +44 16973 42281 Americas (USA) Tel +1 800 424 6273 Asia-Pacific (Aus) Tel +61 3 9303 0600



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