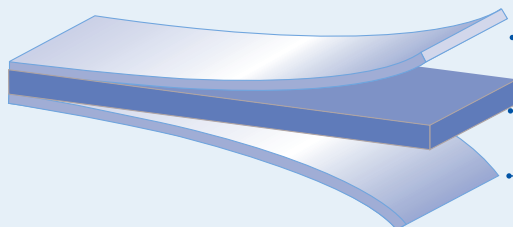


Encore C45bmax/C49bmax/ C90bmax

Technical Data Sheet



C bmax - Clear, Biaxially Oriented Polypropylene Film with Bio-Sourced Renewable PP Resin for Facestock Applications.



Corona Treated Polyolefin Layer

Clear OPP Core

Treatable Polyolefin Layer

Technical Features

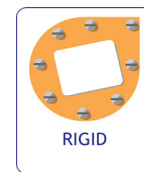
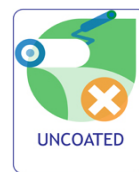
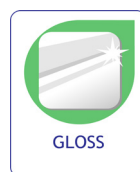
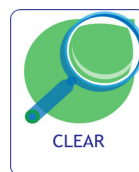
- Corona treated print surface
- No migratory additives
- Excellent clarity for 'no-label look'
- Excellent hot/cold moisture resistance
- Recyclable with polyolefin materials
- Semi-squeeze performance
- High stiffness for conversion and automatic dispensing
- Balanced biaxial orientation for superior die cutting
- High gloss surface

Sustainable Features

- PP certified >98% from bio-sourced renewable source
- ISCC certified via mass balance
- Contributes to reducing global warming :
 - reduced carbon footprint
 - reduced use of fossil resources

Applications

Encore C bmax can be printed by traditional flexographic and gravure processes. However, exact ink systems should be recommended by your supplier. Additional in-line corona treatment is recommended for optimum performance.



Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	C bmax		
Thickness	Innovia Films test		micron	45	49	90
			gauge	180	195	360
Yield	Innovia Films test		m ² /kg	24.4	22.4	12.3
			in ² /lb	17150	15750	8600
			g/m ²	41.0	44.6	81.3
Optical: Gloss Haze (wide angle)	Innovia Films test		%	85	85	
				<2.0		<3.0
Tensile strength	ASTM D 882	Strain rate 50%/min	MN/m ²	MD	200	190
				TD	180	170
			kpsi	MD	29.0	27.5
				TD	26.1	24.6
Elongation at break	ASTM D 882	Strain rate 50%/min	%	MD	105	130
				TD	120	140
Elasticity modulus (1% secant)	ASTM D 882	Strain rate 10%/min	MN/m ²	MD	2400	2000
				TD	2200	1900
			kpsi	MD	348	290
				TD	319	276
Dimensional stability	Innovia Films test	60 secs at 120°C (248°F)	%	MD	3.0	3.0
				TD	Nil	Nil
		60 secs at 130°C (266°F)	MD	6.0	6.0	
			TD	1.0	1.0	

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 C bmax - 1 of 2 - 0221



use our imagination...

Encore C45bmax/C49bmax/ C90bmax

Technical Data Sheet



Conversion

The balanced biaxial orientation of Encore C bmax results in excellent die cutting performance, enhancing label edge appearance and prolonging die life. The high machine direction stiffness and tensile strength produces excellent matrix stripping and superior high speed label dispensing.

Reel Specifications

Nominal Reel Diameters

Film	Core Size/(mm)	Approx Outside Dia/(mm)	Length/(metres)
C45bmax	153	875	12300
		1060	18300
		1217	24300
C49bmax	153	816	9600
		920	12300
		1120	18300
C90bmax	77	450	1600
	153	864	6000

Film	Core Size/(in)	Approx Outside Dia/(in)	Length/(feet)
C180bmax	6	34.4	40300
		41.7	60000
		47.9	79700
C195bmax	6	31.9	31500
		36.2	40300
		44.1	60000
C360bmax	3	17.7	5600
	6	37.9	19700

Alternative reel lengths/core sizes are available subject to negotiation.

The corona treated surface is available on either the inner or outer surface of Encore C bmax.

Film Storage and Handling

Care should be taken to protect reels of film from storage temperatures above 30°C (86°F) and localised sources of heat above 45°C (115°F). The reels should remain in the protective coverings supplied until ready for use on converting machinery. Converted reels, in both master and slit reel form should be similarly protected at all times. Encore C bmax 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 C bmax 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 C bmax 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 L190.

Disclaimer: Innovia Films or any of its affiliated companies (hereinafter 'Innovia Films') declines any liability with respect to the use made by any third party of the information contained herein. The information contained herein represents Innovia Films' best knowledge thereon without constituting any express or implied guarantee or warranty of any kind (including, but not limited to, the accuracy, the completeness or relevance of the data set out herein). Innovia Films is the sole owner or authorised user of the intellectual property rights relating to the information communicated. The information relating to the use of the products is given for information purposes only. No guarantee or warranty is provided that the product is adapted to the client's specific use. The client should perform his own tests to determine the suitability for a particular purpose. The final choice of use of a product remains the sole responsibility of the client.

Ref C bmax - 2 of 2 - 0221

Regional Offices:

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

www.innoviafilms.com
email: labels@innoviafilms.com
™Trademark of Innovia Films

