

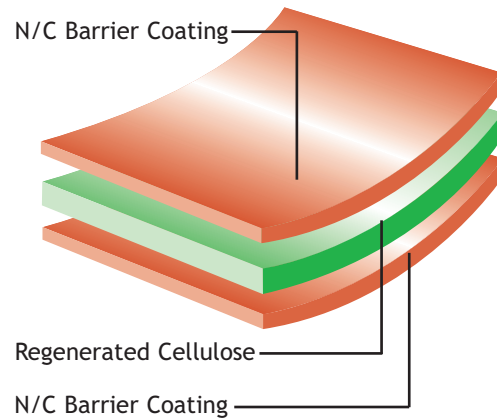
# Cellophane™ MS

Data

## Features - General Purpose Films

Regenerated cellulose film (RCF), coated on both sides with nitrocellulose by a solvent process.

- MS grades heat-sealable on both sides
- Good barrier to water vapour, gases and aromas
- Anti-static
- Resistant to oils and greases
- Both sides of the film are equally receptive to inks, adhesives and tear-tapes
- Excellent dead-fold characteristics
- High gloss and transparency
- Biodegradable base film



## Applications

**335/350/430MS** Suitable for use as a single film for general overwrapping on vertical and horizontal form-fill-seal machines.

**500/600MS** Used as a single film for heavy duty packaging. Particularly suitable as a base for tear-tape manufacture.

**MSC** Coloured versions are available in certain grammages. Please refer to the Cellophane colour swatch for further details.

## Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	MS				
				335	350	430	500	600
Thickness	Innovia Films test		micron	23.3	24.3	29.9	34.7	41.7
Yield	Innovia Films test		m <sup>2</sup> /kg g/m <sup>2</sup>	29.9 33.5	28.6 35.0	23.3 43.0	20.0 50.0	16.7 60.0
Permeability to: Water vapour Oxygen	ASTM E 96	38 °C 90% RH	g/m <sup>2</sup> .24 hrs	20				
	ASTM F 1927	23 °C 0-5% RH	cc/m <sup>2</sup> .24 hrs. bar	3				
Optical: Gloss	ASTM D 2457	45 °	units	90				
Haze (wide angle)	ASTM D 1003	2.5 °	%	4				
Coefficient of friction (film to film)	ASTM D 1894	Static Dynamic		0.25 0.20				
			Tensile strength	ASTM D 882		MN/m <sup>2</sup>	MD TD	125 70
Elongation at break	ASTM D 882		%	MD TD	22 70			
Elasticity modulus (1% secant)	ASTM D 882		MN/m <sup>2</sup>	MD TD	>3000 >1500			
Sealing range	Innovia Films test	0.5 secs; 69 kN/m <sup>2</sup>	°C	90-160				
Seal strength	Innovia Films test	135 °C; 0.5 secs; 69 kN/m <sup>2</sup>	g(f)/38mm	180				

All properties are tested under standard laboratory conditions: 23± 2°C; 50±5% RH, unless otherwise stated.

MD Machine Direction    TD Transverse Direction

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## Reel Specifications

### Nominal Reel Diameters

Film	Length/(metres)			
	1600	3200	6400	9600
335MS	1600	3200	6400	9600
340MS	1550	3100	6200	9300
430MS	1250	2500	5000	7500
500MS	1050	2100	4200	6300
600MS	900	1800	3600	5400
Outside Diameter for 77mm Core	240mm	330mm	450mm	ns
Outside Diameter for 153mm Core	ns	355mm	475mm	570mm

ns = non-standard

Other reel lengths are available subject to negotiation.

### Sheets

We can provide sheets to a range of sizes and shapes upon request.

## Film Storage

To maintain the high quality of this product during storage it is recommended that Cellophane MS should be stored in their original wrapping away from any source of local heating or direct sunlight.

Recommended conditions of storage are:

Temperature: 17-23°C

Relative Humidity: 35-55%

Cellophane MS and MSC are 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

Cellophane MS is suitable for most applications involving direct contact with foodstuffs. Cellophane MSC is suitable for applications involving direct food contact provided EC Regulation No. 1935/2004 (Article 3) and EC Directive 93/10/EEC (Article 2 [2]) are satisfied. For specific enquiries, please refer to literature reference A130 or contact our Technical Services Department.

## Health & Safety Guidelines

For Health and Safety information, please refer to literature reference A190.



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