

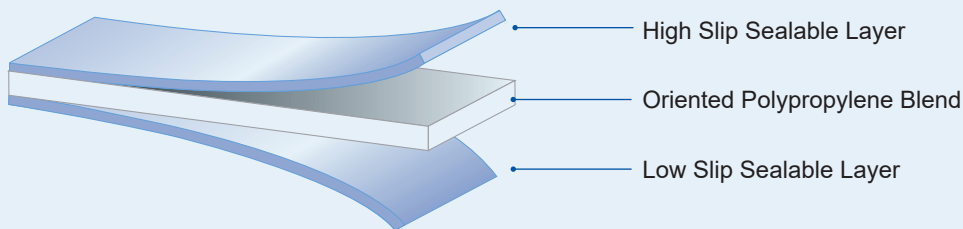
Propafilm™ GLT (Tobacco)



Technical Data Sheet

GLT - High Speed Overwrapping Film with Shrink Tightening Properties.

Biaxially oriented polypropylene (BOPP) film co-extruded on both sides with heat-sealable polyolefinic copolymers.



Features

- Excellent sparkling appearance
- Superior controlled, balanced shrinkage
- Enhanced machine performance
- Satisfies requirements for vending blocking applications
- Excellent moisture and flavour barrier
- Differential slip properties for tight wraps
- Overcomes film relaxation problems
- Resistant to solvent attack

Applications

GLT are suitable for use in the tobacco industry for both high speed overwrapping of unit packs and display outers where exceptional pack appearance and wrap tightness are required.



Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	GLT		
Thickness	Innovia Films test		micron	18	20	25
			gauge	72	80	100
Yield	Innovia Films test		m ² /kg	61.0	54.9	44.0
			in ² /lb	42900	38600	31000
			g/m ²	16.4	18.2	22.7
Permeability to: Water vapour	ASTM F 1249	38°C 90% RH 100°F 90% RH	g/m ² .24 hrs	6.8	6.0	4.1
			g/100in ² . 24 hrs	0.44	0.39	0.26
Oxygen	ASTM F 1927	23°C 0% RH 73°F 0% RH	cc/m ² .24 hrs	1800	1500	1400
			cc/100in ² . 24 hrs	116	97	90
Optical: Gloss Haze (wide angle)	ASTM D 2457	20°	units	130		
	ASTM D 1003	2.5°	%	1.3		
Coefficient of friction (out to out)	ASTM D 1894	Static/ Dynamic		0.40 0.30		
Blocking	Innovia Films test	70°C (158°F) / 200g / 2hrs	N	6		
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	110-140		
			°F	230-285		
Seal strength	Innovia Films test	109°C; 2 secs; 0.10MN/m ² 225°F; 2 secs; 15 psi	g(f)/25mm/ in	480		
Shrinkage	Innovia Films test	60 secs at 80°C (176°F) 60 secs at 120°C (248°F)	%	MD	3.7	
				TD	3.5	
				MD	7.0	
				TD	11.0	

MD Machine Direction TD Transverse Direction
All properties are tested under standard laboratory conditions: 23 ± 2°C, 50 ± 5% RH, (73 ± 4°F, 50 ± 5% RH), unless otherwise stated. Where relevant, tests are based on international testing standards.
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Reel Specifications

Nominal Reel Diameters

Film	2x Length (metres)
GLT18	4200
GLT20	3800
GLT25	3000



Film	2x Length (feet)
GLT72	13780
GLT80	12467
GLT100	9843

Other reel lengths are available subject to negotiation.

Outside Diameter	2x	4x	6x	8x	12x
For 77mm / 3in core	330mm 13in	-	-	-	-

Film Winding

Propafilm™ GLT has differential slip properties for maximum wrap tightness. When overwrapping, it is advised to use the low slip surface on the inside of the packs. The low slip surface is identified by a symbol on the reel label as below.

Low Slip/Treated Surface	Ordering Code	Label Symbol
Inside	I	 Low slip/treat >>
Outside	O	 Low slip/treat <<

*For printing application consult an Innovia Films Technical Representative

Film Storage and Handling

No special conditions are required for the storage of Propafilm™ GLT but it is recommended that dry conditions at temperatures below 30°C (86°F) are employed. Propafilm™ GLT 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

Propafilm™ GLT 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 Propafilm™ GLT 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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Regional Offices:

Europe (UK) Tel +44 16973 42281
Americas (USA) Tel +1 877 822 6273
Asia-Pacific (Aus) Tel +61 3 9303 0600

www.innoviafilms.com
email: tobacco@innoviafilms.com
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