

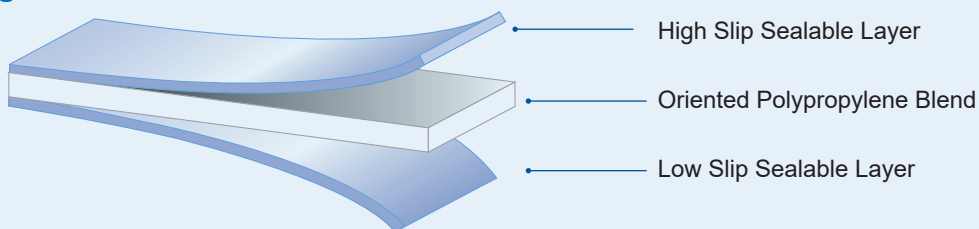
Propafilm™ OLS

Technical Data Sheet



OLS - 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
- Excellent moisture and flavour barrier
- Differential slip properties for tight wraps
- Strong seals for tamper evidence
- Overcomes film relaxation problems
- Resistant to solvent attack

Applications

OLS18(65)/20(80)/25(100) are suitable for high speed overwrapping and horizontal form-fill applications where exceptional pack appearance and wrap tightness are required. The wide sealing range and enhanced machine performance make OLS films particularly suited to demanding magnetic media, confectionery and tea applications.

Technical Properties (Typical Values)

| Property | Test Method | Test Conditions | Units | OLS | | |
|---|--------------------|---|--------------------------------|---------|--------|-------|
| 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 | 0.49 | 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 | 142 | 97 | 90 |
| Optical: Gloss | ASTM D 2457 | 20° | units | 130 | | |
| Haze (wide angle) | ASTM D 1003 | 2.5° | % | 1.3 | | |
| Coefficient of friction (out to out) | ASTM D 1894 | Static Dynamic | | 0.40 | | |
| | | | | 0.30 | | |
| 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 | % | MD | 3.7 | |
| | | | | TD | 3.5 | |
| | | 60 secs at 120°C | 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 ± 4F, 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 | Single Length (metres) | 12x Length (metres) |
|-------|------------------------|---------------------|
| OLS18 | 2100 | 25200 |
| OLS20 | 1900 | 22800 |
| OLS25 | 1500 | 18000 |



| Film | Single Length (feet) | 12x Length (feet) |
|--------|----------------------|-------------------|
| OLS65 | 6890 | 82677 |
| OLS80 | 6234 | 74802 |
| OLS100 | 4921 | 59055 |

Other reel lengths are available subject to negotiation.

| 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 |

Film Winding

Propafilm™ OLS 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. For conversion, it is recommended to treat the low slip surface which is identified by a symbol on the reel label.

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

Film Storage and Handling

No special conditions are required for the storage of Propafilm™ OLS but it is recommended that dry conditions at temperatures below 30°C (85°F) are employed. Propafilm™ OLS 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™ OLS 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™ OLS 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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