

# Exlfilm™ QSL

Quick Shrink Film



Exlfilm®QSL is a fast-sealing, and even faster shrink film with an exceptional high shrink ratio for an excellent “wrinkle free” finish. This film answers your most demanding product from calendars to chocolate boxes... Exlfilm®QSL properties are non-corrosive.

- Quick shrink initiation, fast-sealing and ultra-fast shrinking performance maximizes production speeds even under the most demanding circumstances.
- Maximum hot & cold “slip” ensures easy package insertion and removal from the master carton.
- Exceptionally high shrink ratio ensures that the film conforms to the package and provides “wrinkle-free” finish.
- QSL is non-corrosive, assuring no carbon build-up on sealing system.
- Exceptional tensile strength and tear resistance gives added durability and toughness for a stronger packaging.
- Complies with standards for direct food contact.

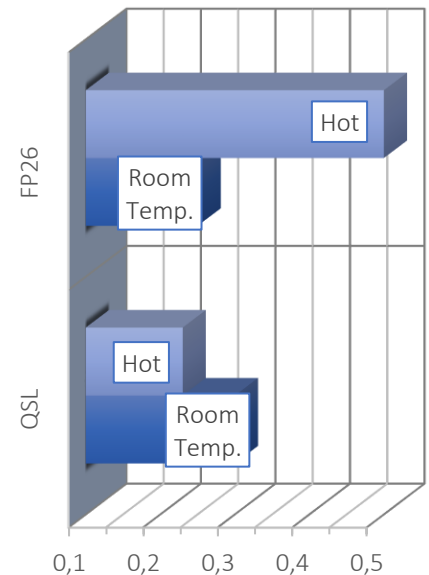
Thickness [µm]	Length [m]					Width [mm]		
	Flat			Centerfolded		Flat	Centerfolded	
9	27.600	13.800	9.200	4.600	4.600	2.300	From 200 up to 1200 width increments of 10mm	From 2 x 150 up to 2 x 1.000 width increments of 50mm
11	22.500	11.250	7.500	3.750	3.750	1.875		
12,5	19.800	9.900	6.600	3.300	3.300	1.650		
15	16.500	8.250	5.500	2.750	2.750	1.375		
19	12.900	6.450	4.300	2.150	2.150	1.075		

Cardboard core internal 76,6mm  
Other specifications available upon request

Properties		Test Method	Thickness (µm)					
			9	11	12,5	15	19	
Yield (m <sup>2</sup> /kg)		-	120,8	98,8	86,9	72,5	57,2	
Unit Weight (g/m <sup>2</sup> )		-	8,3	10,1	11,5	13,8	17,5	
Heat Shrinkage (%)	MD	60 °C, air, 5 min	3					
	TD	MIE 002	4					
	MD	90 °C, air, 5 min	13					
	TD	MIE 002	19					
	MD	120°C, air, 5 min	52					
	TD	MIE 002	58					
Tensile Strength (MPa)	MD	ASTM D882	95	95	100	100	100	
	TD		90	90	100	100	100	
Elongation at Break (%)	MD		90	100	100	120	120	
	TD		90	100	100	120	120	
Haze (%)			ASTM D 1003	2,1	2,4	2,5	2,8	3,4
Gloss at 20° (%)			ASTM D 2457	125	120	120	120	110
Coefficient of friction		ASTM D 1894	0,33					
OTR <sup>(1)</sup> (cm <sup>3</sup> /(m <sup>2</sup> .24h.atm))		ASTM D 3985/ASTM F 1927	8800					
WVTR <sup>(2)</sup> (g/h.m <sup>2</sup> )		ASTM E 96/E96M	0.67					

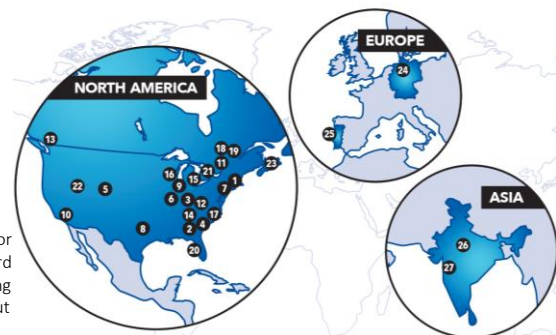
Note: These values are typical and not intended as limiting specifications.  
<sup>(1)</sup>15µm, 23°C&dry gas inside/dry gas outside. <sup>(2)</sup> 15µm 50% RH, 38°C.  
Storage time should not exceed 3 months. The maximum storage temperature for optimum performance is 35°C.

### Hot Slip and CoF



Fibope comply with the requirements and regulations which state that materials may be used in food contact applications. For more information contact our technical support team.

While we believe them to be reliable the statements and information herein are only for general guidance and are not warrants or guarantees for accuracy and completeness. The use must, by test or otherwise, determine suitability for this purpose. Our standard term and conditions of sale apply exclusively to all orders, and all liability for damages of any kind, including consequential exceeding purchase price is excluded. No one is authorized by us to make oral warranties. We reserve the right to make changes without notice or obligation in our products and publications.



ipg intertape polymer group™

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FIBOPE PORTUGUESA – FILMES BIORIENTADOS, SA is an industrial company dedicated to the production of flexible films for packaging, integrated in the group “Intertape Polymer, Inc.”, of Canada. We produce films based on polyolefins, bi-oriented and co-extruded (polyolefin shrink film) in multi-layers. Being a modern unit based on a favorable costs structure and advanced production techniques, it is able to meet the needs of its customers.

FIBOPE practices a continuous policy of quality and development of its capacities to satisfy the requirements of the customers regarding the products and services it offers, being certified since 2001, according to NP EN ISO 9001: 2008 and from 2013 according to the BRC / IOP reference Packaging.

The quality of the products Exfilm®, Exfilmplus® and Exfilmfresh® is constantly tested in our laboratory, equipped with highly sophisticated equipment and qualified technicians, allowing to guarantee quality and consistency.

The main applications are directed to the packaging of food products, cosmetics, paper and display market in general. The concept of total compliance with our customers guides daily activities and differentiates FIBOPE from competitors.