ipg®

i protect

SHRINK FILM

Exlfilm® brand shrink film

Exlfilmplus® brand performance shrink film

i protect

SHRINK FILM

IPG® is a recognized global leader in packaging and protective solutions. We began producing polyolefin shrink film in 1993. For three decades, we have been shrink wrapping products throughout the world with films produced at our manufacturing sites in the US and Portugal.

NORTH AMERICAN MANUFACTURING

In January 2022, IPG expanded its North American shrink film production by acquiring a new film plant in Everetts, NC that allowed us to increase our production capacity and product types. This expansion will help us grow with our North American distributor partners. IPG will continue to invest in people, capital assets and product development to maintain our position and the Exlfilm® line as world leaders in shrink film performance and technology.

The values of a safe work environment, environmental stewardship and good corporate citizenship are deeply embedded in IPG's culture. We live these values every day through our effective resource management, product innovation and our commitment to meet and exceed customer expectations.

IPG SUSTAINABLE ACHIEVEMENTS AND FOOD GRADE CERTIFICATIONS

BEST WINNER 2021

KOSHER CERTIFIED

GFSI Global Food Safety Initiative

BRC PACKAGING CERTIFICATED

ISO 50001:2018 CERTIFIED

Orion ISO 9001:2015 Certified

ENERGY STAR AWARD PARTNER OF THE YEAR Sustained Excellence

Operation Clean Sweep

SmartWay

CERTIFIED cradle to cradle SILVER

USA Recycle if Clean & Dry Store Drop-off PLASTIC WRAP

CAN PLASTIC PLASTIQUE WRAP EMBALLAGE

how2recycle.info

Certifications and achievements are product and manufacturing plant specific.

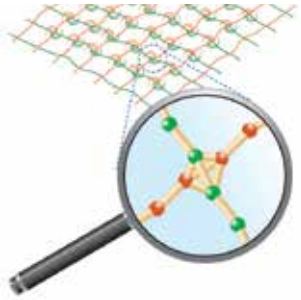
SHRINK FILM

Exlfilm® polyolefin shrink film is engineered to make your packaging look its absolute best, while providing unmatched value, versatility and durability.

Exlfilm*plus*® films are crosslinked. The "plus" of crosslinking provides customers with a stronger film capable of working on a wider variety of equipment and sealing systems.

CROSSLINKING TECHNOLOGY

This innovative technique makes Exlfilmplus Shrink Films one of the toughest and most versatile on the market. This is because the polymer chains are permanently bound into a network, significantly increasing their heat stability and strength. Our films have an inherently greater window of seal and shrink performance at a broader range of temperatures.



- **Prevention of buildup** on wires and knives during sealing
- **Prevention of film burn-through** in heat tunnels
- **Increased film toughness** on the finished package

In Crosslinking Technology, bonds are created where molecules crosslink, resulting in a much stronger film.

SUSTAINABLITY

- Exlfilm and Exlfilm*plus* shrink films are pre-approved for the store-drop off label through the How2Recycle® program
- **Post-consumer recycled (PCR) content** - Exlfilm*plus* PCR contains 10% certified PCR
- **Post-industrial recycled (PIR) content** - Exlfilm*plus* GPL, Exlfilm*plus* GPS, and Exlfilm*plus* SHIELD contain up to 25% PIR
- **Cradle to Cradle Certified®** - Exlfilm*plus* GPL, Exlfilm*plus* GPS and Exlfilm*plus* SHIELD are Cradle to Cradle Certified® Silver
- **Downgauge solutions** - Exlfilm*plus* GPL and Exlfilm*plus* 365 unique film formulations offer similar performance to thicker standard gauge film. Reduce film, save time, and save money.

USA / É.-U. | CAN / CAN
Recycle if Clean & Dry
Store Drop-off
PLASTIC WRAP
how2recycle.info
PLASTIC PLASTIQUE
WRAP EMBALLAGE

CERTIFIED cradle to cradle SILVER

Intertape Polymer Group | 100 Paramount Drive | Suite 300 | Sarasota, FL 34232

SHRINK FILM

Exlfilm*plus* PCR is the first clear polyolefin shrink film containing post-consumer recycled content. IPG's breakthrough proprietary film blend contains 10% post-consumer recycled content and 25% post-industrial recycled content for a total of 35% recycled content, making it an even more sustainable solution. Exlfilm*plus* PCR offers 7%-9% yield savings compared to traditional films. Exlfilm*plus* PCR is the ideal choice for customers seeking a more circular, sustainable shrink packaging solution.

Exlfilm*plus*® PCR

KEY PERFORMANCE FEATURES

- Performs well on all sealing systems and tunnels
- Consistent shrink
- Strong seals

BENEFITS

- Contains 35% recycled content
- 7% -9% yield savings compared to traditional gauges
- Excellent machinability
- Printable
- Crosslinked technology
- Pre-perforated film available

CHARACTERISTICS	TEST METHOD	55 GAUGE		70 GAUGE	
Roll Length – Center Fold		4,770		3,750	
Roll Length – Single Wound		9,540		7,500	
Post-Consumer Recycled Content		10%		10%	
Post-Industrial Recycled Content		25%		25%	
Low Temperature Usage (°F)		-45°		-45°	
Shrink Temperature (°F)		240 – 340°		240 – 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°	
Haze %	D1003	5.0		5.2	
Gloss at 20°	D2457	110		100	
Coefficient of Friction (film to film), kinetic	D1894	0.2		0.2	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	874		580	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	0.45		0.45	
		MD	TD	MD	TD
Tensile Strength (PSI)	D882	18,000	18,000	18,000	18,000
Elongation at Break (%)	D882	120	130	120	130
Stiffness Modulus (PSI)	D882	40,000	42,000	40,000	42,000
Unrestrained Shrink (%) @ 250°F	D2732	65	65	65	65
Tear Propagation (g / ply)	D1922	15	15	18	18

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction
TD = Transverse Direction

Exlfilm*plus* PCR is pre-approved for the Store Drop-off label through the How2Recycle® program.

SHRINK FILM

Exlfilm*plus* GPL, available in 35, 42, and 55 gauge, is a thin gauge, high performance, crosslinked polyolefin shrink film. Exlfilm*plus* GPL provides customers superior machinability, clarity and cost savings through higher yield. Exlfilm*plus* GPL's unique shrink characteristics make it the ideal choice for both general use and light force applications for printers, bakeries and many others.

Exlfilm*plus* GPL
GLOBAL PERFORMANCE LITE SHRINK FILM

KEY PERFORMANCE FEATURES

- High yield
- Wide operating window
- Minimal shrink force

BENEFITS

- Ultra light gauge
- Lowest cost per package
- Consistently strong seals
- Superior clarity and gloss
- Minimal shrink force
- Excellent machinability
- Crosslinked technology
- Pre-perforated film available
- Available on 3in or 6in core
- Contains post industrial recycled content

CHARACTERISTICS	TEST METHOD	GAUGE					
		35		42		55	
Roll Length – Center Fold		7,500		6,250		4,770	
Roll Length – Single Wound		15,000		12,500		9,540	
Post Industrial Recycled Content (not less than %)		--		10		20	
Low Temperature Usage (°F)		-45°		-45°		-45°	
Shrink Temperature (°F)		240 – 340°		240 – 340°		240 – 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°		90°	
Haze %	D1003	2.1		2.3		2.4	
Gloss at 20°	D2457	125		135		135	
Coefficient of Friction (film to film), kinetic	D1894	0.22		0.22		0.22	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	1550		1,100		1,100	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	1.07		0.81		0.74	
		MD	TD	MD	TD	MD	TD
Tensile Strength (PSI)	D882	17,000	17,000	17,000	16,000	17,000	16,000
Elongation at Break (%)	D882	100	110	115	125	130	140
Stiffness Modulus (PSI)	D882	50,000	50,000	40,000	40,000	40,000	40,000
Unrestrained Shrink (%) @ 250°F	D2732	72	72	72	72	72	72
Tear Propagation (g / ply)	D1922	10	11	11	11	13	13

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction
TD = Transverse Direction

USA CAN
Recycle if Clean & Dry
Store Drop-off
PLASTIC WRAP
how2recycle.info
PLASTIC PLASTIQUE WRAP EMBALLAGE

Exlfilm*plus* GPL is Cradle to Cradle Certified® Silver and pre-approved for the Store Drop-off label through the How2Recycle® program.

CERTIFIED cradle to cradle SILVER

SHRINK FILM

Exlfilm*plus* GPS is a high performance crosslinked polyolefin shrink film. This multi-layered film is versatile enough to perform on all sealing systems and shrink tunnels. The premium resin formulation provides our strongest seals ever. Exlfilm*plus* GPS offers high shrink force, making it the ideal choice for multi-packing and unitizing product.

Exlfilm*plus* GPS
GLOBAL PERFORMANCE SHRINK FILM

KEY PERFORMANCE FEATURES

- Consistently strong seals
- Wide operating window
- High shrink force

BENEFITS

- Wide window of operation
- Superior sealing performance
- Higher shrink force
- Printable
- FDA compliant
- Excellent machinability
- Crosslinked technology
- Pre-perforated film available
- Available on 3in or 6in core
- Contains post industrial recycled content

CHARACTERISTICS	TEST METHOD	GAUGE											
		45		60		75		100		125		150	
Roll Length – Center Fold		5,830		4,375		3,500		2,625		2,100		1,750	
Roll Length – Single Wound		11,660		8,750		7,000		5,250		4,200		3,500	
Post Industrial Recycled Content (not less than %)		15		20		20		20		20		20	
Low Temperature Usage (°F)		-45°		-45°		-45°		-45°		-45°		-45°	
Shrink Temperature (°F)		240 – 340°		240 – 340°		240 – 340°		240 – 340°		240 – 340°		240 – 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°		90°		90°		90°		90°	
Haze %	D1003	2.6		2.8		3.0		3.3		4.3		4.5	
Gloss at 20°	D2457	135		135		135		125		125		115	
Coefficient of Friction (film to film), kinetic	D1894	0.2		0.2		0.2		0.2		0.17		0.17	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	1,203		874		700		503		400		319	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	.88		.45		.39		.29		.24		.20	
		MD	TD	MD	TD	MD	TD	MD	TD	MD	TD	MD	TD
Tensile Strength (PSI)	D882	18,000	18,000	18,000	18,000	18,000	18,000	20,000	20,000	20,000	20,000	15,000	16,000
Elongation at Break (%)	D882	115	125	120	130	130	135	140	150	150	150	160	160
Stiffness Modulus (PSI)	D882	38,000	40,000	40,000	42,000	42,000	44,000	43,000	48,000	44,000	44,000	35,000	45,000
Unrestrained Shrink (%) @ 250°F	D2732	65	65	65	65	65	65	65	65	65	65	63	63
Tear Propagation (g / ply)	D1922	12	12	16	16	18	18	25	25	27	27	30	30

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction
TD = Transverse Direction

USA: Recycle if Clean & Dry; Store Drop-off; PLASTIC WRAP; how2recycle.info
CAN: PLASTIC PLASTIQUE; WRAP EMBALLAGE

Exlfilm*plus* GPS is Cradle to Cradle Certified® Silver and pre-approved for the Store Drop-off label through the How2Recycle® program.

CERTIFIED cradle to cradle SILVER

SHRINK FILM

Exlfilm*plus* 365 is a newly developed all-purpose crosslinked polyolefin shrink film. This uniquely engineered multi-layered film demonstrates exceptional performance on manual, semi-automatic and high-speed automatic equipment. The thinner gauges offer a 7%-11% yield savings compared to traditional films. In addition to material savings, longer roll lengths improve uptime due to fewer roll changeovers. Exlfilm*plus* 365 exhibits strong seals, quick shrink initiation, and improved optics. Exlfilm*plus* 365 delivers worry free performance "All day, every day".

Exlfilm*plus*® 365

KEY PERFORMANCE FEATURES

- Wide operating window
- Quick shrink initiation
- Improved optics

BENEFITS

- 7% - 11% Yield savings when compared to traditional films
- Wide window of operation
- Category leading shrink performance
- FDA compliant
- Crosslinked technology
- Optional pre-perforation
- Available on 3" and 6" core

CHARACTERISTICS	TEST METHOD	GAUGE													
		45		55		70		90		115		150		200	
Roll Length – Center Fold		5,830		4,770		3,750		2,910		2,280		1,750		1,310	
Roll Length – Single Wound		11,660		9,540		7,500		5,820		4,560		3,500		2,620	
Low Temperature Usage (°F)		-45°		-45°		-45°		-45°		-45°		-45°		-45°	
Shrink Temperature (°F)		240 – 340°		240 – 340°		240 – 340°		240 – 340°		240 – 340°		240 – 340°		240 – 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°		90°		90°		90°		90°		90°	
Haze %	D1003	3.5		3.5		4.0		4.6		5.4		6.0		6.0	
Gloss at 20°	D2457	120		120		110		100		100		100		100	
Coefficient of Friction (film to film), kinetic	D1894	0.21		0.21		0.21		0.20		0.20		0.17		0.17	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	770		700		580		520		400		300		250	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	0.65		0.55		0.45		0.32		0.26		0.20		0.16	
		MD	TD	MD	TD	MD	TD	MD	TD	MD	TD	MD	TD	MD	TD
Tensile Strength (PSI)	D882	12,500	13,000	12,500	13,000	12,500	13,000	12,500	13,000	12,500	13,000	12,500	13,000	12,500	13,000
Elongation at Break (%)	D882	100	115	110	115	110	115	125	130	150	150	160	150	160	150
Stiffness Modulus (PSI)	D882	30,000	40,000	30,000	40,000	30,000	40,000	30,000	40,000	30,000	30,000	30,000	30,000	30,000	30,000
Unrestrained Shrink (%) @ 250°F	D2732	72	72	72	72	72	72	72	72	72	72	70	70	70	70
Tear Propagation (g / ply)	D1922	18	14	20	16	22	18	25	20	40	30	45	45	45	45

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction; TD = Transverse Direction

Exlfilm*plus* 365 is pre-approved for the Store Drop-off label through the How2Recycle® program.

SHRINK FILM

Exlfilm 307 is a strong, multi-layered polyolefin shrink film with balanced shrink properties. This film is ideally suited for high speed static lap and wire sealing systems, and exhibits superior clarity, gloss, and optics.

Exlfilm® 307
HIGH SPEED SHRINK FILM

KEY PERFORMANCE FEATURES

- High yield
- Wide operating window
- Excellent optics

BENEFITS

- High speed performance
- Excellent machinability
- Superior clarity and gloss
- Excellent static sealing
- Consistently strong seals
- Pre-perforated film available
- Available on 3in or 6in core

CHARACTERISTICS	TEST METHOD	GAUGE							
		50		60		75		100	
Roll Length – Center Fold		5,250		4,375		3,500		2,625	
Roll Length – Single Wound		10,500		8,750		7,000		5,250	
Low Temperature Usage (°F)		-40°		-40°		-40°		-40°	
Shrink Temperature (°F)		240 – 340°		240 – 340°		240 – 340°		240 – 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°		90°		90°	
Haze %	D1003	3.0		3.2		3.4		3.6	
Gloss at 20°	D2457	125		115		115		115	
Coefficient of Friction (film to film), kinetic	D1894	0.15		0.15		0.15		0.15	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	527		431		344		333	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	1.91		1.52		1.179		0.93	
		MD	TD	MD	TD	MD	TD	MD	TD
Tensile Strength (PSI)	D882-80	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000
Elongation at Break (%)	D882-80	120	120	120	120	140	140	140	140
Stiffness Modulus (PSI)	D882-80	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Unrestrained Shrink (%) @ 250°F	D2732	62	62	62	62	62	62	62	62
Tear Propagation (g/ply)	D1922	11	11	14	14	20	20	25	25

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction; TD = Transverse Direction

USA CAN
Recycle if Clean & Dry
Store Drop-off
PLASTIC WRAP
how2recycle.info
PLASTIC PLASTIQUE WRAP EMBALLAGE

Exlfilm 307 is pre-approved for the Store Drop-off label through the How2Recycle® program.

SHRINK FILM

IPG's new Exlfilm*plus* Shield is a polyolefin shrink film designed to conceal the contents of wrapped products. This heavy-duty film can be used to replace expensive corrugated containers.

Exlfilm*plus*® SHIELD
OPAQUE SHRINK FILM

KEY PERFORMANCE FEATURES

- Fully opaque gray film
- Designed for fulfillment houses and e-commerce shippers
- Fully recyclable

BENEFITS

- Eliminates the corrugated container and void fill when packaging items strong enough to withstand the rigors of shipping
- High speed pack off for improved output rates and lower labor costs
- Crosslinked technology provides consistent sealing and shrinking
- Printable for enhanced marketing opportunities

CHARACTERISTICS	TEST METHOD	GAUGE			
		100		150	
Color		Gray		Gray	
Roll Length – Center Fold		2,625		1,750	
Roll Length – Single Wound		5,250		3,500	
Post Industrial Recycled Content (not less than %)		25		25	
Low Temperature Usage (°F)		-45°		-45°	
Shrink Temperature (°F)		240 - 340°		240 - 340°	
Max. Storage Temp. (°F) 2 years max.		90°		90°	
Transmittance %	D1003	5.5		2.5	
Gloss at 20°	D2457	60		68	
Coefficient of Friction (film to film), kinetic	D1894	0.17		0.12	
Oxygen Transmission Rate (cc/100 in²/24 hrs.)	D3985	421		265	
Water Vapor Transmission Rate (g/100 in²/24 hrs.)	F1249	.32		.19	
		MD	TD	MD	TD
Tensile Strength (PSI)	D882	14,000	14,000	14,000	14,000
Elongation at Break (%)	D882	150	140	155	145
Stiffness Modulus (PSI)	D882	47,000	50,000	35,000	45,000
Unrestrained Shrink (%) @ 250°F	D2732	65	65	63	63
Tear Propagation (g/ply)	D1922	23	23	35	35

Note: These values are typical and not intended as limiting specifications.
MD = Machine Direction; TD = Transverse Direction

USA CAN
Recycle if Clean & Dry
Store Drop-off
PLASTIC WRAP
how2recycle.info
PLASTIC PLASTIQUE WRAP EMBALLAGE

Exlfilm*plus* GPS is Cradle to Cradle Certified® Silver and pre-approved for the Store Drop-off label through the How2Recycle® program.

CERTIFIED cradle to cradle SILVER

i protect

CORPORATE PROFILE

Headquartered in Sarasota, Florida, IPG is a global provider of packaging and protective solutions across a diversified set of geographies and end-markets. The Company develops, manufactures, and sells a variety of solutions including paper and film-based pressure-sensitive and water-activated tapes, stretch and shrink films, protective packaging, woven and non-woven products and packaging machinery.

NORTH AMERICA

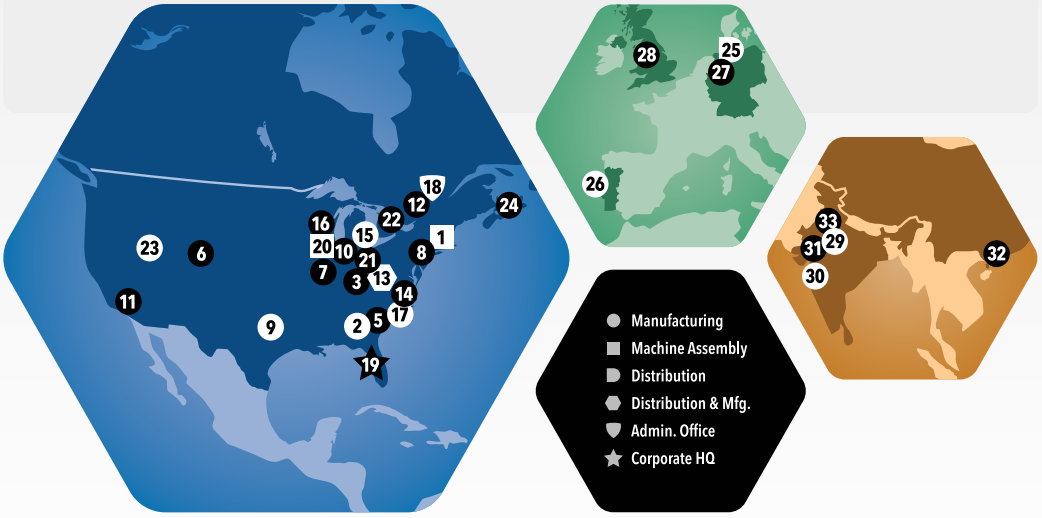
1. Ansonia, CT
2. Atlanta, GA
3. Bardstown, KY (2)
5. Blythewood, SC
6. Brighton, CO
7. Carbondale, IL
8. Carlstadt, NJ
9. Carrollton, TX
10. Chicago, IL
11. Corona, CA
12. Cornwall, ON
13. Danville, VA
14. Everetts, NC
15. Marysville, MI
16. Menasha, WI
17. Midland, NC
18. Montreal, QC
19. Sarasota, FL
20. Schaumburg, IL
21. Springfield, OH
22. Toronto, ON
23. Tremonton, UT
24. Truro, NS

EUROPE

25. Flensburg, Germany
26. Porto, Portugal
27. Soest, Germany
28. Widnes, UK

ASIA

29. Chopanki, India
30. Daman, India
31. Dahej, India
32. Jiangmen City, China
33. Karoli, India



888.898.7834 | itape.com