



# Flexible Substrates & Conversion Capabilities

PolymerFilms is ready to help you outshine your competition with a vast portfolio of high performance film and flexible substrates. We partner with the most innovative and trusted brands to deliver the solutions you need, and with five dedicated **PolymerFilms** locations, we offer a wide range of options for meeting your specialty fabrication and conversion needs.

## FILM PORTFOLIO

- Acrylic
- Alloys & Blends
- Fluoropolymers
- Imides (PEI & PAI)
- Ketones (PEEK)
- LEXAN™ Coated & Uncoated
- LEXAN™ Display
- LEXAN™ Electronic ID
- LEXAN™ Flame Retardant
- Magnetic Materials
- PETG, Co-polyester
- Polyester (PET)
- Polyethylene
- Polypropylene
- Polystyrene (HIPS)
- Static Dissipative
- Sulfones
- Teflon™ FEP
- Teflon™ PFA
- Tefzel™ ETFE
- Tyvek®
- Vinyl, Flexible
- Vinyl, Rigid Calendered



## FILM CONVERSION CAPABILITIES

- Sheeting
- Guillotining
- Slitting
- Annealing
- Laminating
- Shrink wrapping
- Packaging



## INDUSTRY-LEADING PARTNERS





## General Purpose

### Vinyl, Flexible

Has a soft flexible feel, offers excellent clarity, and can be used from windows to printed parts.

- Available in gloss and frost finishes
- UV stabilized grades
- Marine grade with mildew inhibitors
- FR grade that meets NFPA701

### Vinyl, Rigid Calendered

Its outstanding durability, printability, and laminating make it a popular choice for signs and displays.

- Available in a variety of finishes
- Self-extinguishing properties
- Impact and tear resistant
- Chemical resistant

### Polyester (PET)

The base material can be factory pretreated for slip, adhesion, anti-fog, or with a silicone release.

- Polished or matte finishes
- Available in clear, white opaque, milky white and black opaque
- High mechanical strength
- Dimensionally stable

### Polyethylene (PE)

Polyethylene is a lightweight thermoplastic material that is resistant to chemicals and moisture.

- Available in a variety of colors and textures
- Long lasting flexible hinges that won't break
- Can be co-extruded with 2 different colors that will not separate or fray
- Recyclable

### Polypropylene (PP)

Polypropylene (PP) is a semi-crystalline thermoplastic used in a wide variety of applications including packaging and labels.

- Available in a clear transparent sheet, similar to rigid PVC and colors
- Impact and chemical resistant
- Long lasting flexible hinges
- Recyclable

## Graphic Films

### LEXAN™ Uncoated

Offers broad design flexibility and aesthetic appeal.

- Available in polished and textured finishes
- Outstanding optical clarity & easy formability
- Excellent printability without pre-treatment
- FDA / USP class VI compliance (LEXAN 8040 films)

### LEXAN™ Coated HP

Offers unique solutions for scratch resistance, weatherability, anti-glare and anti-fog applications.

- Available in high gloss, smooth and various matte finishes
- Excellent clarity and printability
- Abrasion resistant
- Improved hardness versus uncoated
- Light diffusion, UV and formable grades available

### Acrylic

Acrylic films are impact modified and are ideal for in-mold decorative (IMD) and forming applications. Is 7 to 10 times stronger than standard acrylic.

- Available in matte and gloss finishes
- Screen printable
- Chemical and UV resistant
- Better optical clarity than polycarbonate film

### Polystyrene (HIPS)

Ideal for short to medium term sign and graphic applications, and well suited for thermoforming applications.

- Can be printed using litho, screen, offset, or digital inks
- Excellent stiffness
- FDA approved with 100% virgin resin
- Recyclable

### PETG, Co-polyester

Has higher tensile and flexural strength than acrylic; has a low heat deflection temperature and should not be used outdoors.

- Polished or matte finishes
- High clarity
- Chemical resistant
- Easy to fabricate, form, bond, and print

### Tyvek®

A tough and durable spunbonded olefin that is made from high density polyethylene fibers, and offers characteristics of paper, film and cloth.

- Chemical resistant
- Dimensionally stable
- FDA grades available
- High white point (94.1)

# Fluoropolymer Films

**PolymerFilms** is proud to partner with Chemours™ to offer a portfolio of fluoropolymers films, such as Teflon™ and Tefzel™, offering high chemical compatibility, excellent mechanical strength, outstanding electrical properties, long-term weatherability, and wide thermal range.

## Teflon™ FEP

- High dielectric strength
- High dimensional stability
- Anti-stick & low-friction
- Long-term stability outdoors

## Teflon™ PFA

- Highly thermoformable
- Wide temperature range
- Long fatigue life
- Abrasion resistance

## Tefzel™ ETFE

- Low density
- High tear resistance
- Moderate stiffness
- Increased toughness & 20% lighter

# Specialty & Performance Films

## LEXAN™ Flame Retardant

LEXAN FR films are available in clear or opaque and offer consistent properties for insulation and printability.

- Available in a variety of textures and finishes
- Flame resistance: UL94 V-0
- Excellent printability and ease of fabrication
- High mechanical strength
- ECO FR grades available

## LEXAN™ Display

LEXAN display films provide light diffusion and/or collimation while maximizing light transmission.

- Lower cost and lighter weight versus coated PET films
- Balanced light transmission and LED hiding power
- Good luminance

## LEXAN™ Electronic ID Card

The LEXAN SD film portfolio has been designed for easy manufacturing and lamination of complex security documents and ID cards.

- Print prior to lamination
- Optimal lamination of film layers without adhesives
- Long term durability of cards (up to 10 years)
- Excellent laser markability
- Precise gauge average and tolerance

## Alloys & Blends

A mixture of two chemically diverse polymers to form a homogenous product, having enhanced properties. (PC/ABS, PC/PET, PC/PMMA)

- Improved aesthetics
- Improved mechanical strength
- Improved heat and chemical resistance
- Improved scratch resistance and pencil hardness

## Ketones

Semi-crystalline thermoplastics used in applications where thermal, chemical and combustion properties are critical.

- Excellent temperature and chemical resistance
- Outstanding wear and abrasion resistance
- Low moisture absorption

## Static Dissipative

ESDs are made from polymers with fillers to provide protection from static buildup and electromagnetic interference.

- Insulation against high leakage currents
- Provide a grounding path for amorphous resins
- Prevention of damage to components from static electromagnetic interference

## Sulfones

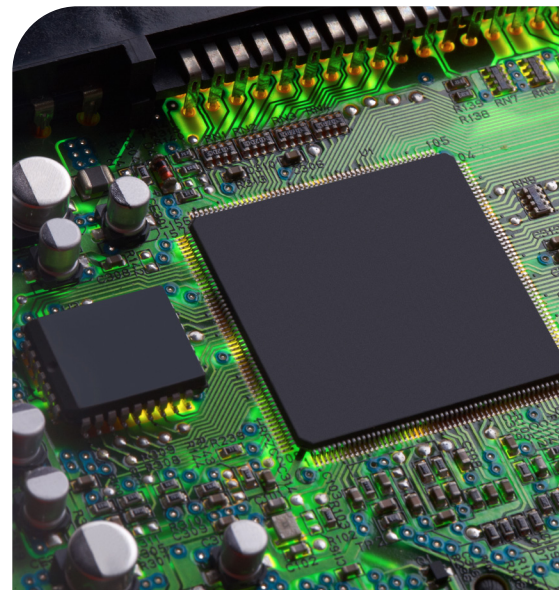
Sulfonated films are made from amorphous resins that are sulfur based. (PPSU & PSU)

- High strength
- Self-extinguishing
- High service temperatures

## Imides (PEI & PAI)

Imides are characterized by very high glass transition temperatures.

- High rigidity
- High strength
- High temperature and chemical resistance







# Film Conversion Solutions To Meet All Your Needs

Tyngsboro, MA | Chicago, IL | Fresno, CA | Montréal, QC | Monterrey, Mexico

**PolymerFilms** strives to exceed our customers' expectations, accurately converting a wide range of products in a timely and cost effective manner. Our conversion facilities provide more than 350 pre-converted standard sheets and rolls in stock, and sheets ready for same day shipping. Additionally, many other products in our portfolio can be custom fabricated and converted within days to meet your exact requirements.

We specialize in serving a variety of customers, from expansive to boutique- all benefiting from our expertise and product offerings. Collaborating with the PolymerFilms team increases our customers' ability to be competitive in the marketplace.

## Sheeting

- Material can be cut into sheets up to 62" wide and 144" in length
- Can tissue or paper interleaf

## Guillotining

- After sheeting, material can be precision cut into any size from 1" x 1" to 100" x 100"
- Notched corners

## Shrink Tunnel

- Sheeted and precision cut material from the guillotine is sealed with shrink film to protect it during shipping and storage

## Laminating

- Masking or pressure sensitive adhesive can be applied to either sheets or rolls

## Slitting

- Rolls of material can be made into smaller rolls – narrower or shorter as required
- Thickness from 0.0005" to 0.030"
- Industry's best – widths from 0.250" to 72"

## Annealing

- Heat and pressure reduce stress in material to ensure the film lies flat once it is sheeted

## Packaging

- Custom packaging options
- Custom shipping options
- Custom bar coding and labelling available
- Experienced consulting for all above options based on your order size



PolymerFilms West (Fresno, CA) and East (Tyngsboro, MA) are AS9120B and ISO 9001 Certified  
PolymerFilms Central (Naperville, IL) is ISO 9001 Certified

Contact us for quotes & availability: [info@polymerfilms.com](mailto:info@polymerfilms.com)

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