



The Brand Packager's
Guide to Clysar®
Shrink Film

Clysar®



Bring Out the Best in Your Next Package...

with the Industry's Premier Portfolio of **High-Performance Shrink Film**

Looking for the best shrink film for your next package?

Here, you'll find a quick guide to the wide selection of high-performance polyolefin films available from Clysar.

Surround Your Products with Industry-Leading Clarity and Sparkle

Ultra-clear Clysar® shrink films have the best optics in the industry—with superior clarity, sparkle and gloss that make your products shine.

Get the **Clysar Quality Advantage** with Every Roll of Film

There's a very real difference in shrink film brands, from how well the film is made, to how efficiently it performs on your packaging line. Clysar® film is:

- Produced to ISO 9001 quality standards
- FDA/USDA approved
- FSSC 22000 certified
- U.S. Postal approved (see your distributor for details)
- Sustainable—lightweight, protective, non-toxic
- Made in the USA

Clysar® films are offered in gauges from 35 to 300, with properties ranging from low shrink force to high stiffness, to optimize every application.

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Achieve Your Vision, with Experts Laser-Focused on You

Our films are only part of the package. You'll also enjoy sales and service expertise from the best shrink packaging distributors in the business, experts who are laser-focused on your application. They'll optimize your package with unique programs that will reduce costs... improve your package appearance... address sustainability... and create a LEAN shrink operation. **No matter what your vision, our experts simplify doing business with 360° support.**

Count on them to:

- Find the Best Shrink Film for Your Application
- Provide Film Properties, Specifications and Certifications
- Get Free Sample Rolls or Package Prototypes
- Calculate Price and Cost per Package
- Run Technical Trials
- Manage a Printed Film Program
- Assist with Film and Equipment Troubleshooting
- Conduct Operator Training
- Reduce Cost with PACE* Evaluations
- Improve Packaging Sustainability

**Connect with Your Area Shrink Specialist...for Easy, Expert Recommendations!
Call 888-4-CLYSAR, or email us at marketing@clysar.com to find a Clysar distributor near you!**

*Clysar's Packaging Area Cost Evaluation, a free cost checkup that identifies cost-out opportunities of 10%-30% in most shrinkwrapping operations

Find Helpful Shrink Packaging Resources Online at www.clysar.com

Our website is rich with content about "everything shrink."

- Distributor Locator
- Easy, Interactive ShrinkFinderSM
- Application Ideas for Products You Are Wrapping
- Film/Equipment Compatibility
- Film Specifications, Certifications and Data
- Tips on Saving Cost, Improving Sustainability and More
- Resource Videos, Troubleshooting Guides and White Papers

Go to Market Backed with Unmatched R&D and Technical Support

Our shrink film innovation is driven by a team of technical experts and extensive research & development capabilities, including fully equipped pilot and quality labs. Daily, we're creating and improving polyolefin shrink films, from leveraging polymer chemistry to the latest film manufacturing technology.

You'll also gain unmatched field support. Clysar's nationwide network of experienced technicians is on call to keep our customers' shrink operations running smoothly, from fine-tuning film/equipment operations to troubleshooting performance.



All-Purpose HP Gold Films

Our best-selling multi-purpose film, HP Gold is extremely operator-friendly and easy to run. HP Gold handles high production speeds and a wide range of operating windows while delivering strong, reliable seals. Plus, its high shrink force and strength are perfect for bundling and multi-packs.



Our Most Popular Multi-Purpose, High-Performance Shrink Films

IDEAL FOR

- Baked goods such as trayed muffins, pies and cakes*
- Box overwraps such as games
- Bundled, multi-pack and club products
- Household products and consumer goods
- Paper (ream-size and up)
- Pizza
- Products with irregular shapes or voids

FEATURES AT A GLANCE

- Beautiful sparkle, clarity and gloss
- Wide sealing window for idiot-proof sealing/shrink
- Performs reliably even in less-than-ideal operating conditions
- Tight, crisp, even shrink in all directions
- Compatible with all sealing systems
- High strength/shrink for bundling products
- Excellent printability**

SOLVES THESE ISSUES

- Resists burn-through, especially on hard-to-shrink products with voids
- Eliminates pinholes, balloon bursts and weak seals
- Conforms to even irregular shapes without dog-ears
- Resists tearing and punctures
- Versatility eliminates multiple film SKUs in contract packaging

**See page 13 for films custom-tailored to bakery.*

***See page 14 for details on printed film.*

Anti-Fog AFG Films

Clysar® AFG is a polyolefin film with a proprietary anti-fog treatment that wicks condensation away from the surface. AFG provides a crystal clear view for moist or respiring products like meat and produce, and is ideal for applications with changing ambient temperatures. The film offers a soft feel, tough protection and easy-running performance despite less-than-ideal shrink packaging conditions.

Also see pre-perforated Produce Films (page 13) that manage respiration and extend shelf life for fresh fruits and vegetables.



Advanced Anti-Fog for Fresh & Refrigerated Products

IDEAL FOR

- Fresh trayed poultry, sausage or meat
- Fresh fruits and vegetables
- Pre-sliced or prepared fruits and vegetables
- Multi-pack and bundled produce
- Trayed or overwrapped organic products

FEATURES AT A GLANCE

- Reliable shrink and sealing on a wide variety of shrink sealing systems
- Shrinks in both hot air and hot water tunnels
- USDA/FDA compliant
- Less likely to leak than ordinary polyolefin films
- Excellent gloss and clarity
- Resists tears and punctures, bounces back despite rough handling

SOLVES THESE ISSUES

- Condensation/haze/cloudy packages due to ambient temperature swings/moisture buildup
- Product cleanliness/protection
- Dog-ears, wrinkling, dimples and other unattractive flaws

Note: AFG is recommended for room-temperature or refrigerated foods—it is not required for frozen foods.

Robust ShrinkBox® and HPG Confidential Films

Clysar offers two versatile heavy-duty shrink films to replace corrugate boxes and shipping materials. Choose ShrinkBox® Clear films to protect and package product while offering a sparkling clear product view; or opaque HPG Confidential films to mask and ship contents requiring privacy and added security.



Clear or Opaque Solutions to Replace Corrugate and Paper

IDEAL FOR

ShrinkBox® Clear Films

- DIY products
- Furniture and rugs
- Commercial building products
- Odd or irregularly shaped products

HPG Confidential Masking Film

- E-commerce
- Official printed forms and documents
- Magazines, catalogs, books and brochures
- High-value products and components

FEATURES AT A GLANCE

- Extremely tough, with superior puncture, abrasion and impact resistance
- Conforms to irregular shapes, pointed angles and difficult profiles
- High shrink force for strong, tight bundling
- May be imprinted with graphics and on-package labeling
- Accommodates many different sizes, reducing packaging SKUs

SOLVES THESE ISSUES

- Dramatically lowers cost-per-package compared to multi-part corrugate
- Stacks and ships more in the same space, costs less to ship per pound
- Reduces pilfering, tampering and product returns
- Saves costs of corrugate inventory and disposal
- Addresses privacy concerns for sensitive printed materials

OPTIONS

- ShrinkBox® Clear 1525 for advanced product protection with enhanced gloss and clarity
- ShrinkBox® Clear 2035, an extra-tough option for the highest level of strength and protection
- HPG Confidential Privacy Film with 90% opacity in attractive, light gray color

High-Speed EZ-R & EZ Gold Films

EZ films set the standard in fast, easy-to-run “stiff” films for static lap or high-speed wire seal applications, and speeds of more than 100 packages per minute. Exceptionally clear and sparkling, these polyolefin-based films eliminate the headaches common to high-speed films, offering true “balanced” shrink that creates a taut, all-around wrap with no dog-ears or crow’s feet. A great choice for premium appearance combined with rugged performance throughout distribution.



The Gold Standard for High-Speed Production and Static Seals

IDEAL FOR

- Frozen foods like pies, cakes and pizza
- Fresh bakery
- Digital storage like DVDs, CDs and software
- Premium computer papers
- Window/shadow boxes

FEATURES AT A GLANCE

- The best clarity and gloss of any high-speed films
- Specially engineered cold stretch for clean, tight shrink in all directions
- Exceptionally stiff and flat for excellent machinability at high speeds
- Reliable, pinhole-free seals for both static lap and traditional heat seals
- Seals and shrinks at lower temperatures
- The best choice for printed film, holds ink extremely well with added corona treatment

SOLVES THESE ISSUES

- Crow’s feet, dog-ears, fish-eyes and other package flaws
- Weak static lap seals at high speeds
- Burn-through: seals at a lower temperature than other multi-layer films
- Rejects caused by wrapping irregular shapes at high speeds
- Brittleness or tearing for frozen products

Low Shrink Force LE Gold Films

This gentle, lightweight, polyolefin film delivers the lowest shrink force in the industry today! It provides a soft, balanced shrink at low temperatures, and delivers exceptionally clear, beautifully wrapped packages. Yet it won't deform, bend or collapse thin, flimsy or delicate products. Also a great choice for PVC replacement.



The Best Lightweight, Low Shrink Film in the Business

IDEAL FOR

- School, office papers
- Magazines, booklets, bundled print materials
- Calendars
- Flexible craft and hobby items
- Stationery and greeting cards
- Filters and other disposable paper products
- Soft vinyl and plastic products
- Candy and confections

FEATURES AT A GLANCE

- Minimum shrink force protects even the most thin or delicate products without curling or distortion
- Very high shrink performance at low temperatures
- Excellent cleanup, with no dog-ears
- Superior clarity and gloss for sparkling product appeal
- Easy to use on all shrinkwrap equipment
- Eliminates major fine-tuning of equipment for difficult-to-wrap applications

SOLVES THESE ISSUES

- Curled, bent or inconsistently sized packages
- Deformed or crushed products
- Damage to heat-sensitive products
- High-heat problems such as pinholing or distortion
- Dog-ears and other appearance problems

Thin LTC Films

Looking for downgauging opportunities? The ultra-thin Clysar® LTC “Lowest Total Cost” film family replaces shrink films up to twice as thick and fits more feet on every roll. Delivering more than gauge alone, LTC films reduce total packaging expenditures through lower transport and distribution costs, superior sales appeal, greater productivity and less waste.



True Sustainability and Lowest Total Cost Throughout the Package Life Cycle

IDEAL FOR

- Box and window box overwraps
- Multi-packs and bundled items (uniform shapes)
- Games and toys
- DVDs/CDs
- Fresh bakery
- Frozen pizzas
- Filters, papers and other flexible thin products

FEATURES AT A GLANCE*

- Runs 15% faster, with a wider operating window
- Performs flawlessly on existing equipment
- More available shrink, better balanced shrink
- Superior film strength, impact resistance and tear strength
- The best clarity and shine, with superior haze and gloss

SOLVES THESE ISSUES

- Cost-reduction/sustainability demands
- Rewraps, rejects, seal failure and film waste
- Tears and damage at retail
- Poor package appearance (dog-ears, loose film, wrinkles)
- Cloudy or hazy film

OPTIONS

- LTC All-Purpose Film for excellent toughness and tear strength
- LTCH High-Speed Film for superior static seals at over 80 packages per minute
- LTCL Low Shrink Force Film for delicate products requiring a gentle shrink

**Compared to competitive thin films*

“Wrap Anything” ABL Films

If you have a hard-to-wrap product, this is the film for you! ABL is tough, versatile and able to wrap anything, no matter what the shape or height. Designed for L-bar sealers and low processing temperatures, ABL delivers high all-around shrink and strong seals. You'll get crisply wrapped packages that shine on shelf but resist punctures, dimpling and tears, even in unsupported areas.



The Tough, High-Shrink Film That's “ABLE” to Tackle Anything

IDEAL FOR

- Odd-shaped products like automotive parts, toys, tools, dog bones
- Rolled products like gift wrap, weed barrier, fabric rolls
- Craft items
- Coiled or wound products like duct tape, hoses, wire or cable
- High-profile products or trays over 4" in package height
- Bundling for non-uniform products
- A sustainable replacement for PVC shrink film

FEATURES AT A GLANCE

- High shrink conforms to irregular shapes
- Exceptionally tear- and puncture-resistant
- Shrinks beautifully at a wide range of temperatures
- Perfect for older equipment, including tunnels with limited air flow
- Excellent memory/recovery keeps packages looking great

SOLVES THESE ISSUES

- Burn-through, especially in odd-shaped products and voids
- Pinholes and weak seals
- Dog-ears, crow's feet, ugly excess film
- Damaged, torn or shopworn packaging

Clysar® Bakery Film



Clysar® polyolefin bakery film is designed with micro-perforations for precise air and heat evacuation to protect and preserve fresh bulk bakery. Ideal for replacing heavy-gauge polyethylene film.

Precise Air and Heat Evacuation for Fresh, Bulk-Retail Baked Goods

IDEAL FOR

- Fresh, bulk-trayed baked goods such as donuts, cupcakes and cookies



FEATURES AT A GLANCE

- Evacuates air and heat to increase shelf life
- Reduces moisture issues caused by cooling
- Excellent clarity
- Runs at higher speeds
- Uses up to 40% less material than polyethylene*

**Based on 45-gauge film*

Clysar® Produce Film



Durable, heat-shrinkable new Clysar® HPG-PP produce film incorporates a precise pattern of micro-perforations to keep respiring fruits and vegetables fresh and protected.

Perforated to Preserve and Protect Respiring Fruits and Vegetables

IDEAL FOR

- Fresh whole, pre-sliced or prepared produce
- Multi-packs, trayed, unitized or bundled produce

FEATURES AT A GLANCE

- Allows respiring fruits and vegetables to breathe
- Controls moisture loss, extending shelf life*
- Shrinks tightly around unique produce shapes
- Can be printed with colorful brand graphics
- Addresses consumer concerns over cleanliness

**Also available in Anti-Fog.*

Printed Shrink Film

With printed Clysar® shrink film, you'll get a vibrant 360° billboard to differentiate your product and dazzle consumers. You'll significantly improve sustainability. Plus, you'll save a bundle: in current commercial applications, brand owners are reducing system costs as much as 40%-60%!



The Colorful, Sustainable Billboard with Up to 60% Savings

IDEAL FOR

- Multi-packs in polyethylene film, paperboard trays, sleeves or corrugate boxes
- Stand-alone products in shrinkwrap with labels or other components
- 3-5 lb. "grab and go" packages in other packaging formats

FEATURES AT A GLANCE

- Available in up to 8 colors
- Offers significant gains in sustainability
- Can be printed with full coverage or leave clear windows
- Easy to use on existing equipment, with minor modifications

SOLVES THESE ISSUES

- Misaligned product facings in multi-packs
- Mis-scanned UPC codes
- Labor-intensive bundling operations
- Extra material and inventory expenses
- Gummed-up equipment from sticky labels

Converting from paperboard trays or sleeves to 100% colorful printed shrink film saves in productivity, packaging material and cost, while delivering all-around brand appeal.

Value-Added Options

Clysar offers a number of special options and treatments that maximize the performance of our shrink films. Many are available at no added cost. Ask your Clysar shrink specialist for details.



No- or Low-Cost Solutions for Improved Shrink Packaging Performance

DOUBLE ROLLS

Double-length rolls of shrink film save changeover time and add production efficiencies. They allow you to run your shrink line longer, and get twice the number of packages to a roll. *(Quad rolls are also available.)*

EFFICIENCY PACKS

Designed for high-volume operations, corrugate-free efficiency packs deliver rolls on a pallet, held in place with plastic cores and spacers. Set efficiency packs in production areas, allowing operators to take rolls directly from the pallet to the machine. *(The packs also save big on corrugate disposal!)*

HOT SLIP TREATMENT

Want faster pack-out? Silicone hot slip lubricant can be added to your shrink film's OUTER surface, making it fast and easy to slide packages into master cartons when warm. Hot slip can also be applied to the film's INSIDE surface to add tack and improve package appearance for irregular or slippery products.

PRINT TREATMENT

Printing your shrink film? Ask for "corona" treated film. This process roughs up the surface of the film so it holds ink and creates crisp, colorful graphics.

PRE-PERFORATED FILM

Most Clysar® film can be ordered pre-perforated—an option that significantly improves air evacuation and overall package appearance. Patterns and perforation locations are based on your applications. Options include:

- Special patterns for produce or other organic materials that "outgas"
- Micro-perfed film for commercial bakery

Clysar® film is available flat or folded to optimize performance on your line.



Clysar® shrink films are manufactured in a dedicated manufacturing and technical campus in Clinton, Iowa, where American ingenuity, hard work and pride make the difference in the world-class films we produce. Achieve your vision, backed by the 300-plus Americans who work for you each day at Clysar.

Your Preferred Clysar Shrink Packaging Specialist:

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