

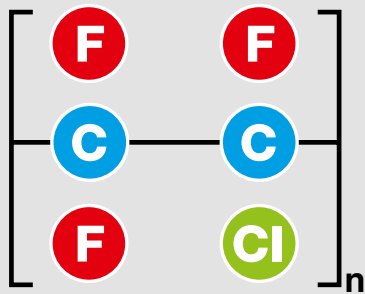


The Aclar[®] Advantage

Aclar[®] - The Clear Choice for Pharmaceutical Packaging

Aclar pharmaceutical packaging film continues to set the global standard for high-barrier thermoform film in the pharmaceutical industry.

Aclar is a clear, poly-chloro-trifluoro-ethylene (PCTFE) film that can help you meet the increasing barrier and shelf-life requirements that your latest hydroscopic formulations demand. Aclar film aids in meeting aggressive product launch schedules, and can help realize substantial operational and sales advantages.



Poly-Chloro-Tri-Fluoro-Ethylene

In combination with Honeywell's world-wide converter partner network, Aclar film can be laminated to a multitude of substrates, including polyvinyl chloride (PVC), polyethylene terephthalate (PET), polypropylene (PP), cyclic olefin copolymer (COC) and ethylene vinyl alcohol (EVOH) to add an oxygen and light barrier or create a more sustainable packaging solution for your application. Aclar film is available in many thickness grades, giving you the flexibility to optimize your moisture protection properties and manage your drug over its lifecycle.

Aclar is the benchmark in secure and dependable protection for your pharmaceutical products.

Aclar Film Properties

- The best moisture barrier of any clear thermoplastic film
- Bio-chemically inert
- Chemical-resistant
- Non-flammable
- Plasticizer and stabilizer free
- Processes within the same range as other thermoforming films



Packaging Decisions are Critical to Success

Your packaging platform choice can have far-reaching strategic implications for your business and can have a profound impact on both top-line sales and bottom-line profitability.

Package solutions vary by region, and regardless of whether or not your incumbent solution is a straight alu/alu blister, a pillow pack or a blister card with a foil over-wrap, you can realize cost savings and/or operational efficiencies by using Aclar® film as your packaging solution. Many companies have found that switching from their existing packaging to Aclar has brought significant advantages in the size of their pack and the efficiency of their packaging for both individual products and entire portfolios.

With Aclar film, you benefit from an efficient and flexible thermoforming platform that offers the opportunity for:

- Significant cost savings
- Operational efficiencies
- Shelf-life optimization and supply chain benefits
- Standardization throughout climate zones
- Flexibility in package design
- Smaller pack sizes, package portability and patient-preferred packaging
- Brand enhancement and increased sales potential

Choose Aclar to Meet Your Operating Cost Reduction Targets

Pack size may be reduced by up to 55% with Aclar. The exact savings will depend on your product size and shape. In the example below, a size O capsule in a new Aclar pack was 55% smaller than the same product packed in alu/alu. Honeywell can help you calculate the exact pack size reduction from switching to Aclar.

Other benefits of smaller thermoformed packs include reduction in material and energy use and productivity gains.

55%
pack size reduction*



* Your pack size could be up to 55% smaller when compared to the same product packed in alu/alu.

Reduce Expenses and Capital

Creating a smaller pack size with Aclar can directly reduce raw material (film or foil) usage, scrap production, warehousing expense and transportation costs. Choosing Aclar, a thermoformable film, also has the potential to lower your capital expenditures and expenses by:

- Purchasing fewer forming machines and tools
- Investing in lower-cost thermoforming tooling
- Decreased maintenance on machines and tooling



55%
warehousing reduction*



55%
transportation reduction*



55%
shelf space reduction*



Increase Operational Efficiencies

Thermoforming with Aclar® may:

- Increase packaging line speed
- Increase packaging line efficiency
- Increase operational flexibility

Ask your local Honeywell representative about what a customized cost analysis can mean for you and your operation.

Choose Aclar to Meet Your New Drug Launch Targets

Passing regulatory stabilities securely, on time and within budget is critical to product success. That is why

both innovator and generic pharmaceutical companies increasingly add Aclar film to their stability protocols. With its proven track record of more than 40 years as the established moisture-barrier packaging choice, Aclar film has moisture-sensitive barrier properties

to protect your newest, most moisture-sensitive pharmaceuticals and new drug delivery systems. Ask your local Honeywell representative about our stability testing capabilities.

Choose Aclar to Optimize Shelf-life and Standardize Across Climatic Zones

With the variety of Aclar thickness grades available and its multiple laminate solutions to add oxygen or light barrier, you can control the level of barrier you need to optimize your drug product's shelf-life and manage it over its lifecycle. Aclar enables you to standardize packaging and, ultimately, your packaging operations across all climatic zones, including the newest, most demanding — Zone 4b.





Choose Aclar® to Gain Flexibility and Brand Enhancement

Selecting a flexible packaging film is now more important than ever.

Package differentiation has increasingly become a key tool for growing market share and value in most of the world's pharmaceutical markets. Aclar's flexibility can help you design packages that:

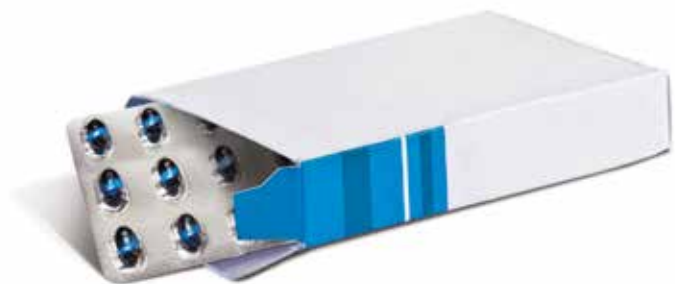
- Are easier for patients to use
- Enhance patient compliance and adherence
- Are more environmentally friendly
- Are easier and lower cost to produce

Aclar's clarity displays your brand's distinct shape and color, helping to guard patients against medication errors. That clarity also aids in reducing production errors by allowing online visual inspection to ensure all blister cavities are filled.

Aclar Film – A Proven Track Record

For more than 40 years, Honeywell and Aclar have been the trusted choice for pharmaceutical packaging. Over the years, the Healthcare Compliance Packaging Council has recognized various pharmaceutical packages containing Aclar film with its annual Compliance Package of the Year award. Aclar film has been part of award-winning packaging in a variety of areas including:

- Treatment of malaria
- Smoking cessation
- Medication for depression and anxiety disorders
- Treatment of type 2 diabetes



Choose World-Class Support from Honeywell

Technical Support from Concept to Launch

Honeywell offers a range of services to support you and your packaging throughout the Drug Development Process. As a packaging partner, we will support you in all phases of your packaging development – from design through production and testing, and ultimately, to launch. We support our customers globally from our labs in Morristown, N.J., in the United States, and Shanghai, China, where a variety of thermoforming and customized barrier studies can be performed by our technical support team. We can also provide you with on-site technical assistance to help you reduce downtime and increase operational efficiency.

Capabilities of Our Global Technical Team:

- Thermoform cavity design and optimization
- Package layout design and optimization
- Comparing thermoform and alu/alu blister footprints
- Developing prototype structures
- Performing material screenings underICH conditions
- Choosing the right barrier material

Choose Aclar® to Optimize Production

Our global sales, marketing and technical team's vast experience can also assist you in saving money. By utilizing our portfolio of proprietary

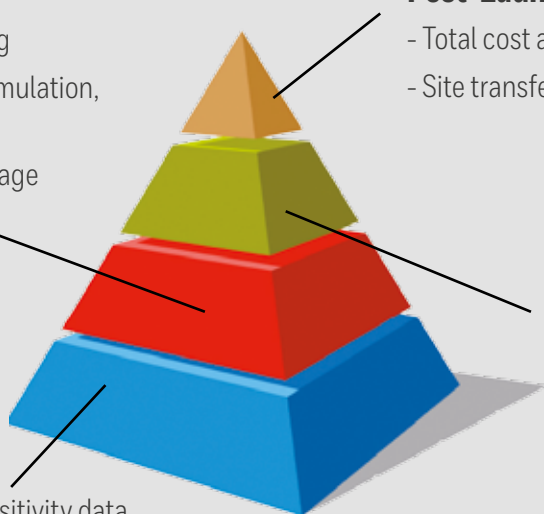
Honeywell Supports the Drug Development Process

Phase III

- Establish value for thermoforming
- Cavity and tooling design, FEA simulation, optimize material selection
- Stability test best practices, package weight gain analysis

Phase IIb

- Characterization, evaluation of sensitivity data
- Initial material selection, barrier analysis



Post-Launch

- Total cost analysis, switch-out support
- Site transfer support and troubleshooting

Phase IV

- Final package design, machine qualification, package weight gain analysis
- On-site training, stability support

costing tools, we can evaluate both single drug applications and complete drug portfolios to calculate the potential cost savings you will achieve with a change in packaging platform. With our portfolio analysis tool, we can conduct an in-depth study of your packaging operations across multiple sites and packaging lines to help in your analysis of plant rationalization and consolidation.

See for yourself by using the Aclar value calculator at:

<https://tools.roi-selling.com/honeywell/aclar/thermoformingvaluecalculator/Home/Home>

Committed to the Pharmaceutical Industry

The Honeywell team has more than 40 years of experience in supporting the pharmaceutical industry with Aclar® film.

Our sales, marketing and technical teams have led and contributed to many highly successful packaging projects with leading global innovator and generic companies to help them succeed in today's competitive pharma market.

Your Local Film Supplier

Our on-the-ground resources in China, Japan, India, North America, Latin America, Europe and the Middle East work in conjunction with a global network of authorized Aclar film converter partners and are available to provide you with superior service and support in your packaging needs.

Take advantage of our considerable experience. At Honeywell, our focus is to make your packaging work for you, your brand and your business.



**For additional information
or to contact us, please
visit: www.aclar.com**

All statements and information provided herein are believed to be accurate and reliable, but are presented without guarantee, warranty or responsibility of any kind, express or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement, and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated herein, or that other measures may not be required. User assumes all liability for use of the information and results obtained.



Aclar® is a registered trademark of Honeywell International

P&C 1907 A4 | October 2017
©2017 Honeywell International Inc. All rights reserved

Honeywell