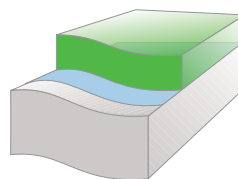


Pentapharm® ACLAR® barrier films

Pentapharm® ACLAR®-laminated rigid films offer unsurpassed protection against moisture in formulations designed to improve performance and reduce costs. At kp, we exist to help you succeed. With our innovative Pentapharm® ACLAR® line of films, you get outstanding quality with significant productivity gains.

Pentapharm® ACLAR® 02

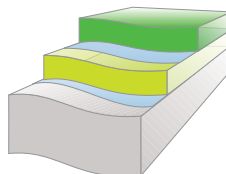
Structure: Two-layer PVC/ACLAR® structure
 Barrier Rating: Mid to ultra high degree of barrier to moisture, gas, and aroma



Two-layer ACLAR®

Pentapharm® ACLAR® 03

Structure: Three-layer PVC/PE/ACLAR® structure
 Barrier Rating: Mid to ultra high degree of barrier to moisture, gas, and aroma

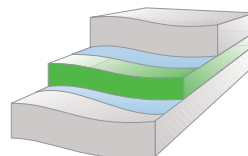


Three-layer ACLAR®

Pentapharm® ACLAR® S03

Structure: Symmetrical PVC/ACLAR®/PVC
 Moisture Barrier: Ultra high
 Oxygen Barrier: Mid
 Thermoformability: High
 Sealability: Mid (both sides)
 Special Features:

- Symmetrical structure increases productivity; designed to operate in the same forming range as PVC mono film
- Better material flow during thermoforming
- Improved barrier (up to 20%) in formed blister
- Symmetrical film improves lay-flatness & eliminates the need for wind orientation; avoids costly operations errors
- Both sides are sealable via heat-seal or ultrasonic sealing
- Product contact layer is PVC
- Sealable to all standard PVC compatible lid stocks
- Processable on standard PVC tooling; no need for ceramic or other coatings
- Eliminates production issues
- High-speed productivity gains with barrier range of low to ultra high



Polymers:

Multi-layer structures
 Customized structures available upon request

Applications:

Ethicals, OTC, generics, physician samples, veterinary, nutraceuticals

General Properties:

Moisture Barrier: Mid to ultra high
 Oxygen Barrier: Mid to ultra high
 Thermoformability: Mid to high
 Sealability: Mid (PVC side only)
 Sterilization: EtO

Performance Features:

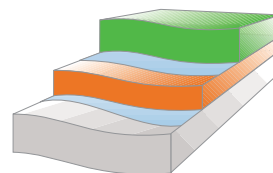
- High transparency, clear film
- Exceptional moisture barrier
- Non-aging
- Provides cost savings opportunities
- Two-layer ACLAR® films eliminate the PE layer reducing gauge, improving machinability & producing higher yields while lowering costs
- Possible 40% reduction in surface area of the blister allowing up to 30% higher machine output
- Low cost for tooling & production equipment
- Available in clear, transparent colors & opaque colors
- Runs on standard equipment & tooling
- Optimized secondary packaging for minimized blister card size

PVC
 Adhesive
 PE
 ACLAR®

Pentapharm® ACLAR® barrier films

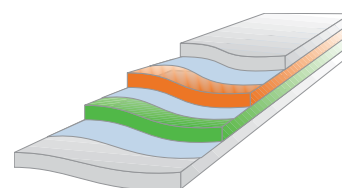
Pentapharm® ACLAR® G03

- Structure: PVC/PE-EVOH-PE/ACLAR® structure
- Moisture Barrier: Ultra high
- Oxygen Barrier: Ultra high
- Thermoformability: Mid
- Sealability: Mid
- Special Features:
- Transparent clear film with high contact clarity
 - Exceptional moisture and oxygen barrier



Pentapharm® ACLAR® G04

- Structure: PVC/ACLAR®/PE-EVOH-PE/PVC structure
- Moisture Barrier: Ultra high
- Oxygen Barrier: Ultra high
- Thermoformability: Mid
- Sealability: Mid
- Special Features:
- Transparent clear film with high contact clarity
 - Exceptional moisture and oxygen barrier
 - Designed for application where cross-diffusional moisture intake needs to be minimized (i.e., small flange blisters requiring ultra-high barrier)



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