

Avery Dennison
Label and Packaging Materials
Technical Guide

ASEAN
July 2024

Film materials



Pioneers in film

Our founder Stan Avery invented the pressure sensitive label back in 1935, and to this day we continue to innovate and inspire as the industry's leading experts in filmic facestocks, adhesive technologies, and sustainable innovation.

No other films perform like Avery Dennison films. Across a broad range of applications, including food, drink, home, and personal care, our filmic labels set the standard for performance, conversion efficiency, sustainability, and aesthetics.



Why choose filmic label?

Filmic labels offer unbeatable durability, aesthetics, and functionality for a wide range of applications and conditions.

Here are some of the many benefits offered by film labels:

Clear no-label look

Filmic labels offer excellent shelf appeal with clear rigid films.

Sustainable & meets recycling guidelines

Film labels are increasingly compatible with many plastic recycling guidelines. They're also available with recycled content.

Flexible and conformable

Film labels adhere seamlessly to shaped and contoured containers and even on squeezable bottles.

Water and moisture resistant









Film labels are ideal for home/personal care, food, and beverage applications where moisture resistance is needed.

Choosing the right film

Selecting the right film for your label depends on a mix of factors, including your application, package design, functionality needs, and more. Here's how to choose the right material in five easy steps.





1. Know your application

What is the item you're labeling? What kind of substrate (surface) will you apply the label to? And what are the conditions under which the label must perform? Our film label materials are widely used in applications in the following industries, among many others:

 Food	 Reclosures
 Beer and beverage	 Pharmaceutical
 Beauty	 Automotive
 Home care	 Electronics and Industrial

2. Decide label characteristics

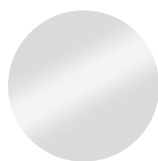
Flexibility is an important consideration when selecting a film label, as it needs to conform well to the container type. Fortunately, film labels are versatile enough to suit a wide range of containers.

Application	Squeezable	Semi Squeezable	Rigid	Durable
				
Recommended film material	Polyethylene (PE) Excellent conformability with slight haziness compared to rigid films.	Polyolefin (PO) A balance of conformability and rigidity while maintaining excellent print registry and clarity.	Polypropylene (PP) Tear-resistant, non-conformable film, suitable for flat surfaces with excellent print registry and clarity.	Polyesters (PET) Suitable for applications where resistance to abrasions, chemicals and high temperatures is needed. Highly rigid and ultra clear.
←		→		
Increased conformability and squeezability		Increased rigidity, durability, clarity and print registration		



3. Choose your color and finish

Your label is key to shelf appeal and for conveying brand look and feel. Its color and finish greatly influence the effect of the end product.



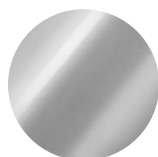
Gloss Clear



Gloss White



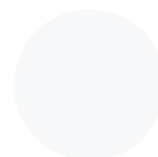
Pearlized White



Silver



Matte Clear



Matte White

4. Decide on film surface treatment

To improve film printability, our film label materials are surface treated. Depending on the need, our film label materials are corona treated or layered with a print receptive topcoat:

Corona treatment

- Surface is treated with high voltage to alter surface characteristics and increase ink anchorage.
- The lifetime of a corona treatment depends on the treated material and the storage conditions.
- The effects of a corona treatment tend to degrade over time, hence treatment is encouraged to be done shortly before the printing, coating, or bonding process begins.

Print receptive topcoat

- A chemical coating applied to the surface to improve ink anchorage.
- Does not degrade over time.

5. Pick your film label material

You now have the information you need to select the right material. You can view our available materials in our [Product Component Guide](#) while you can also view our service offerings in your country through our [Product Services Guide](#). If you have questions, reach out to your dedicated Avery Dennison sales representative.

Types of film

There are various categories of paper, each with different aesthetic and performance characteristics. Here's a quick introduction to the main types.

Increased rigidity, durability and print registration



Polyethylene (PE)

Polyethylene offers excellent conformability that can withstand multiple squeezing without creasing, ideal for tubes, curvy and thin wall containers.



Polyolefin (PO)

Polyolefin is a semi-conformable film, ideal for labelling on bottles with gentle contours to prevent label lifting.



Polypropylene (PP)

Polypropylene is a non-conformable film for rigid containers, providing excellent print registration and resistance to tear.



Polyester (PET)

Polyester is a non-conformable film suitable for applications where maximum durability is required, offering high resistance to tear, temperature and chemical.

Film materials for common applications

Our filmic labels are widely used in various applications. Common applications include:



Food and Beverages

We offer several solutions for food and beverages. These include thin PP40 labels which use less materials therefore reduce packaging waste while offering increased clarity and better container blend. rPP, made with 30% recycled content, is available at the same price as its legacy product — a first in the ASEAN industry.

[Learn more about our Food & Beverage portfolio](#)



Home and Personal Care

Home and personal care packaging needs to endure moisture, fit various container shapes, and stand out on the shelf. Our film portfolio meets these demands while offering varying levels of squeezability for different uses: PE labels that fully conform to squeezable tube applications, rigid PP labels that offer excellent print clarity and registration, and our exclusive PO material AD Flex+, striking a balance between print quality and squeezability for semi-squeeze applications.

[Learn more about our Home & Personal Care portfolio](#)

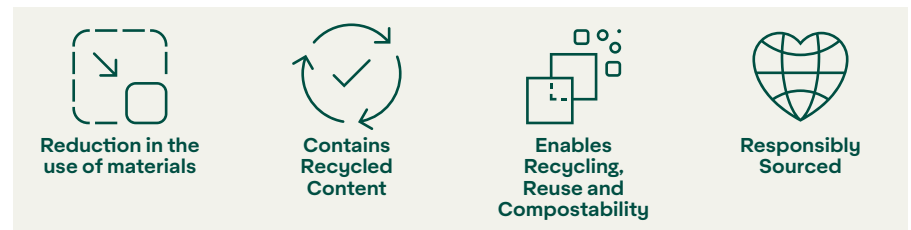
For ultimate shelf impact, our holographic solutions are the perfect solution. The dynamic, shifting patterns are a winning choice for premium product differentiation, special offers and promotional campaigns.

[Learn more about our Holographics portfolio](#)

Films that advance circularity

The packaging industry is increasingly focused on sustainability and regulations are moving us toward a more circular economy. At Avery Dennison, we're constantly in search of sustainable alternatives to conventional approaches. We're not just talking about what the future looks like; we're helping to shape it.

Our Sustainable ADvantage range makes it easy for brand owners to reduce the environmental impact of packaging without sacrificing performance. For each film in the range, one or more of the following applies:



Film that uses less materials

We offer a variety of film label components that use less material. For example, our new PE75 and PP40 films offer the same performance as conventional products in a thinner package. This means they require less materials, resources, waste, transport, and storage space, resulting in reduced environmental impact as well as increased operational efficiency and productivity.

Our unique solution AD Flex+ is an innovative semi-conformable option, just 55 microns thick. It's thinner, lighter than PE85 with a smaller carbon footprint, yet excels across different applications. Available in clear or white, it pairs well with rPET23 or glassine liners.

Film that enables recycling, reuse or composting

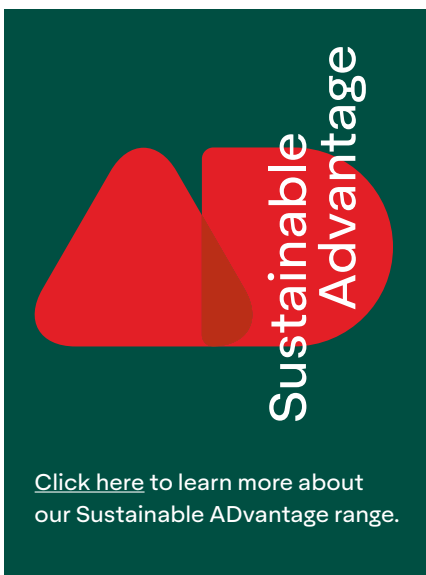
AD CleanFlake™ enables PET and HDPE packaging recycling, aiding brands in sustainability goals, meeting regulations, and increasing recycled plastic availability without sacrificing functionality or shelf-appeal. The adhesive deactivates during PET recycling to cleanly separate label and adhesive, keeping plastic uncontaminated. In coloured HDPE recycling, the label remains attached without affecting the plastic pellets. It pairs with various film labels, including PP and semi-conformable films. AD CleanFlake™ is certified by the Association of Plastic Recyclers.

Film with recycled contents

Our recycled polyethylene (rPE) and recycled polypropylene (rPP) solutions reduce reliance on fossil-fuel based films and lay the foundation for a closed-loop economy by preventing plastics from going to waste.

rPE is the industry's first PE facestock with recycled content, made with 30% recycled PE resin. It has a slightly less uniform appearance that signifies authenticity. rPE face stocks come in white and are compatible with both conventional and digital printing techniques.

rPP, on the other hand, contains over 30% recycled PP resin from pre-consumer recycling, aiding in waste reduction within the packaging industry. It exhibits good printing quality and has a visual appearance akin to a standard cavitated film.



Beyond facestocks: Topcoat, adhesive and liners

Choosing a facestock is just the beginning of label design. The right topcoat, adhesive and liner adds invaluable functionality and performance.

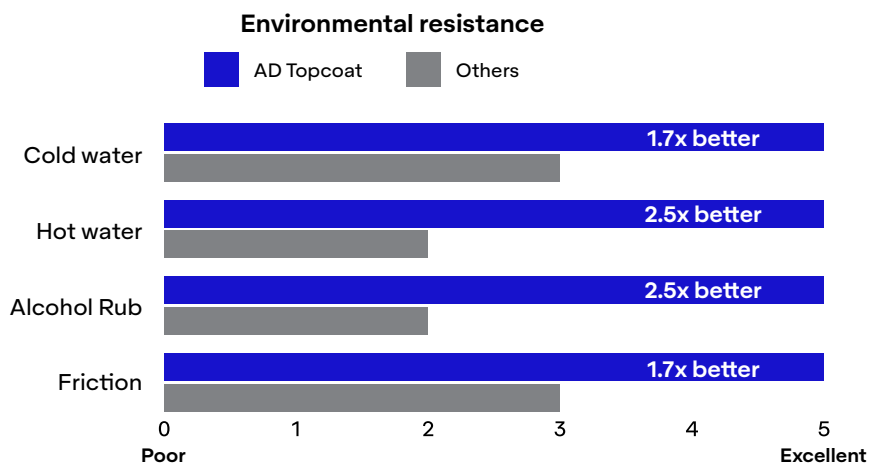
Industry benchmark: The Avery Dennison in-house topcoat

Topcoat technology plays a vital role in the appearance and durability of product labels, while the composition and thickness of topcoats play a major role in determining printing speeds. The Avery Dennison research team has successfully formulated the next generation topcoat, a competitive and productive solution that delivers superior results every time.



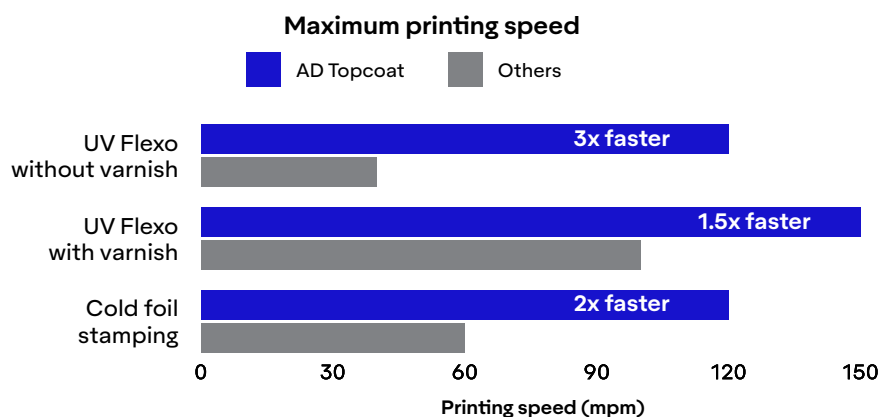
Stronger ink bonding

The unique chemical bonding between our in-house topcoat and the ink layer enables better print protection against scratches and transit damages, retaining ink integrity from source to shelf. It is also proven to be exceptionally resistant against water and alcohol, eliminating the need for overlamination at time.



Fast and efficient operations

Our in-house topcoat enables up to three times faster print speeds compared to others in the market, accomplished by strongest ink anchorage thus increasing the productivity.



Print versatility

Our in-house topcoat provides a surface compatible with inks from a wide variety of brands, enabling you to save costs and improve performance through simpler supplier management. In addition, the product has been extensively market-tested, proven ideal for most conventional printing techniques including UV Flexo, UV Inkjet, UV Offset as well as Thermal Transfer.

Innovators in adhesives

We're the only company in the pressure-sensitive label industry that engineers and produces its own adhesives, and we've done it for almost 90 years. With 400 adhesive scientists working in seven R&D centers worldwide, we solve customer challenges in real time and offer high performing, innovative, customized adhesive solutions to every corner of the globe.

Adhesives for film labels range from extra-permanent to ultra-removable and from general purpose to custom-engineered and application-specific.



Versatile adhesive you can trust — S692N

S692N offers exceptional clarity, ideal for achieving a 'no label look' on containers when used with clear films. This emulsion adhesive is compatible with a wide array of substrates and is fully compliant with the APR Critical Guidance Protocol for HDPE recycling, making it the perfect choice for recycling clear and white films on HDPE plastics while maintaining the quality of the recycled material.

Perfect for PET and glass — S7210

S7210 is a top choice for brands needing a high-quality adhesive with short-term repositioning. Engineered for strong adhesion on glass and PET substrates, it creates a 'no label look' with clear film material. The clear adhesive allows for clean converting and minimal ooze, ensuring reliability.

Enable true PET bottle to bottle recycling — SR3013N

AD CleanFlake™ provides brands a sustainable option for PET and HDPE packaging. Accredited by the APR, it meets critical recycling guidelines for PET and HDPE. For PET substrates, it is also repositionable for up to 8 hours, allowing for the rework of mislabelled containers.

High performance rubber hotmelt — S3010N

Rubber hotmelt adhesives offer broad temperature tolerance, strong initial tack, and lasting adhesion on diverse surfaces. Containing 30% renewable content and is FDA approved for indirect food contact, S3010N is designed to mimic converting conditions of an emulsion adhesive and enables clean converting in the tropical ASEAN climate. S3010N when paired with PP and PO films is fully compliant with APR Guidelines for HDPE recycling.

Clean and effective removable — R480

Removable adhesives are designed for either short-term repositionability or long-term removability. Promoting use, reuse, or recycling of the package, removables are commonly used for retail point-of-sale, promotions, logistics sorting, and shelf tags.

Liners that work for you

We regularly create new kinds of liners to help converters and end users label more efficiently, cost-effectively, and sustainably. Innovations include our PET liner with paper face, liners made with recycled content, and custom designs that optimize performance for customers' specific needs. An increasing number of products have moved to liners with recycled content. For example, our rPET23 liner contains 30% recycled content, while our rCCK liner is made with recycled kraft. Like all of our liners, they are both entirely recyclable.



Recycle liners and matrix with AD Circular

Our AD Circular program makes liner and matrix recycling easier. Simply register for the program and get ready for a recycler to begin the waste collection. We provide regularly updated analytics on the amount of liner material you've recycled, the amount of CO2 emissions avoided as a result, and more. AD Circular processes liners regardless of who made them or where they were purchased.

[Learn more about AD Circular](#)

Services to suit you

We've pioneered several flexible ordering programs that let you order material in the way that best fits your business, so you can maximize efficiency, productivity, and profitability.

EXACT™

Our EXACT program features more than 100 specifications for precise roll widths and lengths that match your slit patterns, enabling you to eliminate end-wasted roll remainders and offcuts.

Ready Width™

Low-volume products at standard widths and lengths currently not included in the EXACT program are available through our Ready Width program.

Mix & Match™

Choose from a set range of unconventional label constructions created to address your unique application and performance needs.

Engineered Solutions

Challenging problems require premium solutions, and our tailored solutions allow you to differentiate your products with custom-made labels that defy the norm.



Who we are

As the pioneer in the pressure-sensitive industry, we bring one-of-a-kind capabilities to sustainable labeling. We combine decades of innovation with deep knowledge of both regulatory and legal requirements. We know about the real-world conditions in which our labels must perform and the technical challenges they have to meet. Whatever your product, wherever it's going, we can help you develop a sustainable label that performs.

What we stand for

Sustainability. Innovation. Quality. Service.

In 1935, we invented the first self-adhesive label, and we've never looked back. With each passing decade, our innovations have further shaped our industry by lifting the limits on what labels can do. The world's most successful brands know that innovation and evolution are the lifeblood of longevity and success. We're proud to help our clients continually expand the boundaries of what's possible.

Work with us

You're the expert in your business; we're the expert in labeling. Contact your local Avery Dennison representative today or visit label.averydennison.com to find out how we can meet and exceed your needs.

For more information on technical performance and printing recommendations, please refer to the respective datasheets. Please note that the Avery Dennison product range and service offering can be subject to changes. For an accurate overview, please check our website label.averydennison.eu or contact your local Avery Dennison sales representative.

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