


Pharmaceutical Labeling Solutions

Labels + Packaging
Brochure
Europe
2023



Tested, proven, compliant
label materials for the
pharmaceutical industry





Contents

- 2 Industry trends
- 4 Pharmaceutical labeling solutions
- 8 Solutions beyond the label
- 10 Proven safety, reliability, and performance
- 12 AD Procerta materials testing services
- 14 Solutions for today and tomorrow

“

As a global leader in pharmaceutical labeling, we're looking towards the future to ensure that industry manufacturers have the solutions you need, today and tomorrow. We develop solutions with the latest industry trends in mind, and offer the support of our team of labeling experts, to help you achieve your patient safety, productivity, and sustainability goals.

”

Ewa Weglinska
Product Manager Pharmaceutical Solutions, Avery Dennison

Industry trends

We work closely with pharmaceutical manufacturers and stay on top of the main trends driving the industry. This enables us to understand your needs, find ways to add value to your business, and help you maintain your competitive edge.

Sustainability

While sustainability has long been a buzz word among businesses, it has taken on new levels of urgency. Reducing the impact of business operations on the environment has become a must for companies in all segments. Within this, an increasing number of pharmaceutical companies are moving towards more sustainable practices in medicine development, manufacturing, distribution, and drug delivery, including packaging.

Furthermore, the European Parliament Committee on the Environment, Public Health and Food Safety has explicitly stated their aim to “(..) address the problem of pharmaceutical household waste, through measures to reduce packaging and the size of containers to ensure that they are no larger than necessary.”

When it comes to pharmaceutical packaging, patient safety will always be top priority. As a result, transitioning to recycled, recyclable, or biodegradable packaging is not always possible. Nevertheless, there are ways to implement solutions that limit the amount of material used in packaging and utilize recycled content which is safe for patients.

Cold chain solutions

A rise in infectious diseases, the continuous development of various lifestyle diseases, and increasing adoption of biologic medicines are leading to an increased need for low temperature-controlled supply chains for medicines. To manage the rise in patient demand on pharmaceutical products, pharma companies are turning to packaging solutions that enable the cold chain. The market for temperature sensitive medicine is expected to grow 10.6% per year between 2022 and 2028 and reach a value of 21.1 billion euros by 2028.



Connected packaging

Whether it's for inventory management, patient safety, or counterfeiting prevention, the functionality made possible by digitally enabled labels helps brands overcome the increasingly complex challenges facing pharmaceutical packaging.

Patient safety + brand protection

Counterfeiting is a global problem. According to 2021 World Health Organization data, about 11% of medications sold in developing countries are counterfeit, leading to 144,000 deaths per year. To combat this, the global market for counterfeit drug detection is expected to grow 5.9% per year between 2021 and 2026. Anti-counterfeiting measures, such as RFID/NFC-enabled labels, help ensure that healthcare providers and patients get the products they need from the brands they trust, and protect brands from financial losses.

Engaging Patients

According to the research conducted by University of Maryland Medical Center chronic disease patients with poor medication adherence are 2.5 times more likely to experience hospital readmission. Various studies suggest that only between 50 and 60 percent of patients adhere to the therapies prescribed. Healthcare practitioners are increasingly interested in pharmaceutical packaging that increases patient adherence, makes dosage management easier, and enhances the overall treatment experience. Makers of medications and devices can use RFID/NFC technology to provide richer instructions (e.g. video) and ongoing two-way communications with patients to ensure they're using their medicine or device correctly, leading to improved outcomes.

Improving supply chain visibility

In recent decades lean supply chains spanning the globe became standard for many industries, including pharma. Current pandemic disruptions, labor shortages, logistics and distribution challenges, geopolitical crises, and more contribute to the need for increased supply chain visibility. By giving each item a unique digital identity, RFID enables users to track and trace thousands of products down to the individual unit in real time, across complex supply chains, and in inventories anywhere worldwide, providing reliable information that is immediately actionable and also informative for future planning.



Pharmaceutical labeling solutions



Pharmaceutical labeling solutions

We developed our pharmaceutical labeling portfolio with the unique packaging needs of the pharmaceutical industry in mind. Solutions that offer outstanding performance in conditions characteristic for pharmaceutical applications, from exposure to different sterilization techniques to cryogenic freezing.



Cold chain labels

Transportation and storage at continuous low sub-zero temperatures is necessary to preserve biological materials drugs in the clinical trial phase or new types of therapies. Our cold chain packaging and label materials are designed for applications ranging from chilled conditions (2-8 degrees) to harsh deep-freeze environments (-80 degrees) to extremely low-temperature storage in liquid nitrogen (-196 degrees). For example, our C2050P adhesive offers application temperatures as low as -50°C and is suitable for labeling containers during clinical trials. Meanwhile, our facestocks remain legible under tough conditions, including low temperatures, warm-water bath (bain marie), sterilization, and treatment with disinfectants. Our cold chain labels can be applied on containers, tubes, vials, aluminum canisters, and other challenging surfaces.

Small diameter packaging

Syringes have a very specific combination of requirements for labeling, including small diameter, surface coating, dispensing speed during packaging, no-label appearance, regulatory requirements, and storage and application temperature. Our dedicated product portfolio for small diameter containers is designed to meet all these requirements. Typical application areas include prefilled syringes, autoinjectors, ampoules, vials, and more.





Ethical and OTC

Containers for ethical and over-the-counter medicines are small. With typical diameters between 10-25mm, made of plastics like HDPE or LDPE. For these containers, our portfolio includes products with excellent adhesion and hold on tight curvature (mandrel), low migration properties, and high shelf appeal. Our blister labeling films can be distinguished by their high opacity and ultra-destructibility. Applications include pill bottles, nasal sprays, eye drops, and inhalers.

Security labels

To counteract pharmaceutical counterfeiters, we offer tamper-evident and void labels that comply with European Union Directive 2011/62/EU requirements. Our security labels reduce the risk of packaging falsification and include destructible labels, box damage films, and void labels.

Intelligent labels

Our range of RFID/NFC-enabled labels can enhance inventory management in pharmacies, clinics, and hospitals by helping to itemize and sort stock. This in turn helps pharma brands ensure quality, prevent waste, and save lives. Pharmaceutical labels with an NFC inlay have a unique digital identity which can be tracked and traced online across the supply chain. Combining NFC tagging and blockchain record-keeping can provide brands and consumers alike with a complete, tamper-proof, and easily-accessible view into a product's origin and journey through the supply chain.

“

Intelligent labels like NFC deliver the added benefit of meeting increasing government and consumer demands for visibility into every step of a product's journey from source to shelf.

”

Solutions beyond the label

We specialize in the design and manufacturing of a wide variety of functional materials that go beyond the label for pharmaceutical and healthcare industries. Our material technologies include medical grade pressure sensitive adhesive-coated tapes, surgical drapes, wound care dressing, Vacuum Insulation Panels for cold chain logistics, and more.



Temperature controlled packaging

For temperature controlled packaging, where temperature is critical, we offer Vacuum Insulation Panels (VIPs) which can be put in a box to keep contents cold during shipment. Therma VIP+ is the perfect solution for packaging systems used in clinical trials, laboratory shipping, and last-mile vaccination distribution. Our VIPs deliver up to seven times more effective insulation than standard materials and save space by increasing payload and reducing the shipping volume.

Medical applications

We offer a variety of adhesive chemistries and material technologies for medical applications. Our specialized medical and healthcare products enable comfortable adhesion to skin for sustained periods and are ideal for applications ranging from surgical, advanced wound care, ostomy, consumer wound care, and wearables, to diagnostics, patient monitoring, and negative pressure wound therapy.



Custom-engineered solutions

Our engineered solutions service helps you develop custom-made solutions that differentiate your business and grow your bottom line. Our team of experienced professionals will explain the latest market developments and trends in innovation, and then use that knowledge as the foundation for developing your unique solution. After eight decades of innovation and pioneering change in the labels and packaging materials industry, we still love a challenge. So if we don't already have a solution for your specific needs, we'd love to work with you to create one.



Proven safety, reliability, and performance

To ensure the safety and reliability of our products, we have implemented an extended change management process and business continuity plan and tested our material against ISO industry standards.

To prove the performance and quality of our products, in 2021 we established AD Procerta, our label materials testing center that offers its services to pharmaceutical brand owners.

Change management

As a global manufacturer serving the pharmaceutical industry, we understand the changing nature of the regulations, performance standards, and compliance needs. We provide advance notifications of product changes (1-year pre-notification) for our pharma adhesives*. With every change, we offer extensive change implementation procedures, customized tests, and change impact analyses.

Compliance

Labeling materials used in pharmaceutical packaging are subject to stringent regulations and quality standards. Our materials are in compliance with all applicable regulations, including European food regulation (1935/2004/EC), US FDA regulations, and REACH. Our dedicated pharma adhesives* have been assessed in line with ISO 10993 and ISO 3826 to simplify your packaging qualification process.

Dedicated adhesives

Label material performance depends greatly on the adhesive used. Our portfolio of pharmaceutical labeling adhesives covers a wide range of applications and delivers solutions for the most demanding conditions. Our emulsion adhesives offer outstanding performance on plastic containers where migration is a concern. Our solvent-based adhesives offer superior stability and low temperature performance. Our rubber-based adhesives excel in applications on apolar and/or chilled substrates.

* S2000NP, S692NP, S2045NP, S2060NP, S717P, C2020P, C2050P, S799P



Find out more

Scan the code to download our Pharmaceutical Labeling Compliance Guide

AD Procerta materials testing services

There are many variables involved when selecting the right labels for pharmaceutical products. Our AD Procerta™ materials testing services can help simplify and streamline this process.

Through AD Procerta, pharma companies can access unparalleled expertise, high-end technologies, and best-in-class facilities for efficient and robust testing of self-adhesive label materials.

ADProcerta™





Our dedicated team of R&D technicians have expertise in material science and pharmaceutical applications and years of industry experience. They are on-hand to guide you through material considerations, discuss testing protocols and outcomes, and help select and qualify solutions.

At our state-of-the-art laboratory at the Leiden Bio Science Park in the Netherlands, we offer a wide range of testing capabilities. We have developed methods and protocols to meet the specific needs of the industry, such as mandrel (small diameter) performance, high-speed dispensing, sterilization resistance, and print durability, to supplement FINAT standard testing.

What we offer

- Label material qualification testing and reporting for a variety of packaging, such as prefilled syringes, infusion bags, secondary packaging, and more
- Industry leading expertise in material science, application, and performance
- Over 100 instruments for extensive testing in application and conditioning
- Testing methods tailored to the needs of your product or project



Find out more

To find out more about AD Procerta, scan this QR code or [fill out this form](#) to contact Ewa Weglinska, Product Manager for Pharmaceutical Solutions.

Solutions for today and tomorrow

Our global team of experts is ready to ensure you have tested, proven, and compliant materials for today and tomorrow. We help find solutions to any challenge within the pharmaceutical industry and support manufacturers throughout the industry to track products, inform customers, and comply with regulations. And we want to work with you.

Who we are

As the pioneer in pressure-sensitive labels, we bring one-of-a-kind capabilities to labeling solutions for the pharmaceutical industry. 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 label that sticks with it.

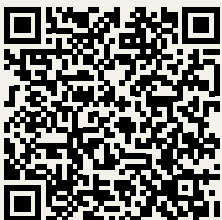
What we stand for

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 pharmaceutical labeling. Contact your business development manager today to find out how Avery Dennison Pharmaceutical Labeling Solutions can meet and exceed your needs.



Let's start a new project together!

To learn more about how we can support you, scan this QR code or [fill out this form](#) to contact Ewa Weglinska, Product Manager for Pharmaceutical Solutions.

label.averydennison.com

Avery Dennison Corporation (NYSE: AVY) is a global materials science manufacturing company specializing in the design and manufacture of a wide variety of labeling and functional materials. The company's products, which are used in nearly every major industry, include pressure-sensitive materials for labels and graphic applications; tapes and other bonding solutions for industrial, medical, and retail applications; tags, labels, and embellishments for apparel; and radio frequency identification (RFID) solutions serving retail apparel and other markets. Headquartered in Glendale, California, the company employs approximately 30,000 employees in more than 50 countries. Reported sales in 2018 were \$7.2 billion.

DISCLAIMER — All Avery Dennison statements, technical information, and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purpose.

© Avery Dennison Corporation. All rights reserved. Avery Dennison® is a registered trademark of Avery Dennison Corporation. Avery Dennison brands, product names, antenna displays, and codes or service programs are trademarks of Avery Dennison Corporation.

