

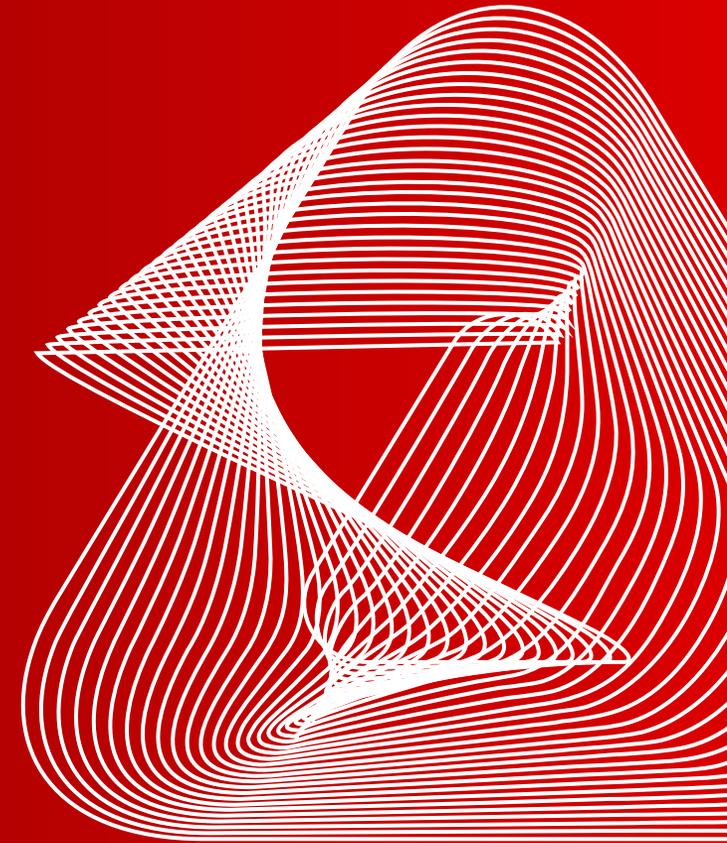


Webinar

by Avery Dennison - ASEAN

Innovations in Food & Beverage Labelling

2022



Welcome to the Webinar

Starts at 10:30 AM



Please wait

Agenda

- Packaging Trends in the F&B Market
- Label Solutions for Food & Beverage
- Digital Identification in the Food Industry



Speakers for Today



Hengky Tanoyo

***Segment Development Manager,
Avery Dennison LGM Indonesia***

10 years of experience in the packaging industry, including 6 years handling B2B key account management and 1 year in business development.

Packaging Trends in the Food & Beverage Market



Packaging Trends in the Food & Beverage Industry



Sustainable Packaging

- Recycled content
- Reusable packaging
- Recyclable packaging
- Biodegradable & Compostable
- Fiber-based solutions



Functional Packaging Enable Convenience

- On-the-go packaging
- Easy-open and reseal packaging
- Extend freshness of the product



Transparent and Clear Labeling

- Clear display of product freshness
- Minimal design to highlight product value



Smart Packaging

- Consumer engagement
- Anti-counterfeiting
- Temperature sensors to ensure freshness along the supply chain

Label Solutions for Food and Beverage

Food Adhesives

Take advantage of food approved labeling solutions that meets the required performance for direct contact, low temperature and retort process.

Sustainable Packaging

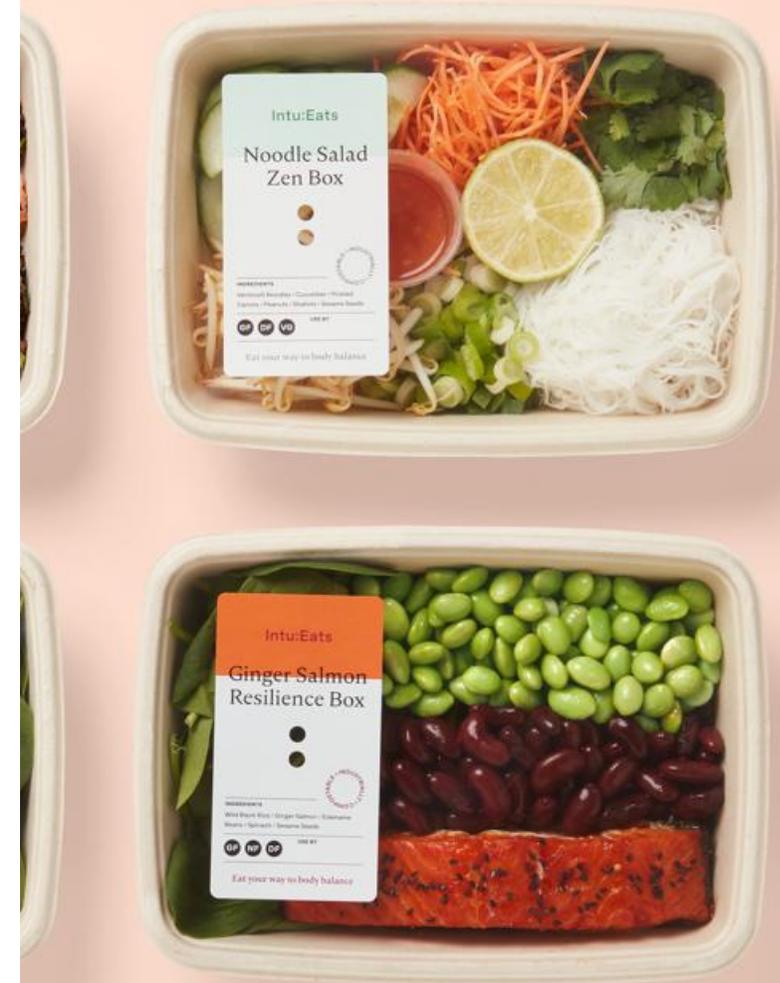
Lower your footprint, enable recycling, reuse and compostability with our portfolio of sustainable labeling materials.

Reclosure

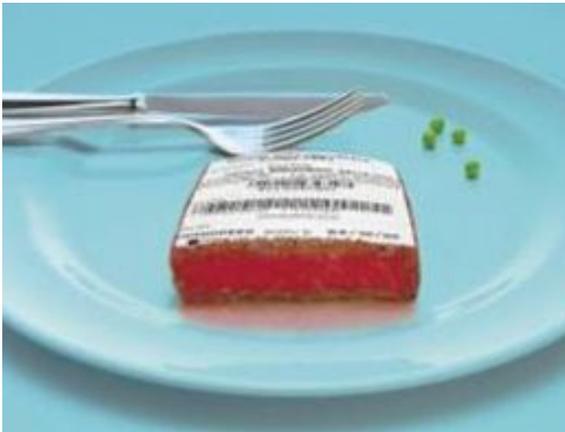
Put your consumers first with elegant, convenient packaging that is designed to be opened and closed many times.

Digital Solutions

Cut waste, ensure freshness and maintain quality with RFID labels that reassure consumers and optimize your supply chain.



Direct Food Contact Labeling



S2800

A special purpose permanent, acrylic based adhesive for **direct food contact**

- ✓ Good adhesion at room and cold temperature
- ✓ Approved for direct food contact onto moist and fatty foods
- ✓ Complies with European food regulation 1935/2004/EC

Applications

- ✓ Direct dry food
- ✓ Cheese & dairy
- ✓ Meat & animal
- ✓ Chilled & frozen



Z3000

A removable hot melt adhesive designed for adhesion to fresh fruits and vegetables with **edible skin**.

- ✓ A high initial tack label designed for all fruits and vegetables, including fruits with textured surfaces e.g. kiwi, avocado, etc.
- ✓ Complies with FDA 175.105 and FDA175.125B

Applications

- ✓ Fresh fruits
- ✓ Vegetables

Low Temperature Labeling



C7501

A permanent, emulsion acrylic adhesive featuring excellent **cold temperature** performance.

- ✓ Good room and cold temperature performance
- ✓ Ideal for applications where temperature is below freezing point
- ✓ Complies with FDA 175.105 for indirect food contact

Applications

- ✓ Chilled products
(e.g. refrigerated meat)



C2075

A special purpose rubber based **freezer grade** permanent adhesive.

- ✓ Designed for deep freeze and low temperature
- ✓ Good adhesion on slightly frosted surfaces
- ✓ Resistant to moisture during thawing
- ✓ Complies with FDA 175.105 for indirect food contact

Applications

- ✓ Chilled products
- ✓ Freezer products
- ✓ Wet surfaces

Special Applications Labeling



S333F

A clear acrylic emulsion adhesive for food applications involving **retort process**.

- ✓ Able to withstand high temp and humidity during retort process
- ✓ Approved for direct food contact Direct EU No.10/2011

Applications

- ✓ Retort process (e.g. ready meals, sauces, can food)



S477A

A permanent, emulsion acrylic adhesive featuring high initial tack for labeling on **freshly blown bottles** and/or **hot filling process**.

- ✓ Able to withstand dimension changes of the container during hot filling process, preventing wrinkling and lifting of the labels
- ✓ Strong adhesion at temperatures of 80°C, even on low surface-energy plastics e.g. HDPE

Applications

- ✓ Hot filling of liquid foods or beverages
- ✓ Freshly blown bottles

Heat Seal Reclosure Solution



Rigid Tray + Heat Seal Reclosure

Features a heat sealable liner - entire label construction can be heat sealed onto PET trays.

- ✓ Reduced total packaging cost compared to clamshell containers
- ✓ 44% to 47% reduction in plastic usage compared to clamshell containers
- ✓ Less space required during transit and on in store display
- ✓ Meets the requirement of FDA FCN 1716 for “Direct Food Compliance”

Applications

- ✓ Fresh produce
- ✓ Shelf stable baked goods
- ✓ Confectionary
- ✓ Sweet and savory snacks
- ✓ Deli meats
- ✓ Cheese

New Innovation



PVDC-free OXYB (oxygen barrier) reclosure label

The first PVDC-free oxygen barrier reclosure label to support recycling

- ✓ Offer easy opening with repeated resealability
- ✓ Deliver transparency that is required in “see-through” food packaging
- ✓ Extend product shelf life (very low oxygen transmission rate (OTR) of 8 cc/m²/24 hours)
- ✓ Free of PVDC which is considered a contaminant for the recycling stream

Applications

- ✓ Fresh herbs
- ✓ Biscuits
- ✓ Sliced and fresh meats
- ✓ Cheese
- ✓ Prepared fruit
- ✓ Savory snacks
- ✓ Confectionery
- ✓ Packaged produce

Enable Reuse for Returnable Glass Bottles



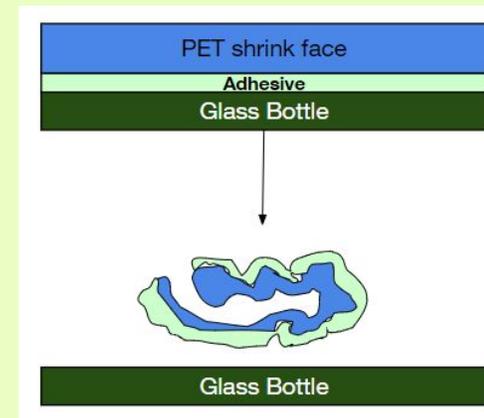
Wash-off S6000

Designed for returnable glass bottles

- ✓ Facilitates easy label removal from returnable bottles
- ✓ Proven Wash-off performance in conventional bottle washers (+65°C)
- ✓ No adhesive residues left on the bottle or in washer
- ✓ A clear-on-clear label material that is not affected by humid environments

How it works:

The clean removal of the label is based on the shrinkage of the facestock in combination with the Wash-off adhesive.



Enable Recycling



CleanFlake™

Enable bottle-to-bottle (B2B) recycling of PET bottles into **food grade packaging**

- ✓ Adheres to APR design guidelines for PET and HDPE recycling
- ✓ One solution that supports PET B2B recycling & HDPE recycling (mono-material)
- ✓ Available with various PP and Flex+ labels

PET B2B Recycling Fundamentals

CleanFlake significantly increases the **yield and quality** of rPET, leaving **no residue** on the resulting PET flakes.

HDPE Recycling Fundamentals

The labels form a mono-material construction with the HDPE bottles and can be recycled together in the recycling process.

Biodegradable & Compostable



S9500

Facestock and adhesive combinations that can be reintroduced into nature

- ✓ Carries the “OK Compost” certificate according to EN13432 regulations for industrial composting
- ✓ Available with a whole range of paper and biodegradable film facestocks (PLA and NatureFlex)
- ✓ Direct food contact approval for dry, non-fatty foods

Benefits

- ✓ Helps brand owners, retailers & converters meet growing demand for sustainable solutions for **difficult to recycle packaging**



Applications

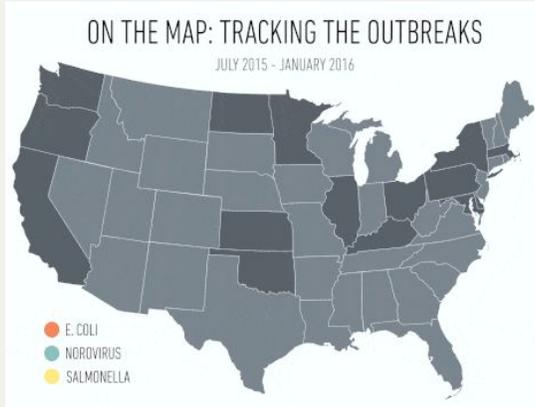
- ✓ Indirect labeling on biodegradable & compostable food packaging
- ✓ Direct labeling on dry food (fruits & vegetables)
- ✓ Beverages, especially on biodegradable bottles (e.g. PLA)



Digital Identification in the Food Industry



Technology Drivers



Safety and Authenticity

- Food safety
- Recall management
- Brand cost

Speed and Efficiency

- New delivery models
- Automation
- New competitors

Sustainability: Food Waste

- Consumer awareness
- Tight profit margins
- Inventory complexity

Inventory Management

- Turnover / wages
- Tight profit margins
- Inventory complexity

Technology Drivers



Omnichannel Grocery

- New delivery models
- Labor impact
- Inventory availability
- New competitors

New Store Models

- Grab and Go
- New competitors
- Infrastructure investment

Know Your Food

- Hyper local sourcing
- Diet awareness
- Transparency and sustainability

Consumer Engagement

- Loyalty programs
- Grab and go
- Connected products
- In store shopping experience

Introducing RFID Technology

Avery Dennison Smartrac is the world's largest RFID partner, and has the most sustainable product portfolio.

UHF RFID TAG (ULTRA HIGH FREQUENCY)



NFC TAG (NEAR FIELD COMMUNICATION)



Introducing RFID Technology

UHF RFID Enables Faster Inventory Counts



Clipboard and pencil

85% accurate

80 minutes



Barcode scanning

92% accurate

8 minutes



RFID tagging

99.9% accurate

8 seconds

Inventory count times based on 300 SKU's. Stores able to scan over 30,000 units per hour.



Introducing RFID Technology

NFC Enables Consumers to Interact with Products Digitally

Compatible with vast majority of mobile phones

All iPhones and most Android phones

Access Digital Data

By tapping phone to NFC tag

Ensure authenticity

Using unique serial numbers and security features



RFID for Food



Reduction in Expired Food Waste

- Supply chain visibility drives efficiency and enables effective first-in first-out strategies
- Store-level visibility aids promotional markdowns for near-expiry items



Improved Availability and Stock Management

Improved sales, stock reduction

High Speed Retail Check-Out
7 to 15 x faster with RFID tagging (IBM Survey 2017)



Improved Utilization of Returnable Trays and Totes

Track their location in suppliers and stores, loss reduction



Food Safety

End-to-end traceability guarantees product authenticity, expiry accuracy and aids recall management

RFID Product Portfolio for Food and Beverages

UHF



Standard RFID Labels

Inlays with food grade materials and adhesives, suitable for meat, fish, packaged foods and ready meals.



On-metal Labels

Flag tags and foam labels for canned drinks, foil based packaging, and liquid items.



Microwave-safe Labels

Tags that resist excessive heating and sparking in microwaves.



Passive Temperature Sensor

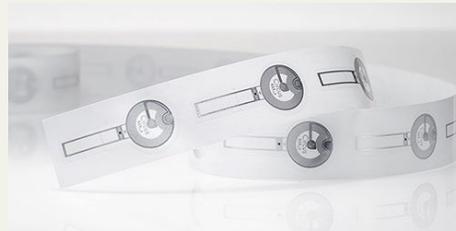
RFID with integrated temperature sensing capabilities for temperature audits.

NFC



Standard NFC inlay

Installed in packaging or under decorative labels.



Tamper Evident NFC

Alerts the user when product packaging has been opened.



NFC Temperature Logger

Temperature data is logged autonomously and uploaded via NFC or Bluetooth.

For more information :

Please feel free to reach out to our Avery Dennison team in your countries or contact below person at anytime.

We will be very happy to contact with you again soon.

Hengky Tanoyo (Mr)

Segment Manager, AD Indonesia

hengky.tanoyo@ap.averydennison.com

