PLASTICS DESIGN FOR RECYCLABILITY WEBINAR SERIES

Part 2: Why Is/Isn’t My Plastic Recyclable?

Hosted by:

Walmart

The Association of Plastic Recyclers
TODAY’S PRESENTERS

Steve Alexander
President, APR

Ashley C. Hall
Senior Manager - Sustainability, Walmart

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President, Common Sense Solutions, Inc

Kara Pochiro
VP of Communications & Public Affairs, APR
AGENDA

1. What Is This Series?
2. Walmart Goals
3. Who is APR?
4. The Definition of Recyclable
5. Reasons why something may not be recyclable
   1. Material choice
   2. Sorting – size, metal, color
   3. Package Design Features
6. Design for Recyclability
7. Questions
WHAT IS THIS SERIES?

A series of webinars hosted by Walmart, and presented by The Association of Plastic Recyclers, discussing design for plastics recyclability and communicating the common messages within the Walmart Recyclability Playbook and the APR Design® Guide for Plastics Recyclability.

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<td>Overview of Plastics Packaging</td>
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<td>Why Is/Isn’t My Plastic Recyclable?</td>
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*All webinars begin at 2:30 PM EST.*
Registration links, presentation slides and recordings will be available on the APR Website and the Walmart Sustainability Hub.
OUR SUSTAINABILITY PRIORITIES

Key Focus Areas for Walmart Sustainability in FY20

PROJECT GIGATON

Working with suppliers to reduce 1 billion metric tons of GHGs by 2030

PACKAGING & PLASTICS

Use less plastic. Make it recyclable. Label it for the customer.

SUSTAINABLE PRODUCTS

Identify sustainability priorities based on your product category

JOIN US!
WALMARTSUSTAINABILITYHUB.COM

USE SUSTAINABLE MATERIAL SPECS AND LABEL PACKAGING

ADVANCING EDLTC ACROSS ALL PRODUCT CATEGORIES
OUR SUSTAINABLE PACKAGING COMMITMENTS

For Private Brands, Encouraged for National Brands

**USE LESS PLASTIC**
- Reduce the use of plastic when possible
- Remove unnecessary packaging

**MAKE IT RECYCLABLE**
- 20% Recycled content in plastic packaging
- Increased recycled content
- 100% Recyclable, reusable, or industrially compostable
- Make packaging recyclable

**LABEL IT**
- 100% Packaging labeled for recyclability
- Apply the How2Recycle label

INNOVATE TOGETHER
Project Gigaton is designed so that every supplier can participate in at least one pillar.
The Sustainability Hub, a one-stop shop

- Learn how to design for recyclability
- Download the recycling playbook
- Find webinar recordings
- Link to other resources

walmartsustainabilityhub.com
WHO IS APR?

International trade association

The Voice of Plastics Recycling®

Companies committed to the success of plastics recycling
WHO IS APR? ENSURING PACKAGE DESIGN FITS WITH RECYCLING INFRASTRUCTURE

- APR Design® Guide for Plastics Recyclability
- Test Methods
- Training
- Communication
- Advocacy
APR’s DEFINITION OF RECYCLABLE

60% consumer access

Processed by existing infrastructure
- sort
- clean

Can be manufactured into identifiable product
WHY MIGHT A PACKAGE NOT BE RECYCLABLE?
Reason #1 - Material

60% consumer access

Processed by existing infrastructure
• sort
• clean

Can be manufactured into identifiable product

The Association of Plastic Recyclers
2015-16 CENTRALIZED STUDY ON AVAILABILITY OF PLASTIC RECYCLING

Download the full report: sustainablepackaging.org
WHY MIGHT A PACKAGE NOT BE RECYCLABLE?  
Reason #1 - Material

60% consumer access

Processed by existing infrastructure
- sort
- clean

Only
- PET
- HDPE
- PP
- PE film

Can be manufactured into identifiable product
...But “Material” is Not Enough
WHY MIGHT A PACKAGE NOT BE RECYCLABLE?
Reason #2 - Sortability

60% consumer access

Can be manufactured into identifiable product

Processed by existing infrastructure

- sort
- clean
NOT RECYCLABLE - SORTING (small size)

Less than 2” x 2” must be tested

Definitions and test methods at www.plasticsrecycling.org
NOT RECYCLABLE – SORTING (dark)
Most blacks and near blacks cannot be detected

Definitions and test methods at www.plasticsrecycling.org
NOT RECYCLABLE – SORTING (obscuring the object)

Thick labels covering more than 85% of the object might be sorted incorrectly

Definitions and test methods at [www.plasticsrecycling.org](http://www.plasticsrecycling.org)
NOT RECYCLABLE – SORTING (metal)

Large metal components are rejected

Definitions and test methods at www.plasticsrecycling.org
WHY MIGHT A PACKAGE NOT BE RECYCLABLE?
Reason #2 – Design Features

- 60% consumer access
- Processed by existing infrastructure
  - sort
  - clean

Can be manufactured into identifiable product
NOT RECYCLABLE – Design Features

• Any PVC component other than tamper evident sleeves
• Degradable additives
• Multi-polymer packaging not passing APR test protocols
• Non PE bags/films
• Metalized films
• Flexible packaging that cannot be completely emptied

Definitions and test methods at [www.plasticsrecycling.org](http://www.plasticsrecycling.org)
## FIVE FOR FOCUS for PET

| 1) Metal components attached to PET packaging | Increase operation costs and yield loss; are a primary source of defects in products made with recycled PET; will not be recycled if removed from stream by metal detectors. |
| 2) PETG sleeve labels | Can reduce quality of RPET; increase yield loss; bottle coverage can impede PET sortation (all sleeve labels). |
| 3) Pressure sensitive labels | Full-coverage adhesive can be difficult to remove from recycled PET; inks and adhesives can be source of discoloration for PET. |
| 4) Barrier layers | Additives and non-PET layers providing oxygen scavengers or CO2 barrier are a source of discoloration and defects in products made from recycled PET. |
| 5) PETG extrusion blow-molded containers | PETG is a copolymer that is not compatible with commonly used container grade PET. |
DESIGNING FOR RECYCLABILITY

• Choose a material with adequate consumer access
• Leverage the Walmart Recycling Playbook and APR Design® Guide for Plastics Recyclability
• Avoid using the “five for focus” items identified by APR for PET
  • Metal
  • PETG sleeves
  • Pressure sensitive labels
  • Barrier layers
  • PETG bottles
• Use the How2Recycle label for consumer messaging
QUESTIONS
Check out the following webinars for more information:

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