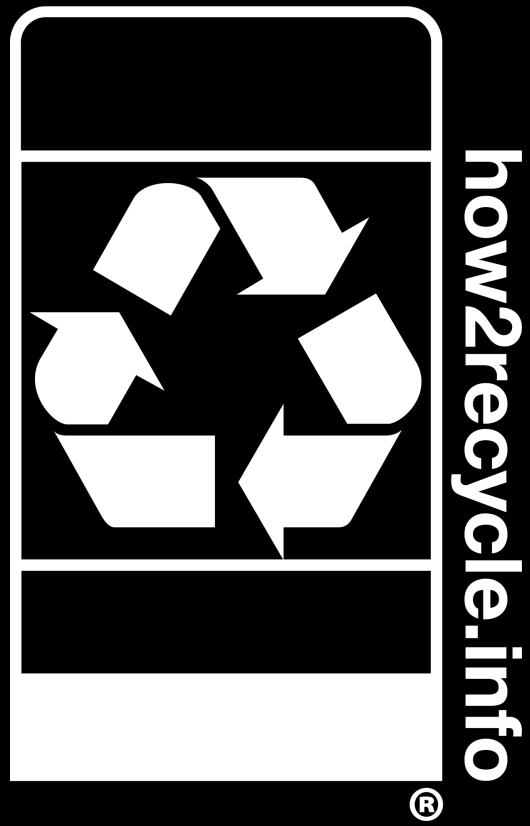
how2recycle.info

How2Recycle®

Guidelines for Use

Abbreviated

08 2024 - 01 2025



Abbreviated Membership Guide & Rulebook

This is an abbreviated version of the official rulebook and guide for How2Recycle membership. It is not an exhaustive document and doesn't reflect every factor that How2Recycle may consider during recyclability assessments.

How2Recycle updates its Guidelines for Use twice a year. Members of How2Recycle are required to stay up to date with all program changes and follow the most recent version of the Guidelines for Use.

The How2Recycle labeling system is designed to comply with legislation and guidance in the United States and Canada, such as the US Federal Trade Commission's Guides for the Use of Environmental Marketing Claims. To avoid consumer deception and increase the transparency, reliability, and completeness of recyclability claims, all How2Recycle members must endeavor to be consistent with these laws in all marketing materials, including but not limited to website content and on package language.

How2Recycle is unable to provide legal advice for claims outside of How2Recycle labeling but works to provide members with timely updates when relevant legislation and guidance changes.

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- Legislation News
- Packaging Under Review
- Design Work

News & Important Updates

How2Recycle

Canada Check Locally Update

In the February 2024 Guidelines for Use release, How2Recycle announced an updated design for the Check Locally label for products sold in Canada to improve compliance with the strictest interpretation of Québec's Charter of the French Language.

The updated dual language design co-locates all French and English text and provides equal language prominence. Going forward, all label requests for products sold in Canada with a Check Locally component will be assigned the updated label, and the How2Recycle team manually updated all previously assigned labels.

This label update is complete as of July 2024. All outdated Check Locally labels have been updated in the Member Platform. If you believe a label has been missed during the update, please contact us at how2recycle@greenblue.org with the direct URL to the label request.

We encourage members to update their labels on pack as soon as possible to comply with the law today and avoid potential penalties.

Additional label changes made be deemed necessary as a result of emerging legislation and ongoing program work into label design. Any changes will be proactively communicated to all members.

Legislation Update

Applicable law is one of the foundational aspects of how How2Recycle assesses recyclability. Our program will always adapt to be in compliance with law in the United States and Canada at the federal, state, and province levels.

For current legislation news, we recommend reading the Sustainable Packaging Coalition's (SPC) new **monthly policy round-ups**, which are free to access. Additionally, companies who are also SPC members can join the SPC Packaging Policy Collaborative.

How2Recycle is following multiple pieces of emerging legislation affecting packaging, including state and federal policies regarding Extended Producer Responsibility (EPR and recyclability labeling acts. **As of July 31st, 2024, no new policies have gone into effect with immediate impact on How2Recycle labels, but we are working to adapt the label to be in compliance with coming legislation.** Members may receive supplemental communications in 2024 on these efforts as we progress with our label design work.

National Access to Recycling

Access to recycling plays an important role in the recyclability claims that can be legally made on packages. As a result of 2024 work in this space, recyclability categories for various materials and formats may change in both the US and Canada. GreenBlue has worked with a third-party consultant to conduct a new nationwide access to recycling study in Canada and is working with additional third parties to gather new access data for the United States.

Packaging Under Review

We closely monitor changes in the recycling system and make every effort to let members know before any packages change recyclability categories. The general recyclability categories have not changed as of this release, but **changes are likely to occur later in 2024 or 2025** based on emerging data. We will inform members if an update to recyclability designations goes into effect, which may include packaging formats beyond those listed below.

Since our last Guidelines for Use release, How2Recycle received sufficient data on the access and end markets for **aluminum food cans**, so this package format remains Widely Recyclable.

Formats to Watch for Upgrade

- Composite canisters with steel bottoms (US)
- HDPE & PP squeeze tubes
- PP beverage cups & other formats (US)
- PET beverage cups (US)

Formats to Watch for Downgrade

- Aluminum & steel aerosol cans (US)
- Aseptic & gable top cartons (US)
- PP single use coffee pods (US)
- Some PE flexible packages (Canada)

View our history of recyclability category changes and **learn more about why we're watching the listed formats in our Appendix .**

The Future of the Label

The How2Recycle label is evolving. Direction for this next iteration of the label will be shared proactively with all members prior to implementing any new label design.

Label Design Work

The How2Recycle label design is under review to comply with legislation and meet our goal of clarity in labeling. The SPC Packaging Design Collaborative is supporting How2Recycle through this brand refresh by involving brands and designers.

The collaborative work includes exploring new symbols, terminology, and layout of the How2Recycle label through consumer research and consulting with third parties with expertise in graphic communication. As of July 2024, consumer research studies are underway to vet consumer understanding of different label options.

The collaborative expects to present their findings and propose label design updates in the second half of 2024. How2Recycle will conduct a thorough review of proposed updates to the label prior to implementing program changes.

Dynamic Labeling

How2Recycle continues to explore the role of dynamic labeling to provide additional detailed recycling information on pack. We launched a pilot with Recycle Check in 2023, where a How2Recycle label and a Recycle Check QR code are provided to be featured side-by-side on pack. How2Recycle is working with The Recycling Partnership (TRP) to expand this pilot and then share our findings and next steps later in 2024.

PE Film Recyclability

How2Recycle continues to support the PE film recycling stream and is engaged in several ongoing projects related to the recyclability of this material type.

Access to Recycling

Data for the collection of PE film for recycling is being updated through the larger access study for recyclable materials in Canada and through a separate study of Store Drop-off collection access with Resource Recycling Systems (RRS) in the United States. The results and interpretation from each study were not available in time for an update in this Guidelines for Use release, but can be expected in the next update.

Store Drop-off

How2Recycle and GreenBlue are committed to supporting the Store Drop-off recycling stream as a method to facilitate PE film recycling in the US. Work is underway to gather more information about Store Drop-off operations and develop a new directory.

Clean & Dry Protocol

How2Recycle continues to work with partners to develop a quantitative test to understand the limitations of product residue on film for Store Drop-off recycling. While the protocol validation is led by APR's Clean & Dry Working Group, additional work is ongoing to understand which product types and quantitative limits will be acceptable throughout the recycling value chain. How2Recycle is also collaborating with the SPC's Flexible Packaging and Retailer Collaboratives and key industry stakeholders to fill in data gaps.

Recyclability History

This is a brief history of How2Recycle's recyclability designation changes, as announced in the Guidelines for Use.

JULY 2016

Metal aerosols upgraded to Widely Recyclable in US

Coated paper cartons upgraded to Widely Recyclable in US

Black plastic downgraded to Check Locally

JANUARY 2017

EPS downgraded to Not Yet Recyclable in US

Rigid PP downgraded to Check Locally in US

PET Thermoforms downgraded to Check Locally in US

Paper with PFAS downgraded to Not Yet Recyclable

JANUARY 2020

Rigid PS downgraded to Not Yet Recyclable

Rigid LDPE downgraded to Check Locally

JULY 2021

EPS downgraded to Not Yet Recyclable in Canada

Black plastic downgraded to Not Yet Recyclable

PE mesh & netting downgraded to Not Yet Recyclable

JULY 2022

Rigid PP Tubs, Bottles, Jugs, & Jars upgraded to Widely Recyclable in US

Section

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How2Recycle Program Foundations

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Definition of Recyclability

For each package, you will receive a How2Recycle label and a **custom recyclability assessment**. Each assessment considers:

Consistency, Common Sense, Consumer Experience, Material Health

The How2Recycle label was designed to comply with the FTC's Green Guides and the Competition Bureau Canada's Enforcement Guidelines. We regularly consult with the FTC to ensure our labels avoid consumer deception.

We reference the Sustainable Packaging Coalition's 2020-2021 Centralized Availability of Recycling Study and additional data to assess national recycling access for package types.

We consider how successfully materials sort in a Material Recovery Facility (MRF) based on size, shape, and other physical attributes to ensure they're properly recycled.

We consider how successfully materials are reprocessed by entities. We consult experts and reference well-established industry guidance like the APR Design® Guide and the suite of paper testing protocols.

Materials with no end market cannot be considered recyclable. How2Recycle assesses demand, scale, value, and time for each material to categorize the strength of end markets.

For a deeper understanding of our definition of recyclability and assessment criteria, read the How2Recycle Guide to Recyclability.

US General Recyclability Categories

These are the general overall recyclability designations of various material formats and the percent of the population that has access to recycling these formats in the **United States**. This list does not consider attachments, labels, size, additives, interaction between components, consumer preparation, testing, and many other attributes that are assessed during How2Recycle's process.

			Plastic	Paper	Metal	Glass	*PE Film Only*
60% - 100% Access	**Widely Recyclable**		clear PET bottles & jars; HDPE rigids; PP tubs, bottles, jugs, & jars	uncoated & clay coated wood fiber; aseptic & gable top cartons*; molded wood fiber; tested coated paper	aluminum & steel beverage & food cans; aluminum & steel aerosols*	soda-lime glass	**Store Drop-off** flexible PE film bags, wraps, & pouches 
20% - 60% Access	**Check Locally**		clear, colored, & opaque PET thermoforms; LDPE rigids; PP drink cups & other rigids*	1-side poly coated rigid paper; 1-side heat seal coated rigid paper	aluminum foil; aluminum food trays		
0% - 20% Access	**Not Yet Recyclable**		multi-layer films & rigids; PVC; PS; other plastics; black plastic rigids; squeeze tubes*; foam; PP & PET film	2-side poly coated rigid paper; 1-side poly coated flexible paper; innovative coatings on fiber; non-wood fiber	stainless steel	borosilicate glass	

**This package format is currently under review and its general recyclability category may change in the future.*

Canada General Recyclability Categories

These are the general overall recyclability designations of various material formats and the percent of the population that has access to recycling these formats in **Canada**. This list does not consider closures, attachments, labels, size, additives, interaction between components, consumer preparation, and many other attributes that are assessed during How2Recycle's process.

			Plastic	Paper	Metal	Glass
50% - 100% Access	**Widely Recyclable**		clear PET bottles, jars, & thermoforms; HDPE rigids; PP containers; flexible PE film bags, wraps, & pouches*	uncoated & clay coated wood fiber; aseptic & gable top cartons; molded wood fiber; tested coated paper	aluminum & steel beverage & food cans, aluminum & steel aerosols; aluminum food trays	soda-lime glass
20% - 50% Access	**Check Locally**		colored, & opaque PET thermoforms; LDPE rigids	1-side poly coated rigid paper; 1-side heat seal coated rigid paper	aluminum foil	
0% - 20% Access	**Not Yet Recyclable**		multi-layer films & rigids; PVC; PS; other plastics; black plastic rigids; squeeze tubes*; foam; PP & PET film	2-side poly coated rigid paper; 1-side poly coated flexible paper; innovative coatings on fiber; non-wood fiber	stainless steel	borosilicate glass

**This package format is currently under review and its general recyclability category may change in the future.*

Compostable Packages

For packages that become saturated with food or other organic matter and are not eligible for a favorable recyclability category, compostable packaging may be a suitable option.

Learn more about when compostable packaging may make sense for your packaging sustainability goals.

How2Compost labeling is designed to communicate comprehensive recovery instructions to consumers on pack alongside How2Recycle labels.

To use the How2Compost label, you must be a US based How2Recycle member and receive **BPI certification** for each package. You may also acquire a sublicense from BPI if your supplier holds the compostable certification. There are certification costs, but How2Compost membership is free for eligible How2Recycle members.

Email **how2compost@greenblue.org** for additional information and next steps.

Overall Recyclability

We identify ways members can improve their package design by assigning one of three overall recyclability categories for each complete package we assess on the How2Recycle Member Platform.

How2Recycle encourages members to apply all recommendations given to every Recyclable but Needs Improvement and Partially Recyclable or Not Yet Recyclable label request to strive for Optimal Recyclability.

Optimally Recyclable	The entire package meets all the criteria for the best design practices in their material category. No recommendations to improve the package design are needed.
Recyclable but Needs Improvement	The majority of the package or the whole package is recyclable, but it falls short of being Optimally Recyclable due to suboptimal features.
Partially Recyclable or Not Yet Recyclable	The package includes one or more components that feature the Check Locally or the Not Yet Recyclable label, or has design features that inhibit recyclability.

Optimal Plastic Package Design

When assessing the technical recyclability of plastic packages and making recommendations for optimal design, there are key alignments between How2Recycle and the **Association of Plastic Recyclers (APR)** Design® Guide, APR Design® Recognition Program*, and testing protocols. This partnership allows us to leverage APR's technical expertise as needed. Both organizations are excited to continue working together to promote better plastic packaging design.

To be categorized as Optimally Recyclable by How2Recycle, all features of a plastic package, including labels, closures, and additives, must be categorized as Preferred by APR. How2Recycle encourages companies to pursue APR Design® for Recyclability Recognition* for all eligible packages.

Using a package or components with APR Recognition does not always guarantee a specific label will be assigned, but it helps simplify the label request process by providing data on the structure's technical recyclability. APR Recognition can also reduce the amount of information and testing How2Recycle requires on a label request.

As How2Recycle and APR work towards greater alignment, testing requirements and recyclability assessment criteria may change. Any updates resulting in label assignment changes will be proactively communicated to members.

*Please note: no claim of APR approval or recognition may be made without undergoing the complete APR Design® for Recyclability Recognition process, which includes submitting information to APR and technical panel review.

Detrimental Features

APR recommends prioritizing the removal of the following detrimental features that significantly reduce the quality and yield of recycled plastics.

- From **all plastics**, remove paper labels and metal attachments.
- From **PET packages,** remove pressure sensitive and shrink sleeve labels that have not received APR Recognition.
- From **HDPE packages**, remove or limit all PP content from closures, labels, and attachments to no more than 10 wt % of the package.

Design for Optimal Recyclability

Optimally Recyclable

If your package is not Optimally Recyclable, we will provide recommendation(s) on how to improve the design. Consider these Optimally Recyclable package examples.

PET Bottle

Many **pressure sensitive labels can be problematic** during reprocessing and degrade the value of the recycled material. This bottle uses pressure sensitive labels specifically designed for recycling that have received **APR Design for Recyclability Recognition**.

This bottle also uses a **closure that is Preferred by APR**.

Paper Box

This paper box has a **clay coating** (with no poly extrusion, lamination, or other innovative coatings) and is constructed of rigid paperboard made of **wood fiber**.

There are **no plastic, metal, or other non-paper attachments**, which can reduce recycled fiber yields and create wear on recycling equipment.

Recyclability Assessment Criteria

As How2Recycle evolves with the recycling industry, the information we request from our members and our assessment criteria changes. Members may notice continuous improvements within the Member Platform and will receive notice of major changes impacting labels. Members must stay up to date with the Guidelines for Use to be informed of changes and be prepared to fill out label requests with all necessary information.

These are some recent improvements to our assessment which stem from our alignment work with APR.

Rigid Plastic Packages - *Effective 8/1/24*

- Test requirements and recommendations for EVOH used in rigid HDPE and PP plastic containers are updated to better align with what is preferred by APR.
- Sortation testing is required based on the label coverage and container volume, per the APR Design® Guide. Members must provide the container volume in addition to the label coverage when a label is being used on a rigid plastic container.
- Metal sortation testing is required for containers employing metal decoration in accordance with the APR Metal Decoration Resource. The type of decoration and coverage area are needed in requests when metal decoration is used on a rigid plastic package.

PE Film Packages

- Compatibilizers for barrier layers (e.g. EVOH) must be used at the loading that received APR Design® for Recyclability Recognition or passed technical recyclability testing. Please work with your supplier to check the appropriate usage.
- Combinations of APR Preferred elements and APR Recognized innovations may require additional testing, especially when the amount of PE in the structure is <90% by weight.
- AlOx and SiOx barrier coatings do not require testing when used in accordance with what is preferred in the APR Design® Guide.

Package Testing

We are here to help! If you are unsure if your package requires testing or how best to conduct required testing, you can reach out to How2Recycle.

There are tests your company may be required to complete for a package to demonstrate technical recyclability and be eligible for a more favorable label. The test protocols How2Recycle relies on to support sortation and reprocessing are developed by trusted third-party organizations and widely accepted within the industry in the US and Canada.

The following pages detail commonly required testing. Please note that this list is not exhaustive and your package may require additional testing not listed here.

Quick Links

- Fiber Packaging
- PE Film
- Rigid Plastics
- Sortation Potential
- More About Package Testing

Testing for Fiber Packaging

Some rigid and flexible fiber based packaging may require technical recyclability testing to be eligible for a more favorable How2Recycle label. How2Recycle may decline to label flexible paper innovations until testing is completed.

Examples of attributes that may require testing:

- Plastic laminates & coatings
- Foil & metallization
- Repulpable, sealable & other coatings
- Bagasse, bamboo, & other non-wood alternative fibers

Based on our Material Health rule, some fiber packages require testing for **polyfluoroalkyl substances (PFAS)** by testing the total organic fluorine concentration.

Both Repulpability (Part 1) and Recyclability (Part 2) must be completed at a partner lab for any flexible or rigid fiber package requiring testing. Packaging must be tested **as it would enter the recycling stream,** including all print and decoration, against an appropriate wood fiber control.

- The **OCC-E Protocol** should be followed for unbleached fiber packaging.
- The **SBS-E Protocol** should be followed for bleached fiber packaging.

Currently these are the only two protocols How2Recycle accepts when a fiber package requires technical recyclability testing. The How2Recycle team is aware of ongoing work in the paper industry to develop new test methods and will inform members if any new protocols will be accepted in our assessment. The SPC team recently announced the Paper Packaging Recyclability Collaborative that is available for SPC members to join who are interested in fiber testing.

Partner Labs

OCC-E paper testing: University of Wisconsin Stevens-Point, Innofibre (Quebec), Western Michigan University

SBS-E paper testing: Western Michigan University

Testing for PE Film

How2Recycle requires the transparent, data-driven test protocol for Store Drop-off recyclability: **APR's Critical Guidance Protocol for Polyethylene Films** when testing is required to demonstrate a PE film structure's compatibility with the PE recycling stream.

PE films may require APR's Polyolefin Packaging Articles Sink or Float Evaluation when Critical Guidance testing is not required, but the film's density is a concern. This test may be completed by members in-house.

Eligible PE films will receive a Store Drop-off How2Recycle label in the US and a Widely Recyclable label in Canada.

Technical recyclability testing may be required for PE film with the following attributes:

- Metallized layers & metallic ink
- Unfilterable barrier layers (i.e., PP, nylon, & EVOH)
- Barrier & innovative coatings (i.e. PVOH)†
- Combination of multiple functional layers, barriers, or coatings
- Cold seal adhesive
- Non-PE attachments (i.e., zippers & labels)
- Fillers and PE attachments or labels causing density to exceed 0.996 g/cm^3

Some structures may not require testing if they have received APR Recognition or have been pre-qualified with How2Recycle. **We may require testing for other attributes not listed or new combinations of previously tested structures and APR preferred elements when the total amount of PE in the structure falls below 90%.**

†AlOx and SiOx coatings no longer require testing if applied per the APR Design® Guide.

Partner Labs

All APR Critical Guidance testing must be completed at an APR candidate lab. If you are unsure if a certain facility is appropriate, reach out to the How2Recycle team.

Testing for Rigid Plastics

How2Recycle relies on the industry-developed **APR protocols** when requiring technical recyclability testing for rigid plastic packages.

Examples of attributes that may require testing:

- Scavengers & oxygen ingress barriers
- Barriers (i.e., EVOH, nylon, AlOx, & SiOx)
- Fillers & integrated desiccants
- Functional additives, layers, & coatings

Structures with the above attributes may not require testing if they have received APR Recognition or been pre-qualified by How2Recycle. We may require testing for other attributes not listed here.

Required APR Test Protocols

- **HDPE or PP containers** with fillers or additives that increases the resin density to 0.97 - 1.0 g/cm^3, Polyolefin Packaging Articles Sink or Float Evaluation may be completed in-house.
- **HDPE containers**, Critical Guidance Protocol for HDPE Rigid Containers.
- **PP containers**, Critical Guidance Protocol for PP Rigid Containers.
- **PET containers** , Critical Guidance Protocol for Clear PET Resin and Molded Articles. If an innovation exhibits time dependent behavior (e.g., oxygen scavengers), the Preparation of PET Articles with Potential Time Dependent Behavior should be followed before testing.

The above protocols refer to reprocessing testing. Additional attributes, such as color and labels, on rigid plastic packages require sortation testing.

Partner Labs

All Critical Guidance testing must be completed at an APR candidate lab. If you are unsure if a certain facility is appropriate, reach out to the How2Recycle team.

Testing for Sortation Potential

APR has published several sortation potential protocols to help the industry better determine what packaging may be difficult to sort at MRFs based on its design attributes. All sortation potential protocol tests should be preceded by APR's **compression protocol**.

Specific sortation tests can determine packaging's sortation potential based on:

- Size (small packages)
- Shape (2D/3D sortation test)
- Color & Near Infrared (NIR) Identification (plastic packages)
- Metal & Metallic Components (plastic packages)

The above tests may be required by the How2Recycle team to demonstrate your package's sortability. A conservative Not Yet Recyclable label may be assigned until required testing is completed. Failure to sort properly or with a preferable result will also result in a Not Yet Recyclable label.

Partner Labs

All APR sortation potential testing must be completed at an APR candidate lab. If you are unsure if a certain facility is appropriate, reach out to the How2Recycle team.

More About Package Testing

Test Requirements

The How2Recycle team proactively communicates which test(s) are required to support a more favorable recyclability category. Without testing, your package may receive a conservative label or we may decline to provide a label. Testing should be completed at third-party facility to ensure objectivity and credibility. In-house test results are only appropriate for specific, limited situations when specified by How2Recycle.

Test Articles

In all recyclability testing scenarios, test articles should be representative of the package as it would enter the recycling stream, including all print, decoration, and attachments present after consumer use. Attributes under evaluation should be tested at the highest level or worst-case scenario, such as the maximum coverage and darkest color ink if the exact print is unknown or varies.

Data Ownership

The member who conducts the test owns the results, and that data will only apply to that member's requests. Data or test results are not shared between requests from different members, even if multiple members have the same packaging format. How2Recycle will only share data between members with explicit written permission from the data owner.

Utilizing Other Tests

Testing can help fill gaps when the data required to determine a package's recyclability are missing. If no industry standards fit your situation, alternative routes to gathering data may exist.

The How2Recycle team can help review your test plans. A **MRF flow test** may be appropriate to study the sorting potential of an innovative or unusual package.

As the industry evolves and new protocols arise, How2Recycle may expand or change which protocols are required. We are developing a **standard for accepting protocols** which will be shared publicly once available. Members are encouraged to present new, scientifically backed protocols for consideration.

Proving Recyclability

Changes in legislation, access to recycling, and innovations in technology contribute to a dynamic recyclability landscape. In response, we provide guidance for members, partners, and industry groups to propose updates to a package format's recyclability category and label eligibility.

Guide to Future Recyclability

How2Recycle's Guide to Future Recyclability offers a roadmap to understanding emerging and innovative packaging format recyclability. It provides insight into:

- Assessment criteria and considerations to achieve future recyclability
- Recommendations for strategizing future recyclability
- Examples of current recyclability-challenged packages
- What data are needed to prove recyclability

Presenting Your Case to How2Recycle

If you believe a particular package format should be eligible for a different recyclability category and placed under review by How2Recycle, we ask you to submit scientifically credible data from third parties to support the claim. Please use the Guide to Future Recyclability as a tool for this process.

We understand that building a case for recyclability of a package format takes significant time and resources. Our team is equally committed to thoroughly reviewing all submitted information. Before enacting a recyclability category change, we must verify that the claim is not misleading to consumers and there is sufficient data to support the recyclability claim. This careful approach safeguards our members from the potential negative attention of using misleading claims. How2Recycle will only issue recyclability labels that comply with applicable laws and are supported by strong, credible scientific evidence.

Section

3

Quick Links

Requesting How2Recycle Labels

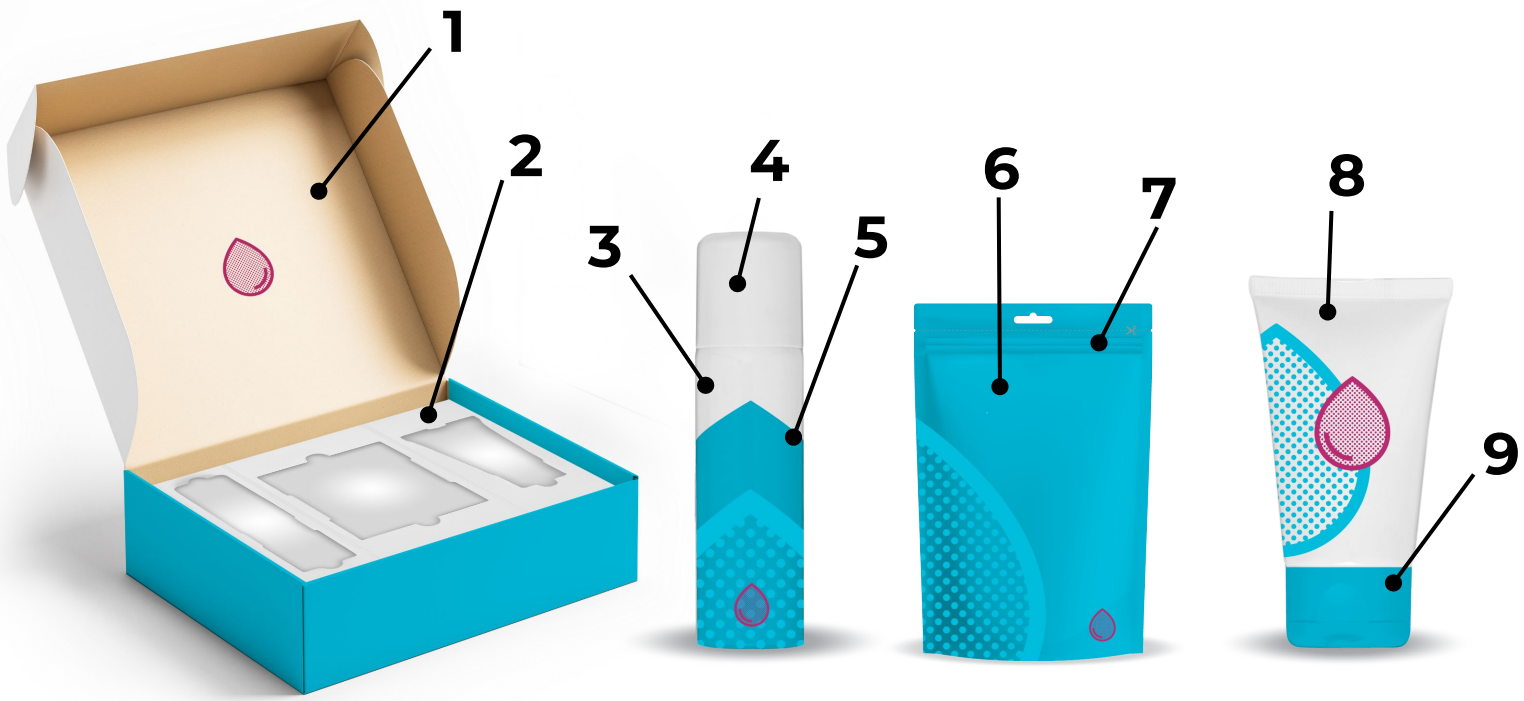
How2Recycle

Package Components

If this was your package, these are all of the components you need to enter on your request. *See the assigned label this package would feature on pack.*

Components

1. Paper **Box**
2. Paper **Tray**
3. Metal **Can**
4. PP **Cap**
5. PET **Label**
6. PE **Pouch**
7. PE **Zipper**
8. HDPE **Tube**
9. PP **Cap**



Similar But Different Packages

Packaging that are similar but differ by materials, closure types, coatings, additives, or other factors may require separate requests.

Separate Requests

These are **NOT the same package format** because the bottles have different closures.

These are **NOT the same package format** because one box has a window.

One Request

These are the **same package format** because they use the same closure, materials, and label type and coverage.

These are the **same package format** even though they are different shapes. They have the same materials, coatings, and function.

How2Recycle

Information Needed on Every Request

Certain packaging formats and attributes require more details to complete a label request. Read the following pages for what information is needed and why.

All Package Types

- Material Health
- Pre-qualified Packages
- Package Size
- Labels on Plastic Packages & Other Packages
- Product Application Limits
- Consumer Preparation

Plastic Packages

- Product Application Limits for PE film
- Black Plastic & Colored PET
- Closures & Seals on Plastic Packages
- All Plastic Packages

Fiber Packages

- Coatings & Additives on Fiber Packages
- Attachments on Paper Packages

Material Health Rule

How2Recycle encourages finding safer alternatives to substances that are hazardous to the environment and human health. We may render a package **Not Yet Recyclable** if it contains intentionally added substances that are harmful or potentially harmful to the environment and/or organisms. Read more about this rule here.

In partnership with ChemFORWARD, the SPC launched CleanPackage, a database of verified safer alternative materials that can connect companies with suppliers based on leadership in human and environmental safety and interest in increasing consumer trust.

Fiber packages containing intentionally added per- and polyfluoroalkyl substances (PFAS) are assigned a Not Yet Recyclable label. How2Recycle may require lab testing to verify claims on formats where PFAS use is known to be used. If the total fluorine concentration exceeds **100 ppm**, the package will receive a Not Yet Recyclable label.

The following package formats historically have contained PFAS:

- Take-out containers
- Fiber foodservice packaging
- Molded fiber plates, bowls, & trays
- Bakery & deli paper wraps
- Microwaveable popcorn bags
- Grease-resistant paper bags

Pre-qualified Packages

Material manufacturers and converters receive a pre-qualification letter for eligible packages by submitting a label request. These letters are not certificates. **The How2Recycle program is not a certification program and this letter and label are for marketing purposes only.**

Brands and retailers must submit a label request for the final package application to feature the label on pack. Pre-qualification does not guarantee a specific How2Recycle label will be assigned for on-pack usage. Factors such as attachments and product application may impact the package's ability to be recovered and affect the label assigned.

If you are using a pre-qualified package, include the following in your request:

- Supplier name
- Package trade name
- Pre-qualification letter as an attachment (if available)
- Where the pre-qualified structure appears in your package

Clearly explain any modifications or additions made to the pre-qualified package, such as applying labels and closures and changing the layer structure of film package, as these can change the recyclability assessment.

Package Size

Share the exact dimensions for package components **less than 3 inches** in height, length, width, or diameter. **Submit a separate request** when the same package has drastically different version sizes, such as mini or travel sizes. Include closure dimensions for **plastic caps on metal and paper packages**, such as used on aerosols and composite canisters.

Small packages that are less than 2 inches (5 cm) in any dimension are at risk for not sorting properly at MRFs. We may require testing for these packages and assign a conservative label until testing is complete.

Large, bulky containers are also at risk for not sorting properly at MRFs. Make sure to include the volume of your container in your request if larger than 2 gallons (7.5 liters).

Additionally, the **package size can influence the consumer facing language** in your assigned label. For example, a similar shape container may receive a label calling it a cup when it holds single serving, but a tub when it holds multiple servings.

Labels on Plastic Packages

To optimize plastic recyclability, HowRecycle recommends using labels that have received APR Recognition. When using a recognized label, you must include the producer and specific product name as it was recognized in your label request. We recommend also attaching the documentation from APR.

Full body shrink sleeves on plastic containers that have not received APR Recognition must have a full length perforation to be eligible for a two tile label instructing the consumer to remove the label.

Labels Requiring Additional Testing

As a result of alignment efforts with APR, How2Recycle will require NIR sortation potential testing for pressure sensitive, spot glued, and in-mold labels that exceed coverage amounts preferred by APR. **Members must provide the label coverage and brimful volume of the container in their requests.** The coverage % is defined as the label surface area divided by the area of the side wall and shoulder of the container. Area does not include the container neck, threaded finish, and base.

Testing may be required for metallized labels and labels with metallic decoration or ink due to reprocessing and sortation challenges. Refer to the APR's Metal Decoration Resource to understand when sortation testing may be required.

RFID Tags

Labels with integrated RFID are detrimental to plastic recycling because of the potential for contamination from the plastics, adhesives, and metals used in the RFID tag. **Plastic packages with RFID tags will be designated Not Yet Recyclable**, even when retailers require their use, unless the package has passed all necessary testing.

Eliminate the use of RFID tags when possible.

Labels on Other Packages

Always be mindful of **label materials**. Using a label material that is dissimilar to the package body can be detrimental to recycling.

Paper Packages

It is best practice to direct print on paper packages. **Pressure sensitive labels** on rigid paper packaging should be made of paper substrate.

Metal Packages

It is best practice to direct print on aluminum and steel packages when possible. Paper or plastic **pressure sensitive and wraparound labels** don't negatively impact the recyclability of aluminum and steel cans and aerosols, but will not be recycled themselves. **Shrink sleeves** on aluminum cans and aerosols can be detrimental to MRF equipment.

Glass Packages

Glass recycling is generally forgiving to labels, including pressure sensitive labels and shrink sleeves, but may reduce overall yields. During the recycling process, glass is crushed and most labels can be easily separated or will burn off during glass making.

RFID Tags

While more forgiving than when on plastic packages, RFID tags on paper, glass, and metal packages may still be problematic and reduce recycling yields. Technical recyclability testing may be required for certain fiber package formats with RFID tags applied. Glass packaging with attached RFID tags may receive a Not Yet Recyclable label.

Eliminate the use of RFID tags when possible.

Product Application Limits for PE Film

Because of contamination concerns in the Store Drop-off recycling stream, product application can render a technically recyclable PE film as Not Yet Recyclable. The basis for this rule includes **collection concerns** (safety hazards, odor, mold, pests, etc.), **reprocessing concerns** (discoloration, odor in recycled material), and **recyclers' attitudes**. These limits also apply to PE films collected in Canada through curbside and drop-off collection programs. Work is ongoing to develop quantitative product residue limits.

The following product applications make a package ineligible for a Store Drop-off How2Recycle label.

- **Wet, moist, sticky, gooey, or oily**, including:
  - Condiments & dressings
  - Wet baby food & wet pet food
  - Dairy products
  - Refrigerated meats
  - Drinks containing sugar
  - Liquid soaps, detergents, & personal care products
- **Hazardous or potentially hazardous**, including medical waste, pesticides, & herbicides
- **Dirt or dirt-like**, including growing media & sand
- **Lacking strong end markets**, including salty snacks & chocolate products
- **Difficult or unreasonable for the consumer to prepare** as 'Clean & Dry' to be recycled via Store Drop-off.

How2Recycle

Product Application Limits

A product can limit a package's recyclability and may render a package Not Yet Recyclable, even when the package material is technically recyclable. Certain product applications impact reprocessing because of residue or present health and safety concerns. Similar packages may receive different How2Recycle labels depending on the degree and type of residue specific to the product application, just as similar products may receive different labels depending on their package's format and material. For example, a dairy product in a paper tub will be designated Not Yet Recyclable while a dairy product in a PP tub may be eligible for Widely Recyclable.

The How2Recycle team may ask for photos of the package contents and/or product samples to evaluate residue left behind in a package. When samples are requested we ask that you send the worst-case sample, the product that leaves behind the most residue. The sample should be sent in the final package or as close to final as possible. Always send physical documentation including the request number with the sample and send us the tracking number upon shipment.

Provide additional details when your package has direct contact with a product that:

- Leaves a **thick, sticky, or oily residue**
- Classifies as **flammable, corrosive, or highly reactive**
- Has **hazard warnings** about environmental or human exposure
- Is **cooked** (as in through a microwave or oven) in the package

Consumer Prep Rule

How2Recycle takes a balanced and common sense approach to determining whether a special instruction is appropriate to prepare a package properly for recycling. We seek to support packaging innovation and the recycling system with our instruction tab, while recognizing the importance of convenience and ease for consumers to recycle properly. We may request videos, photos, or physical samples to assess how a consumer may prepare the package for recycling.

If consumers have to take an unreasonable action, such as using tools and excessive force, to recycle a package properly, we will not provide additional instructions. Read the full description of the consumer prep rule.

Package formats **designated Not Yet Recyclable under the consumer preparation rule** include:

- Full body shrink sleeves on plastic containers that prohibit recycling and do not have a full length perforation
- High coverage paper labels on plastic containers that are easily peeled off by consumers
- Pressure sensitive labels on PE film that are contaminants to the PE recycling stream and are not easy to remove
- Packages that must be cut to be emptied, when that package format needs to be clean for recycling

Special actions that are clear, reasonable, and well-known and accepted by the general public to prepare the item for recycling, such as flattening corrugated boxes and removing lidding film, will be provided by How2Recycle.

Colored Plastic Packages

Disclose if any plastic components in your package are **black or dark colors** and submit a separate request for product variations that use a dark or black container. This does not apply when only the closure is black or darkly colored.

Dark colors can prevent a plastic package, including HDPE, PP, and PET from sorting properly in a MRF. **NIR testing is required for all rigid black plastic packages and may be required for additional dark colors.**

Rigid black and dark colored plastic packages that are not tested or do not pass testing as Preferred will receive a Not Yet Recyclable label. Dark color packages that pass testing are eligible for a more favorable recyclability category.

PET Packages

Always include the color of your PET packaging and if it is transparent or opaque. Clear material has the highest value as a recycled stream since it has the widest variety of end-use applications. **Clear, transparent blue, and transparent green PET bottles** are eligible for Widely Recyclable.

To learn more about how colors in plastic packages affect recyclability, check out the Color sections in the APR Design® Guide for each plastic type.

Closures & Seals

Closures and seals can impact the recyclability of your package and influence the consumer preparation instructions on your assigned label. Provide complete details about each type of closure and **list all closures and seals as separate package components**. Adhesive strips and glue do not need to be listed as separate components, but should be listed within the component it's adhered to.

If the closure contains **any PVC, metal, silicone, or other materials**, clarify how the consumer uses it and if you can separate it from the rest of the package.

Indicate **whether the consumer removes the closure during regular use** (i.e., twist-off cap or snap-on lid) **or** if it remains on the package during the use of the product (i.e., flip-top or disc caps).

If your package has a **tamper-evident seal**, provide the material composition and a brief description of its location (i.e., induction seals and neck bands).

If present, don't forget to include the **lidding film** in your label request. Depending on the end use, composition, and the container the lidding film is attached to, your assigned label may instruct consumers to "discard seal" in the label's instruction tab.

Plastic Packages

How2Recycle recommends following the APR Design® Guide for Plastics Recyclability and ensuring all additives, barriers, and coatings are Preferred by APR. As described in the guide, some common plastic additives are considered **workhorse additives** and are not known to impact plastic recycling and do not require technical recyclability testing.

Other additives and attributes may cause reprocessing issues. Provide details about all additives, barriers, and coatings present, such as:

- Active packaging (e.g. desiccants)
- Adhesives
- Barrier & tie layers (e.g. EVOH, PA)
- Coatings
- Degradability additives
- Fillers (e.g. $CaCO_3$)
- Foils & metallized layers
- Metallic inks & decorations

How2Recycle may request reprocessing and sortation testing for the above attributes and without testing, your package may receive a conservative label.

Flexible PE Films

When submitting a request for a package with a PE film component, don't forget to also include these details:

- Resin types (i.e., LDPE, HDPE, LLDPE, MDPE)
- Fillers and the film density when fillers are present
- Compatibilizers and their loading
- Overall density of the structure when PE attachments (i.e., labels) are present

Paper Coatings & Additives

Paper coatings and additives that perform different functions, such as adding barrier properties, sealability, and scuff resistance, may cause reprocessing issues and reduce overall yields.

Include detailed information about all present:

- Additives (i.e. wet strength and grease-resistance additives)
- Coatings (i.e., clay, UV, heat seal, & cold seal adhesive)
- Other alternative & repulpable coatings
- Laminates, extrusions, & poly coatings
- Metallic layers & decorations
- Liners
- Fluorinated or polyfluoroalkyl substances, chemicals, coatings, & additives (PFAS)

Also include in your request if a coating is on **one or both sides** of the paper component and if it is **flood coated or pattern applied** as these factors influence the recyclability assessment.

See the page on Fiber Testing for more information regarding the testing required for paper packaging with specialty coatings.

Attachments on Paper Packages

Attachments on paper packaging can reduce overall recycled material yields and create wear on MRF and recycler equipment. While some attachments are tolerated, others need to be removed before recycling. This will affect the package's overall recyclability and may influence the consumer preparation instructions on your assigned label.

Provide detailed information about all components present, including:

- Blister trays
- Fasteners & other plastic attachments
- Hangers & handles
- Metal cutters, spouts, & other attachments
- Plastic, glassine paper, or other material windows
- Seals & stickers

To design a paper package for Optimal Recyclability, How2Recycle recommends removing non-paper attachments or moving to all paper attachments.

Section

4

Applying How2Recycle Labels

Quick Links

- Artwork Rules
- Minimum Size
- Messaging

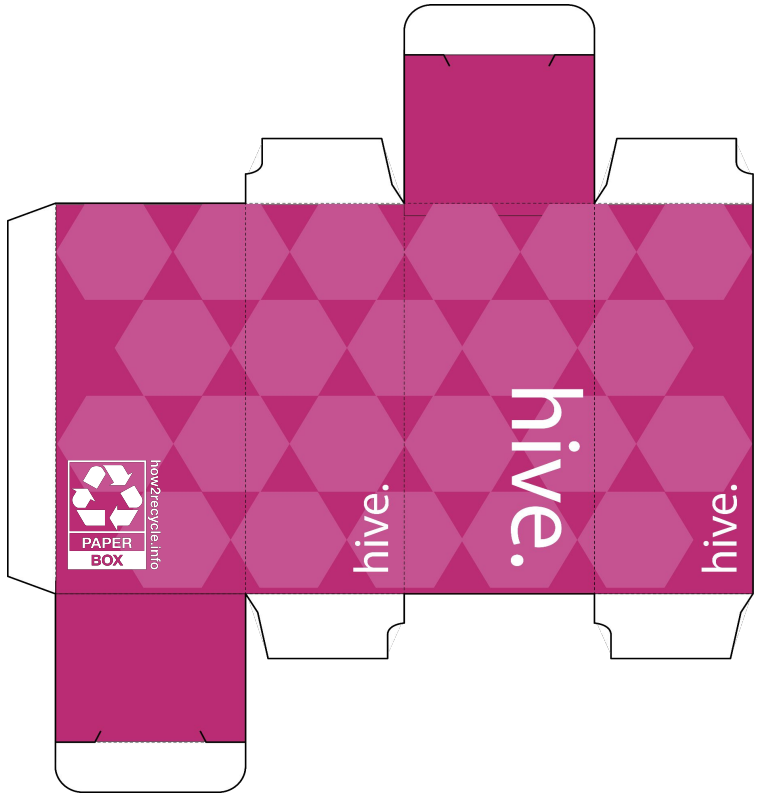
On Pack Label Rules

Label Checks

- ❑ The label assigned in the request is the same label on the proof.
- ❑ The label follows rules on sizing and color.
- ❑ The fonts in the label have not been changed.
- ❑ All parts of the label are present, including the instruction tab and URL.
- ❑ *If selling in multiple countries*, geographic qualifiers have been used and placed correctly.

Package Checks

- ❑ Label(s) are placed on the correct component(s).
- ❑ The How2Recycle label is easy to find and read.
- ❑ Only permitted sustainability messaging & the label are used.
- ❑ All on-pack claims are specific and clear.
- ❑ Qualifying statements regarding recyclability have been used if a Store Drop-off, Check Locally, or Not Yet Recyclable label was assigned.
- ❑ Duplicative chasing arrows and disposal instructions are not used.



Minimum Label Size Required

Always start with a larger label and scale down as needed without going below these minimums so all label elements are legible. Difficult-to-read and small labels can cause consumer confusion and frustration.

United States

Absolute smallest size: **0.475 in**

Canada & Dual US/Canada

Absolute smallest size: **15 mm**

Instruction tabs are not included in the minimum size requirement because tab sizes vary. Use only the **main label body** to measure.

Acceptable Color Formatting

Classic
Traditional black and white.
Most common

Inverted
White, or a single light color.
For darker packages

One Color
Single, solid dark color.
For lighter packages

Classic on Dark
Traditional black and white.
For darker packages

Faded Classic
Traditional black with a lightened shade of the package's color

The How2Recycle label colors should not be altered in any way other than the acceptable formats outlined here. The color format selected must produce **legible contrast of all parts of the label on your artwork**.

Unacceptable Color Formatting

Do not **frame the label**. A border needed for printing is permissible.

Do not use **more than two colors**.

The **background color** should only be transparent, white, or a lightened shade of the package.

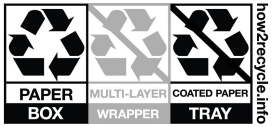
Do not use colors that produce an **illegible color contrast**.

Do not **invert isolated parts of the label**, such as only the instruction tab.

All of the above labels are examples of **unacceptable** color formatting and should not be used in your artwork.

Limits on Label Format

The How2Recycle label and iconography are registered trademarks. Modifying the label design, format, and language is strictly prohibited.



Do not remove, shuffle, or de-emphasize any part of the label.

Do not change text or fonts inside the label.

Do not separate tiles or split the label.

Do not use the outdated horizontal label.

Do not remove label elements including the URL, qualifiers, or instruction tab.

Do not stretch or compress the label or label text.

How2Recycle

International Labeling

Geographic qualifiers must be legible on your package and centered above the label tile. The qualifier text cannot be smaller than the smallest text in the How2Recycle label.

How2Recycle is for use in the United States and Canada.
The table below outlines label options based on where you sell your product.

Sold in US Only	Sold primarily in US, but also sold elsewhere	Sold in US, Canada & elsewhere (Recyclability of the package is **the same** in US & Canada)	Sold in US, Canada & elsewhere (Recyclability of the package **differs** in US & Canada)	Sold in Canada Only	Sold primarily in Canada, but also sold elsewhere
					
Geographic qualifier **not required**	*US ONLY* geographic qualifier **required**	*USA & CAN* geographic qualifier **required**	*USA & CAN* geographic qualifiers **required**	Geographic qualifier **not required**	*CAN ONLY* geographic qualifier **required**

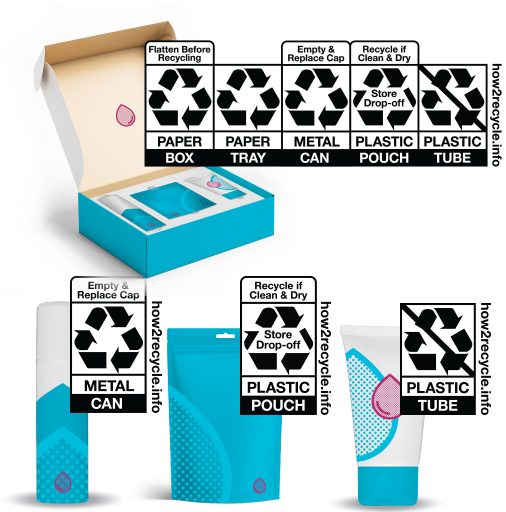
How2Recycle

Label Placement

Every component referenced in the assigned How2Recycle label must be featured on pack. Unprinted components should be referenced on the printed component it is contained within or attached to.

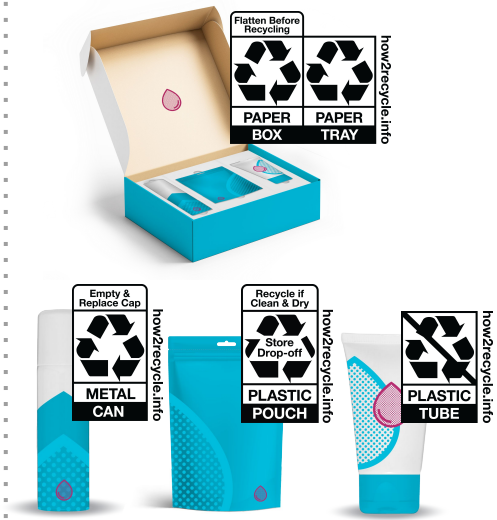
Best format

Label all components on the outermost & all printed components individually



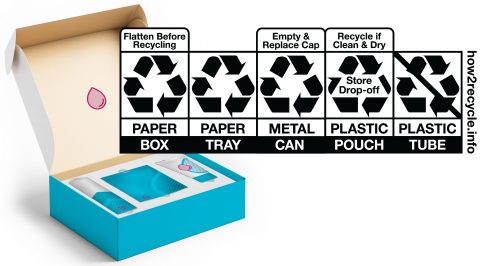
Good format

Label all printed components individually



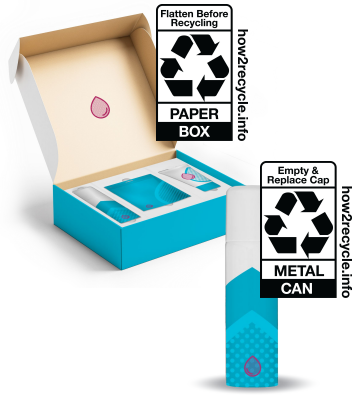
Discouraged but allowed format

Label all components on the outermost component



Not permitted format

Not labeling all components



How2Recycle

Label Location

The **label must be featured where the consumer will encounter it** during product use or be able to locate it quickly at the time of disposal.

While not encouraged, it is permissible for the product to cover the label as long as it becomes fully visible and is not distorted once the package is open. Ensuring that the consumer spots the label naturally while experiencing the package should be prioritized when determining label placement.

Best location
Top or front of package

Good location
Side or back of package

Discouraged but allowed location
Bottom of package

Permitted Sustainability Messaging

The How2Recycle label should be the only package recyclability messaging; all other recyclability-related claims should be removed unless required by law.

Material Content Claims

How2Recycle encourages the use of recycled content and source certifications to guarantee and communicate responsible sourcing measures. Recycled content messages should be clear, specific, and cannot use chasing arrows that could lead to potential confusion or conflict with the How2Recycle label. Make sure messaging about the contents of the product and package are clearly distinguished.

Digital Labeling

With approval from the How2Recycle team, members can include the assigned How2Recycle label within a digital QR code or on their website as soon as the label is featured on pack. **Only featuring the How2Recycle label in a digital format is prohibited**. Members are responsible for updating any digital label if the assigned How2Recycle label changes.

International Labeling

As How2Recycle is applicable only to the US and Canada, we do not interfere with international messaging and symbols. We recognize that other countries may require specific claims and information or use other labeling, such as the Australasian Recycling Label (ARL), the On-Pack Recycling Label (OPRL), and the Triman Label.

Prohibited Sustainability Messaging

Using prohibited sustainability messaging will cause your artwork proof to be rejected. These are some examples that should not be printed on pack.

Generic & Misleading Claims

Use of "100% recyclable", "fully recyclable", "completely recycle", or "infinitely recyclable" claims can be deceptive to consumers and is prohibited. Even Widely Recyclable items have elements (i.e. inks, adhesives, and most incidental attachments) that are not recycled and experience yield loss during the recycling process. Generic and misleading graphics are also prohibited.

Unqualified Claims

Do not use generic "recyclable" claims for packages with Store Drop-off, Check Locally, or Not Yet Recyclable labels. Store Drop-off and Check Locally labels are qualified recyclability claims and omitting the qualifier is prohibited.

Duplicative Statements

Do not include duplicative recycling instructions, claims, or images, including chasing arrows, in addition to the How2Recycle label. It is permissible to include information about product disposal when the product is not already referenced in the How2Recycle label.

Resin identification codes (RICs) on plastics, if used, should only appear in an equilateral triangle and not the chasing arrows symbol.

Permitted Pre-qualification Uses

Material Manufacturer & Converter members of How2Recycle are eligible to receive pre-qualification letters and to use the How2Recycle label for marketing purposes. All communication materials created by members must follow the artwork rules in the Guidelines for Use and be reviewed and approved by How2Recycle prior to publication.

Share your pre-qualification letters with your customers

Pre-qualification letters facilitate the transfer of information from your customers to How2Recycle. Your customers should attach pre-qualification letters directly to the label requests for their final packages on the Member Platform.

Pre-qualify innovative packaging

Innovative packages often require testing to be eligible for a favorable recyclability category. In most cases, as determined by How2Recycle, if your package undergoes testing for pre-qualification, that testing applies to your customer's package.

Qualify that the How2Recycle recyclability assessment may change

Include qualifiers on marketing materials and tell your customers that not all package uses will receive the same recyclability assessment. Additional components, product applications, or other attributes may change their package's recyclability.

Market your pre-qualified package in the US & Canada

How2Recycle is for use in the United States and Canada. Request a dual US and Canada label to feature on your marketing materials and use geographic qualifiers if your package is sold in additional countries.

Collaborate with other How2Recycle members

Work with partners and your customers to pre-qualify complete packages when your component is not eligible for its own pre-qualification letter and label.

Stay In Touch

Send us an email, check out our websites, and follow us on social media!

how2recycle@greenblue.org

how2recycle.info

greenblue.org/projects/how2recycle

@How2Recycle_

@How2Recycle

@How2Recycle® (H2R)

How2Recycle is a project of GreenBlue, a 501(c)(3) environmental nonprofit based in Charlottesville, Virginia, United States.

How2Recycle

Appendix

We created this section of the Guidelines for Use for our members who want to dive deeper into work impacting the How2Recycle label and recyclability.

Quick Links

Packaging Under Review

Packaging Formats Under Review

Please continue reading to understand why certain packaging formats are under review for a potential upgrade in recyclability. We will inform members before an update to the recyclability designations goes into effect, which may occur later in 2024 or 2025.

Watch for Upgrade

- HDPE and PP squeeze tubes may be upgraded from Not Yet Recyclable to Check Locally in the future thanks to the collaborative efforts of The Tube Recycling Projects. Stakeholders including material convertors, brand owners, and additional organizations have joined forces in a pre-competitive space to move the industry towards plastic squeeze tube designs that will allow for future recyclability. While significant and compelling progress has been made to support the sortation, reprocessing, and end markets of this package format, access to recycling tubes has not yet reached the threshold to receive Check Locally labels. How2Recycle thanks all companies involved for engaging with us and for their shared commitment to bettering the disposal options for plastic squeeze tubes.
- Additional PP rigid plastic formats may be upgraded from Check Locally to Widely Recyclable in the US. This may include formats such as beverage cups, additional single-serve cups, and thermoform trays, which are already Widely Recyclable in Canada. This is a result of upward trends in the end market strength and collection of PP.
- PET beverage cups may be upgraded from Check Locally to Widely Recyclable due to upward trending access in the United States. This applies to transparent PET. This format is already Widely Recyclable in Canada.
- Composite cans with steel bottoms may be upgraded from Not Yet Recyclable to Check Locally in the US thanks to data provided by members and third parties which shows the steel bottom may be positively sorted, collected for recycling by reclaimers, and reprocessed into new material. How2Recycle continues to work with our members and third parties to develop a label which will clearly communicate the unique recyclability of this format and ensure that all thresholds for recyclability are met, such as access.

Packaging Formats Under Review

Please continue reading to understand why certain packaging formats are under review for a potential downgrade in recyclability. We will inform members before an update to the recyclability designations goes into effect, which may occur later in 2024 or 2025.

Watch for Downgrade

- Steel aerosols and aluminum aerosols are under review for potential downgrade from Widely Recyclable to Check Locally in the US based on access to recycling these package formats. While end markets for aluminum and steel materials are generally strong, access for the category of aerosols may no longer meet the criteria for Widely Recyclable.
- Certain flexible PE formats may not be eligible for a Widely Recyclable label in Canada due to more restrictive community language around collection based on package format and product application. The formats include items such as stand-up pouches, metallized film, wrappers, and other food packaging. Formats such as grocery store, bread, and newspaper bags remain widely collected. Further investigation and interpretation of access data is needed and underway.
- Aseptic and gable top cartons may be downgraded from Widely Recyclable to Check Locally due to ongoing work to harmonize and define access to recycling this package format.
- PP single-use coffee pods remain under review by How2Recycle for a downgrade to Not Yet Recyclable. In addition to end market challenges, access to recycling these formats is decreasing due to more communities prohibiting their collection for recycling. How2Recycle may decline to label new requests or assign Not Yet Recyclable labels.