

Eco Mark Product Category No.140

**“Refill Containers and Resource Saving Containers
Version 1.11”
Certification Criteria**

—Applicable Scope—

- A. Refill Containers
- B. Resource Saving Containers (Edible Oil Containers)
- C. Container for Sterile-Packed Cooked Rice
- D. Lightweight PET Bottles (Container)
- E. PET Bottles (Containers) Using Reprocessed Materials in Kitchen Utensils and Containers/Packages
- F. PET bottles (containers) using plant-based plastics
- G. Plastic containers and packaging using recycled plastic
- H. Plastic containers and packaging using plant-based plastics

Established: July 2, 2007
Last revised: February 1, 2017
Expiration: June 30, 2022

Japan Environment Association
Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

Eco Mark Product Category No.140
“Refill Containers and Resource Saving Containers Version 1.11”
Certification Criteria
H. Plastic containers and packaging using plant-based plastics

Japan Environment Association
Eco Mark Office

1. Purpose of establishing criteria

Omitted

2. Applicable Scope

The criteria shall cover plastic containers and packaging that function to preserve the quality of content (such as extension of the quality preservation period). While PET bottles designated by the ordinance based on “Act on the Promotion of Effective Utilization of Resources” (designated PET bottles) are covered by Classifications D. to F. in this product category, any PET bottle other than the designated PET bottles is covered by this product category. However, if the Eco Mark product category is also set on the content, the PET bottle is treated as an individual package of said content and thus not included in the applicable scope of this product category.

3. Terminology

Omitted

4. Certification Criteria and Certification Procedures

To show conformance to the individual criteria item, the corresponding boxes in the Attached Certificates shall be checked/filled in, stamped with the applicant company seal and submitted.

4-1. Environmental Common Criteria and Certification Procedures

- (1) The containers and packaging using plant-based plastic shall meet all the following requirements a) to c).
 - a) The content of biobased synthetic polymer in the container and packaging shall be 25% or higher;
Laminated packaging materials shall have the bio-based synthetic polymer

content in containers and packaging of 10% or higher. However, when PET resin is used in plastic films, the bio-based synthetic polymer content in at least one layer of a plastic film (PET) shall be 20% or higher and that the bio-based synthetic polymer content in containers and packaging may be 3% or higher.

- b) For the plant-based plastic (raw resin), the applicant shall have the understanding of the supply chain from cultivation of plant materials to manufacturing of plant-based plastic (raw resin). Each process shall conform to the checklist in the Attachment 1;
- c) The Applicant shall have confirmed by the life cycle assessment (LCA) that for the plant-based plastic (raw resin), greenhouse gas emissions (CO₂ conversion) from raw material procurement to discarding/recycling does not increase, when compared with conventional resin that is to be replaced. Note that if any increase in the emissions is offset by the reliable carbon offset (such as purchasing clean electric power, etc.), the applied product shall also conform to this item

Note) In the case of container and packaging composed of an individual package and an outer package, apply the biobased synthetic polymer content rate with total weight of the individual package and outer package in one sales unit as a denominator.

[Certification Procedure]

a) Certificates indicating the calculated content of biobased synthetic polymers in the product shall be submitted. For the plant-based plastic (raw resin) thereof, measurement results of the biobased synthetic polymer content calculated with the method specified in ISO 16620-3, using measurement results of the biobased carbon content and element composition by the 14C method specified in ISO 16620-2 or ASTM D6866 shall be mentioned. Should there be any deviation of 10% or higher between the measurement results and the content of biobased synthetic polymer in the standard, a description of a reason(s) therefor shall also be included. The measurement results of the biobased carbon content shall be submitted as an attached document.

In addition, for appropriate maintenance of the content of biobased synthetic polymer after certification, any of the following certificates issued by a raw resin supplier (including a dealer) shall be submitted.

- An explanatory document stating that measurements of the content of biobased carbon will be regularly carried out, and that measurement results can be disclosed as per a request of the Eco Mark Office; and

- A certificate that the Applicant has been audited or certified by a third party for management of the content of the biobased synthetic polymer.

b) Certificates issued by a raw resin supplier (including a dealer) indicating the supply chain (flow diagram, etc. and including purification, fermentation, etc.) from the cultivation area (country, state, city, etc.) to manufacturing of plant-based plastic (raw resin), and status of conformance to the Attachment 2 shall be submitted.

c) Results of the LCA assessment of the plant-based plastic (raw resin) shall be submitted (reference to the existing paper, etc. is acceptable). If carbon offset is

adopted, data describing content of the carbon offset and reliability shall be submitted together.

- (2) In manufacturing the applying product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the “Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous materials in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the last five years from the date of application (whether there is any violation) must be reported. If there is any violation, it is necessary that proper remedies and preventive measures have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a certificate issued by the representative of the manufacturer of the applying product or the relevant plant manager (entry or attachment of a list of names of the Environmental Laws, etc.) must be submitted.

In addition, the applicants shall report whether there is any violation in the past five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (clearly indicating a series of communication);
- b. Following materials (copies of recording documents, etc.) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with roles, etc.);
 - 3) Bylaws stipulating retention of recording documents;
 - 4) Recurrence prevention measures (future preventive measures);
 - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

- (3) Plastic materials to be used in the containers and packaging shall not be added with plastics that contain halogen in polymer backbone as a prescription constituent.

[Certification Procedure]

Compliance with the NL regulations shall be indicated in the Attached Certificate

- (4) Plastic materials to be used in the containers and packaging shall not be added with plastics that contain halogen in polymer backbone as a prescription constituent.

[Certification Procedure]

Whether any halogen element is added or not in polymer backbone shall be indicated in the Attached Certificate.

- (5) For containers and packaging for food, plastics additives such as the plasticizers, colorants, stabilizers, lubricants, etc. used in the plastic materials shall comply with the positive list of the Japan Hygienic Olefin and Styrene Plastics Association, etc.

[Certification Procedures]

A certificate to show that plastic additives such as the plasticizers, colorants, stabilizers, lubricants, etc. used in the plastic materials shall comply with the positive list of the Japan Hygienic Olefin and Styrene Plastics Association, etc., shall be submitted.

- (6) Adhesives to be used for the containers and packaging shall comply with “voluntary regulations on adhesives for food package materials, etc.” (NL regulations) by the Japan Adhesive Industry Association

[Certification Procedures]

Compliance with the NL regulations shall be indicated in the Attached Certificate.

- (7) The containers and packaging for food shall meet the requirement of harmful substances described in “the Standards and criteria for Food and Food Additives, etc. (Ministry of Health and Welfare Notice No. 370, 1959)”

Containers and packaging for anything other than food shall meet the requirement of harmful substances defined in the same standard criteria or ISO-8124-3, etc.

[Certification Procedures]

The test results to certifying that the products do not contain the corresponding harmful substances shall be submitted.

4-2. Quality Criteria and Certification Procedures <common>

- (8) Quality of containers of containers and packaging shall conform to the industrial voluntary standards or the manufacturer’s own standards.

[Certification Procedures]

A certificate to show the compliance with the appropriate standards shall be submitted

5. Considerations <common>

In manufacturing products, it is desirable to consider the following, although they are not requirements for certification. The conformance to the individual criteria item shall be indicated in Attached Certificates.

- (1) Containers and packaging shall have a mechanism related to discharge control of wastes from recovery/recycling
- (2) Plastic materials to be used in a container/package shall not be a disincentive for recycling after use.

6. Product Classification, Indication and Others

- (1) A product classification (application unit) shall be by a brand name.
- (2) In principle, Eco Mark shall be indicated on the body of the container and packaging, etc. For an indication method, “Guide to Eco Mark Usage” shall be followed and the type B indication shall be performed. In addition, when application for Eco Mark product certification/usage is made, a location to indicate Eco Mark and content of the indication shall be submitted.

The certification information including the following (1) to (3) shall be indicated adjacent to the mark. Note that when certain conditions are met in accordance with “Guide to Eco Mark Usage”, indication of only the mark may be accepted (B type exception).

- (1) The statement of “Eco Mark” or a designation of being Eco Mark product that is defined in “Guide to Eco Mark Usage”, Section 7
- (2) The environment information indication, or statement that the container or package is under certification.

“Container: Plant-based plastic ○%” (When any material other than plastic is used concurrently, an expression such as “Container: Plant-based plastic ○% in plastics” or the like shall be included so that a member in which the Plant-based plastic is used can be defined) or any statement equivalent thereto.

For the ○%, state biobased synthetic polymer content rate (round off to the closest whole number). If biobased synthetic polymer content rate differ in a same product classification, the lowest value in the same product classification may be stated or “○○% or higher” may be stated with the

lowest value. Alternatively, a reference value may be set to the lower limit or a numeric value that can be easily handled. Note that “plant-based plastic” can be replaced with a name of polymer (plant-based PET, etc.).

For laminated packaging materials, however, provided that a member in which plant-based plastic is used is defined by stating constituent materials of a packaging material adjacent to Eco Mark, etc., biobased synthetic polymer content rate in a plastic film may be stated. The statement of the environment information indication in this case shall be “Container: Plant-based plastic ○% in XX” or an expression equivalent thereto. For XX, a polymer type or member, etc. shall be stated so that a member in which plant-based plastic is used can be seen.

- (3) Indication of Eco Mark certification number and license holder name (It is also acceptable to select and indicate either one of them.)

[examples of basic indications]



エコマーク
容器:植物由来プラスチック○%
12345678

※when selecting Eco Mark certification number in (3) above.

[For laminated packaging materials]

An example of a combination of material indications based on Act on the Promotion of Sorted Garbage Collection and Recycling of Containers and Packaging

(biobased synthetic polymer content rate of a container and package shall be stated in ○%.)



エコマーク
容器:植物由来PET○%



PET, PE

○○○株式会社

※when selecting Eco Marc contactor in (3) above (may not to be adjacent to Eco Mark if being displayed on the same package).

(Biobased synthetic polymer content rate of a plastic film (PET) shall be stated in ○%.)



エコマーク認定容器
PET フィルムに植物由来プラスチック○%



○○○株式会社

※when selecting Eco Marc contactor in (3) above (may not to be adjacent to Eco Mark if being displayed on the same package).

An example of a combination of a laminated packaging material and material indication

(biobased synthetic polymer content rate of a container and package shall be stated in ○%.)



エコマーク
容器:植物由来 PET○%
12345678

包装材料の材質
袋:PET, PP

※when selecting Eco Mark certification number in (3) above.

(Biobased synthetic polymer content rate of a plastic film (PET) shall be stated in ○%.)



エコマーク認定容器
PET フィルムに植物由来プラスチック○%
12345678

包装材料の材質
袋:PET, PP

※when selecting Eco Mark certification number in (3) above.

An example of a combination of container and packaging which is composed of an outer bag and an inner bag of a laminated packaging material, with a material indication

(Biobased synthetic polymer content rate of an inner package shall be stated in ○%.)



エコマーク
内袋に植物由来PET〇%
12345678

包装材料の材質
内袋:PET, ONY, PP, アルミ箔
外袋:PET, PP, アルミ箔

※when selecting Eco Mark certification number in (3) above.

(Biobased synthetic polymer content rate of an inner package (plastic film) shall be stated in 〇%.)



エコマーク
内袋(PET)に植物由来プラスチック〇%
12345678

包装材料の材質
内袋:PET, ONY, PP, アルミ箔
外袋:PET, PP, アルミ箔

※when selecting Eco Mark certification number in (3) above.

[example of B type indication]



エコマーク認定容器

〇〇〇株式会社

※when selecting Eco Marc contactor in (3) above (may not to be adjacent to Eco Mark if being displayed on the same package).

October 1, 2013	Addition of Category C, D and E (Version 1.7)
June 1, 2015	Revised (Category A-D) (Version1.8)
June 1, 2016	Addition of Category G and H (Version 1.9)
September 16, 2016	Addition of Category F (Version1.10)
February 1, 2017	Revised (Category D 4-1-1(1) and 5, Category E 5, and Category H 3: Version.11)
June 30, 2022	Expiration

The Certification Criteria for the Product Category will be revised when necessary.

Checklist of Traceability of Plant-based Plastic (Raw Resin)

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
1	Prevention of global warming, conservation of the natural ecosystem	Hasn't the farm land where plants are cultivated been converted from forests in the recent ten years?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	<input type="checkbox"/> Confirmed the laws and regulations concerning the land conversion for the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.):
2	Conservation of the ecosystem	If the Applicant uses the genetically engineered crop as a raw material, has the Applicant assessed ensuring of safety?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No/ <input type="checkbox"/> Not applicable (Not used)	<input type="checkbox"/> Confirmed the laws and regulations concerning genetically engineered crop on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system:

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
					<input type="checkbox"/> Others (Describe specifically.):
3	Prevention of land acidification/nutrient enrichment/water contamination	Has the Applicant gained the understanding of usage conditions of fertilizers/agricultural chemicals in the main cultivation area of plants? Isn't any agricultural chemical regulated under the "Stockholm Convention on Persistent Organic Pollutants" (POPs Treaty) used?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	<input type="checkbox"/> Confirmed the laws and regulations concerning fertilizers/agricultural chemicals on the site <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.):
4	Appropriate water usage	Has the Applicant gained the understanding of usage conditions of water in the main cultivation area of plants?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	<input type="checkbox"/> Confirmed the laws and regulations concerning usage of water (limits on the amount of water) on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system:

