

Eco Mark Product Category No.128

**“Household Commodity Version1.25” Certification Criteria**

**H. Pet Supplies and Gardening Tools**

Japan Environment Association

Eco Mark Office

**1. Purpose of Establishing Certification Criteria**

Commodities consist of various products, ranging broadly from kitchen utensils to tableware, home and living supplies, etc. They are the most closely related daily-use products to consumers. Setting an Eco Mark Category for such a group of commodities to recommend eco-friendly products within the category to consumers would therefore contribute enormously to reducing environmental impact in daily living, as well as enhance the environmental awareness of consumers. For this reason, the establishment of this Product Category is considered to have vast environmental significance.

Under the Eco Mark program, the certification criteria of several current product categories have been established taking material into account, namely Product Category No.115 “Wooden Products Using Waste Wood, Thinned-Out Wood, Small-Diameter Logs, etc.”, No. 118 “Plastic Products Using Recycled Materials”, and No.124 “Glass Products”. This new Product Category was established by integrating the commodity products included in those product categories and adding tableware, kitchen utensils, footwear, and home and living supplies to cover a broad range of products.

Existed eight categories of the Eco Mark program cover kitchen utensils including sponges, coffee filters, cooking oil filters, rubber gloves, waste oil absorbers, draining filter bags, strainers, and triangle strainers for kitchen sinks. They have also been organized and integrated into this Commodity category. For these types of products, previous criteria were established from the environmental perspective of preventing discharge of water pollutants, using natural materials, and non-bleaching, but as a result of a general evaluation based on the new product lifecycle concept, they were reviewed also from the perspectives of effective use of resources and chemical substances this time.

As a specific example, Product Category No.5 “Absorbents for Used Cooking Oil” was established for the purpose of reducing waste by preventing the discharge of waste oil which causes water pollution and the use of recycled material, while in this Product Category, the effective use of thinned-wood and waste fiber (cloth, etc.) as unused material differing from recycled material was selected as a new criteria.

**2. Applicable Scope**

Applicable products of this Product Category are those shown in Table 1, selected out of the “Bird and animal breeding supplies (except cattle and poultry supplies)” and “Household gardening tools” covered by Standard Commodity Classification for Japan, issued by the Ministry of Public Management, Home Affairs, Posts and Telecommunications.

However, for products using electricity and products whose mass ratio of metal materials, leather materials, and stone that make up 50% or more of the total product mass are excluded.

Table 1 Applicable product classification

Classification number	Classification	Products applicable to each classification
	<b>Bird and animal breeding supplies (except cattle and poultry supplies)</b>	
	Bird and animal breeding supplies (except cattle and poultry supplies)	
85 81	Bird cages	
85 82	Bird breeding things	
85 89	Other	Pet sheets, Cat litters, Pet house, Pet diapers
	<b>Household gardening tools</b>	
	Household gardening tools	
85 42	Sprinkling cans	
85 43	Flower pots	
40 0341	Sprayers	Misters, Spray bottles
85 49	Other	Name tag, Banding ropes, Artificial grasses

### 3. Terminology

<b>Terms for the common criteria</b>		
Disposable products		Products not intended for repeated use while other products in the same area are used repeatedly with durability.
Reusable		Nature of products and packaging designed for repeated use for a certain number of times through recycling.
Recycling		Indicates material recycling. Does not include energy recovery (thermal recycling).
Prescription constituents		Components intentionally added with the purpose of providing specific characteristics to the product. Impurities which are inevitably mixed during the manufacturing process are excluded.
Plastic sheet		Plate-like thin plastic with 0.25mm and more thickness
<b>Terms for material</b>		
Recycled material		Materials made of post-consumer materials, pre-consumer materials, or a mixture of these. In this Product Category, includes waste fiber.
Pre-consumer material		Materials or defective products generated from disposal route of manufacturing process. However, excludes those recycled within the same process as the raw material (same plant).
Post-consumer material		Materials or products disposed after used as a product.
<b>Terms for paper</b>		
Percentage of waste		Weight percentage of waste pulp in pulp contained

paper in the pulp mixture	in product. Expressed by (waste paper pulp) / (virgin pulp + waste paper pulp) x 100 (%). However, the weight of the pulp is measured under the condition of containing 10% moisture. For materials with 100% yield such as pulp mold and cushioning made of cut waste paper, percentage of waste paper in pulp mixture is taken to be 100% regardless of the actual percentage.
Terms for wood	
Reused/Unused wood	Indicates the following: thinned wood, waste wood, construction waste wood, and less useful wood.
Thinned wood	Wood produced from work activities adjusting the individual density of the objective tree type according to the congested state of forest stand.
Waste wood	Used wood (used packaging material, etc.), remainder material generated in wood processing plants (shavings generated in plywood and lumber plants, etc, low quality chips not used as raw material for paper, etc.), and wood and wooden materials such as trimmed branches, bark, etc.
Construction waste wood	Wood and wooden materials disposed as waste in construction work such as dismantling of buildings, construction of new buildings, building extensions, renovation, and construction related to other work.
Less useful wood	Abandoned lumber in the forest, shrubs, tree roots, wood obtained from lumber damaged by disease, pests, disasters, bent or small diameter logs, etc. Also includes bamboo cut down in bamboo groves for the purpose of maintenance and management in environment preservation. Small diameter logs measuring less than 14 cm in diameter corresponding to “a” or “b” below must be certified as forests sustainably managed by an independent third party. a. Small diameter logs from logs felled from natural forests. b. Small diameter logs from logs produced by clear cutting, patch logging, and strip logging in plantation forests.
Waste plant fiber	Fiber made from agricultural residue (such as stalks that are usually disposed, etc.) generated in harvesting and manufacturing process of crop.
Wooden part	Actual wood (including plant fiber)
Terms for plastic	
Plastic	Materials made of single or multiple polymers, additives, fillers, etc. added to give characteristics
Polymer	Macromolecules, which are the main components of plastic.
Biomass	Biomass is a term originally used in ecology to describe the amount (mass) of living organisms (bio). In this criteria, it refers to resources that

	are organic matter derived from plants and animals, excluding fossil fuels.
Bio-based plastic	Plastics that are produced from bio-based synthetic polymer derived from renewable organic resources such as plants. In particular, plant-derived plastics are also called plant-based plastics. For example, polyethylene (PE), polyethylene terephthalate (PET), polylactic acid (PLA) and polytrimethylene terephthalate (PTT), etc. are offered in the form of bio-based plastics. *Bio-based plastic means plastic whose bio-based carbon content can be determined by 14C content measurement specified in ISO 16620-2 or ASTM D6866. Plastic made of bio-based synthetic polymer whose materials are plant.
Bio-based synthetic polymer	Polymer obtained through chemical and/or biological industrial process(es) wholly or partly from biomass resources.
Bio-based synthetic polymer content rate	Amount of biomass resource origin part in biobased synthetic polymer present in the product (or the portion specified in the certification criteria). Natural polymers such as starch are not included. This is defined in ISO 16620-1 3.1.5. (original :biobased synthetic polymer content: amount of biobased synthetic polymer present in the product.)
<b>Terms for glass</b>	
Glass cullet content	Percentage of glass cullet in the whole glass materials used in a product. i.e. Glass cullet content = Glass cullet/Whole glass materials (per product), (materials are expressed in mass)
Cullet	Glass materials recycle-processed (sorting, elimination of foreign bodies, etc.) from waste glass
<b>Terms for fiber</b>	
Unused fibers:	Fibers using unused materials such as cotton linters, staples produced during spinning (thread that cannot be used as the same grade, or ones that require some processing when used), fibers extracted from waste plant fiber materials (banana fiber, etc.), etc.
Cotton linter:	Short cotton linters that start to protrude from the plant four to twelve days after flowering
Waste plant fiber material	Unused plant fibers including cane, etc., which are usually wasted, such as agricultural residue generated in harvesting and manufacturing process of crop.
Recycled fibers:	Fibers recycled from pre-consumer and post-consumer materials. Depending on the recycling method, there are reclaimed fibers, recycled polymer fibers, chemically recycled fibers and other recycled fibers (fibers directly recycled

	from recovered fiber by twisting, cutting, tearing, etc.).
Recovered fibers:	Waste fiber products including used clothing that have become unnecessary. It refers to both "wasted clothing", the used clothing and used cloth material collected from homes and plants. This term also means "wasted fibers", which are generated from manufacturing processes such as thread wastes from a weaving mill and cutting wastes from a sewing plant.
Reclaimed fibers:	Fiber which returned to flocculating fiber by raveling a recovered fiber of pre-consumer and post-consumer material with Rag machines
Recycled polymer fiber:	Fibers recycled from synthetic resin or regenerated materials of synthetic resins in a polymer structure using regenerate flakes or pellets.
Chemically recycled fiber:	Fibers consisting of polymer from polymerizing monomers obtained by depolymerizing the polymers of regenerated materials of synthetic resin, or synthetic fibers such as nylon and polyester.
Fiber-based recycled fibers	Recycled fibers whose main contents are recovered fibers from recycled polymer fibers or chemically recycled fibers. Although recovered fibers from pre-consumer and post-consumer materials may be considered materials, they shall only be applied in the event of using recovered fibers from post-consumer materials to be recycled. If major materials of regenerated materials, which are put through a series of recycled processes for the formation of fibers are recovered fibers, even when only a part of the regenerated materials include waste plastic, the total amount of regenerated materials included can be considered recovered fiber-based.
Bio-based synthetic fiber	Synthetic fiber whose material is bio-based plastic.

#### 4. Certification Criteria and Certification Procedure

To show conformance to the individual criteria item, the respective Attached Certificates shall be submitted.

##### 4-1. Environmental Criteria and Certification Procedure

##### 4-1-1. Common Criteria and Certification Procedure

(1) In manufacturing the applied 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 substances 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 past five years from the date of application (whether there is any violation) must be reported. If there is any violation, proper remedies and preventive measures shall 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 business of manufacturing the applied 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).

- (2) Products shall not increase waste (products shall not be disposable). However, this requirement does not apply to bird and animal bleeding supplies.

[Certification Procedure]

The use of the applied product shall be indicated in the Attached Certificate.

- (3) Products shall consist of less than 50% metal for the total product mass.

[Certification Procedure]

The total mass of metals used in the applied products shall be indicated in the Attached Certificate.

- (4) Products shall be shipped in the unpackaged state or in simple packaging at the retail stage. Material labeling of plastic materials used for packaging shall conform to JIS K 6899-1:2000. However, labeling can be omitted in accordance with the standards on ID marks in the “report developed by the Package Labeling Review Committee” (Ministry of Economics, Trade and Industry) such as “labeling for plain containers”, “labeling for containers with physical restrictions of display space, etc.”, “labeling conditions and methods for multi-layer containers, etc.”, “labeling for packaging printed with company/brand name”, and “labeling on

export products”.

[Certification Procedure]

The packaging state in the retail stage of products, packaging material used (content rate of recycled materials), material labeling state shall be indicated in the Attached Certificate. (Drawings and photographs can be used to supplement description). If material labeling is omitted, the reason shall be indicated.

- (5) Plastic materials used for packaging shall not use plastics containing halogens in the polymer backbone.

[Certification Procedure]

For packaging, use or not of any plastics containing halogens to the polymer backbone shall be indicated in the Attached Certificate.

- (6) The product shall not use antimicrobial agents as far as possible. In the case of use, the product shall be certified by the SIAA Mark of Society of Industrial technology for Antimicrobial Articles or the SEK Mark of Japan Textile Evaluation Technology Council, etc.

[Certification Procedure]

Compliance with this item shall be indicated in the Attached Certificate. In the case of using antibacterial agents, documents certifying SIAA Mark of Society of Industrial technology for Antimicrobial Articles, or SEK Mark of Japan Textile Evaluation Technology Council, etc. shall be submitted.

#### 4-1-2. Material criteria and Certification Procedure

Materials of which the product is composed shall meet the material criteria specified below. However, the following material criteria shall not apply to small accessories (screws, and other small parts required by the product function) and (14) shall apply to adhesive and the other material criteria shall not apply to adhesives.

##### A. Paper

- (7) Percentage of waste paper in the pulp mixture shall be above 70%.  
For “pet sheets and cat litter among products for breeding birds and animals”, this criteria does not apply, but to 4-1-3(38).
- (8) The coating amount on coated printing paper shall be 30 g/m<sup>2</sup> or less on both sides. However, the maximum amount per side shall be 17g/ m<sup>2</sup>.
- (9) The brightness of uncoated printing paper shall be about less than 70%.
- (10) Addition of fluorescent whitening agents as a prescription constituent shall be minimized.
- (11) Chlorine gas shall not be used in the bleaching process of pulp.

[Certification Procedure]

Certificates issued by the paper manufacturer shall be submitted. For (7) and (8),

the waste paper pulp content, and specific coating amount (numerical value) on either and both sides shall be indicated. Documents indicating the results of brightness tests by the Hunter method or based on the ISO whiteness (diffuse blue reflectance factor) shall be submitted. These documents shall indicate the specific whiteness value for the test results, whether florescent whiteners are added. If added, the amount used in the documents submitted.  
Whether chlorine has is used in the pulp whitening process shall be indicated.

#### B. Wood

(12) The percentage of reused/unused wood or waste plant fiber provided by terminology as materials for wooden parts shall be 100% (mass ratio). Less useful wood with small diameters shall satisfy Attachment 1 for forest certification if corresponding to “a” or “b”. For “pet sheets and cat litter among products for breeding birds and animals”, not this criteria but 4-1-3(38) is applied.

(Note) The mass percentage means the mass ratio of the product or each material at the air dried state<sup>\*1</sup> or at the point of constant mass<sup>\*2</sup> under the condition of a temperature of 20±2°C and humidity of 65±5%.

<sup>\*1</sup>: Indicates leaving in a well-ventilated room for seven days or more.

<sup>\*2</sup>: Change is less than 0.1% when mass is measured every 24 hours.

<sup>\*1</sup> is not applicable if lumber and logs are used. It can be applied when using wood corresponding to the water content percentage of 15% or below in domestic and overseas public dried material water content percentage criteria.

#### [Certification Procedure]

Documents issued by the raw material vendor certifying that the raw material is reused /unused wood or waste plant fibers shall be submitted. If there are multiple vendors, a list of the vendors and list of certification of the top 10 vendors in terms of volume of material traded shall be submitted.

If using thinned wood as the material, a certificate of origin that includes information on the place of production, type of tree, and year of planting shall be submitted with photographs of the forest concerned (showing clearly that the forest stand has been thinned). The thinning percentage and how many times the forest stand has been thinned, including the most recent thinning shall also be indicated if possible.

If using less useful wood, the following information shall be submitted. At the same time, official documents stating that the forest has been certified as sustainable by a third party shall be submitted.

- Type of forest (natural or man-made, etc.), place of production, type of tree, and year of tree planting if man-made forest.
- Under what conditions was the wood produced (damaged by disease/pests, damaged by disaster, bent or narrow trees, etc.). For small diameter log, indicate logging method and tip end diameter.

If using bamboo as the raw material in less useful wood, certificates indicating the following information and photographs/maps of the surroundings of the bamboo grove shall be submitted.

- Type of bamboo, place of production, surrounding conditions, and description that logging is carried out for the purpose of appropriate maintenance and management in environment preservation, as well as management plans and quantity.



- (13) Products shall not use wood preserving agents (wood termicides, preservatives, pesticides, and fungicides) as prescription constituents.

[Certification Procedure]

Whether termicides, preservatives, and pesticides are used as prescription constituents shall be indicated in the Attached Certificate.

- (14) Regarding products used indoors, no emissions of toluene or xylene shall be detected at product shipment. "No emissions detected" means less than the minimum value measured by JIS A 1901. "Measuring methods for emission of volatile organic chemicals (VOC), formaldehyde and other carbonyl compounds—small chamber method."

[Certification Procedure]

Results of tests prescribed in JIS shall be submitted. The test method shall be based on JIS A 1901. However tests can be exempted for products not added with toluene and xylene as prescription constituents.

- (15) For products used indoors and using adhesive or paint, emissions of formaldehyde from the product, wood material, adhesive or paint shall be of the F\*\*\*\* grade in accordance with JIS or JAS, or falling outside the scope of regulations by the Ministry of the Land, Infrastructure and Transport. The products should meet the numerical criteria of "a" or "b" below. However, this item is not applied to "incense stick".

- a. The amount of Formaldehyde emissions measured by JIS A 1460 "Building boards Determination of formaldehyde emission -- Desicator method" shall be below 0.3 mg/l for average value and below 0.4 mg/l for maximum value.
- b. The emission rate of formaldehyde measured by JIS A 1901 "Determination of the emission of volatile organic compounds and formaldehydes for building products -- Small chamber method" shall be less than 5µg/(m<sup>2</sup>-h).

[Certification Procedure]

Results of tests prescribed in JIS A 1460 or JIS A 1901 or tests by methods prescribed in specific JIS or JAS criteria shall be submitted to indicate that standard values are met. For materials and products permitted to be labeled F\*\*\*\* grade in accordance with JIS and JAS, documents certifying this or copies of such documents can be submitted in place of test results. For materials and products authorized as falling outside the scope of regulations by the Ministry of Land, Infrastructure and Transport, documents certifying this or copies of such documents can be submitted in place of test results. For materials and products permitted to be labeled as using non-formaldehyde adhesives by JAS, documents certifying this or copies of such documents can be submitted in place of test results.

### C. Plastic

- (16) Mass ratio of recycled polymer in the total raw material polymer of the product shall be over 50% for products made of post-consumer materials as the raw

material polymer. However, for products made of pre-consumer materials as the raw material polymer, mass ratio of recycled polymer made from pre-consumer materials in the total raw material polymer of the product shall be 60% or more.

For film products, mass ratio of recycled polymer in the total mass of raw material polymer shall be 40% or more.

For synthetic paper, mass ratio of recycled polymer in the total mass of raw material polymer shall be 50% or more.

Products using bio-based plastic shall meet the criteria item (17) instead of this item

This criteria does not apply to “pet sheets and cat litter among products for breeding birds and animals” but 4-1-3(38) applies.

[Certification Procedure]

The mass ratio of pre-consumer materials and post-consumer materials making up the whole product shall be indicated in the Attached Certificate. Raw material certificates issued by the raw material supplier shall also be attached.

コメントの追加 [津崎1]: 日本語原本では重量割合だが、基準内容に沿って「質量割合」で訳出

(17) Products using bio-based plastic shall meet all requirements in the following a) to c).

- a) The content of bio-based synthetic polymer in the product shall be equal to or higher than 25%;
- b) Sustainability of biomass mixed into plastic as raw material shall meet the requirements of [Appendix 1\(a\)](#) “Sustainability checklist of bio-based plastics (raw resin)” and the supply chains of the biomass shall be identified. If the biomass material has underwent third-party audit or certification for sustainability (an international sustainability certification for plastics, etc.), the result of audit or certification may be submitted as evidence instead of [Appendix 1\(a\)](#).
- c) It shall be confirmed through life cycle assessment (LCA) that the bio-based plastic (raw resin) does not cause an increase of GHG emissions (in terms of CO<sub>2</sub>) throughout the product life cycle in comparison with a resin to replace with.

[Certification Procedure]

a) Certificates indicating the calculated content of bio-based synthetic polymers in the product shall be submitted. For the bio-based plastic (raw resin) thereof, measurement results of the bio-based synthetic polymer content calculated with the method specified in ISO 16620-3, using measurement results of the bio-based 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 bio-based synthetic polymer in the standard, a description of a reason(s) therefor shall also be included. The measurement results of the bio-based carbon content shall be submitted as an attached document.

In addition, for appropriate maintenance of the content of bio-based 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

bio-based 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 bio-based synthetic polymer.

- b) An applicant shall submit documents on the source of biomass material (a cultivation area (country, state, city, etc.), a generation process of waste and residues, etc.), a manufacturing flowchart (of raw resin) (describe the name of manufacturers of fundamental chemicals (monomers), polymers, etc.), and checklists or an evidence of a third-party audit or certification.

To the application for Eco Mark certification of products containing bio-based plastics or biomass materials that have never been certified for use, Eco Mark Office may request the applicant (or the plastic supplier) to provide information on the chemical composition of the products (see [Appendix 1\(b\)](#)).

- c) An applicant shall submit the result of LCA conducted by a third-party. (An applicant shall provide the LCA result and the calculation conditions. If the applicant has underwent LCA under an international sustainability certification scheme for plastics, it may submit the data instead. The applicant may submit an academic paper published on a journal as an evidence as long as the same materials and/or manufacturing processes (sites) are mentioned in the paper as those used for the product applied for certification.).

- (18) HCFCs shall not be used during the manufacture of plastic materials.

[Certification Procedure]

Certificates issued by the manager of the plant manufacturing the plastic material shall be submitted.

- (19) Plastics shall not use plastics containing halogens in the polymer backbone.

[Certification Procedure]

Use or not of plastics containing halogens in the polymer backbone shall be indicated in the Attached Certificate.

- (20) Products shall not contain harmful substances such as heavy metal, etc. prescribed in laws and voluntary criteria of the industry concerned as prescription constituents.

Plastic additives shall conform to the positive list system of food utensils, containers and packaging, etc. In case of using color materials or the plastic additives which are not listed in the positive list for products other than food utensils, containers and packaging, those color materials or plastic additives shall meet the requirements described / prescribed in ISO 8124-3, laws or voluntary standards in the industry etc.

[Certification Procedure]

Certificates issued by the raw material supplier, or documents certifying results of tests performed by a third party testing center or public institution shall be submitted. The Applicant shall submit certificates that the plastic additives such as color materials, plasticizers, stabilizers, lubricants and other additives used in the plastic materials conform to the Positive List system of food utensils, containers and packaging, etc. With respect to color materials and plastic additives not listed in the Positive List, the results of tests to show the

conformance to the requirements described in ISO 8124-3, laws or voluntary standards in the industry, etc. shall be submitted.

- (21) The product shall not contain Polybrominated biphenyl (PBB), Polybrominated diphenylether (PBDE) or short-chain chlorinated paraffin (the number of chained C is 10 to 13 and contained chloride concentration is 50% or over) as a prescription constituent when flame retardant is used in plastics.

[Certification Procedure]

Compliance with this item shall be indicated in the Attached Certificate. In the case of using flame retardant, the applicant shall submit a document specifying the names of chemical substances.

#### D. Glass

- (22) Use of glass cullet shall be above 70% (weight percentage). It shall be above 20% (weight percentage) in heat-resistant glass.

[Certification Procedure]

The utilization rate of glass cullet and weight percentage of glass materials making up the whole product shall be indicated in the Attached Certificate.

- (23) Safety of the glass bottle (elution of total mercury, chromium, arsenic, selenium) shall be verified and explained. The elution of the subject materials shall conform to the requirement of the Environmental Standard concerning soil pollution (the Ministry of Environment Notice No.46, Aug.23, 1991).).

[Certification Procedure]

Purchasing methods and acceptance test standards (for cadmium, lead, mercury, chromium, arsenic, and selenium; tests may not be required for certain substances) of glass cullet shall be submitted.

- (24) Coloring agents used in products shall not contain cadmium, lead, mercury, chromium, arsenic, selenium and their compounds as prescription constituents.

[Certification Procedure]

Component list issued by the manufacturer of coloring agents or the Material Safety Data Sheet (MSDS) shall be submitted.

#### E. Fibers

- (25) Fibers shall make up less than 50% of the exterior of products.

[Certification Procedure]

The percentage of fibers making up the exterior of products excluding accessories shall be indicated in the Attached Certificate.

- (26) The mass ratio of waste fibers or recycled fibers in the total mass of the product shall meet the standard content rate shown in Table 2.

Products using bio-based plastic shall meet the criteria item (27) instead of this item. However this item is not applicable to “pet sheets and cat litter among

products for breeding birds and animals”, but 4-1-3(38) is applicable, instead.

Table 2. Standard Content Rate of Fiber Versus Total Mass of Product

Type of Fiber	Standard Content Rate		
Waste fibers	10% or more	70% or more for products using cupra fibers, and unused material shall be 10% or more	
Recycled fiber	Reclaimed fiber	10% or more	
	Recycled polymer fiber	50% or more	For the amount of resin content, Recycled polymer shall be 50% or more.
		25% or more	For fiber-based recycled fibers, the recovered fiber-based recycled polymer shall be 25% or more.
	Chemically recycled fiber	50% or more	Recycled monomer as monomer content shall be 50% or more.
		25% or more	For fiber-based recycled fibers, the recovered fiber-based recycled polymer shall be 25% or more.
	Other recycled fiber	50% or more	

[Certification Procedure]

The applicant or the manufacturer shall submit a certificate indicating the mass ratio of the fiber material. They shall submit a material certificate indicating the details of unused/recycled materials, recycled methods, content rate, management methods, etc. which was issued by the supplier of the fiber material. When criteria for fiber-based recycled fibers are applied, amounts of recycled materials received (amounts used) and their breakdown (recovered fiber, other waste plastic, etc.) and results from a recent year, as well as their receiving system and results of recovered fiber from post-consumer materials shall be reported. However, when Eco Mark-certified products are used for the cloth, the indication of the "Product brand name", "Certification number" and "Model (product number)" in relation to the cloth, etc. in the attached certificate may be substituted for a materials certificate.

(27) The product containing bio-based synthetic fiber shall meet all the following requirements, a-c.

a. The content ratio of bio-based synthetic polymer in the total mass of the fiber portions shall be 10% or more. Also, the mass ratio of bio-based synthetic fiber in

the total mass of the fiber portions shall be 25% or more.

b. Sustainability of biomass mixed into plastic as raw material shall meet the requirements of [Appendix 1\(a\)](#) "Sustainability checklist of bio-based plastics (raw resin)" and the supply chains of the biomass shall be identified. If the biomass material has underwent third-party audit or certification for sustainability (an international sustainability certification for plastics, etc.), the result of audit or certification may be submitted as evidence instead of [Appendix 1\(a\)](#).

c. It shall be confirmed through life cycle assessment (LCA) that the bio-based plastic (raw resin) does not cause an increase of GHG emissions (in terms of CO<sub>2</sub>) throughout the product life cycle in comparison with a resin to replace with.

[Certification Procedure]

a. The applicant or the manufacturer shall submit a certificate calculating the bio-based synthetic polymer content ratio and the mass ratio of bio-based synthetic fibers in the fiber portion and a material certificate indicating bio-based synthetic polymer content ratio in the bio-based synthetic fiber material issued by a fiber material supplier or a raw resin supplier. For the plant-based plastic (raw resin) thereof, measurement results of the bio-based synthetic polymer content calculated with the method specified using bio-based carbon content in ISO 16620-3, using measurement results of the bio-based carbon content and element composition by according to the 14C method specified in ISO 16620-2 or ASTM D6866-05 shall be mentioned. Should there be any deviation of 10% or higher between the measurement results and the bio-based synthetic polymer content rate in the standard, a description of a reason(s) therefor shall also be included.

The measurement results of the bio-based carbon content rate shall be submitted as an attached document.

In addition, for appropriate maintenance of the bio-based synthetic polymer content rate 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 bio-based carbon polymer content rate 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 bio-based synthetic polymer content rate.

b. An applicant shall submit documents on the source of biomass material (a cultivation area (country, state, city, etc.), a generation process of waste and residues, etc.), a manufacturing flowchart (of raw resin) (describe the name of manufacturers of fundamental chemicals (monomers), polymers, etc.), and checklists or an evidence of a third-party audit or certification.

To the application for Eco Mark certification of products containing bio-based plastics or biomass materials that have never been certified for use, Eco Mark Office may request the applicant (or the plastic supplier) to provide information on the chemical composition of the products (see Appendix 1(b)).

c. An applicant shall submit the result of LCA conducted by a third-party. (An applicant shall provide the LCA result and the calculation conditions. If the applicant has underwent LCA under an international sustainability certification scheme for plastics, it may submit the data instead. The applicant may submit an academic paper published on a journal as an evidence as long as the same materials and/or manufacturing processes (sites) are mentioned in the paper as those used for the product applied for certification.).

However, when an Eco Mark certified product is used for an intermediate product, the indication of the "Product name (Product brand name)", "Certification number" and "Model (product number)" in relation to the thread, cloth, etc. in the attached certificate may be substituted for the certificate for a raw resin supplier (including a dealer) or a fiber material supplier (a material certificate, measurement results of the bio-based synthetic polymer content, a certificate of the appropriate maintenance of bio-based synthetic polymer content rate after certification, or Sustainability checklist of bio-based plastics (raw resin)).

(28) Use of chemical substances in products shall meet all the following requirements, a-c.

a. Adequate consideration shall be given so that various processing (mildew proofing, fluorescent whitening, flame retarding, softening, sanitation, antimicrobial finishing, product bleaching) is limited to a necessity minimum, products will not be subjected to excessive processing, and that use of any processing agent that is suspected to affect safety to human body should be refrained voluntarily. Also, standard values in Attachment 3-1 shall be met.

The product shall not contain such flame retardants as Polybrominated biphenyl (PBB), Polybrominated diphenylether (PBDE), short-chain chlorinated paraffin (the number of chained C is 10 to 13 and contained chloride concentration is 50% or over) or Hexabromocyclododecane (HBCD) when flame retardant is used.

b. The amount of free formaldehyd shall conform to a standard value in Attachment 3-2. However, this item shall not be applied to a product which is installed outside the buildings; and

c. For a dye and pigment to be used in the product, dyes and pigments and chrome defined in 1), 2), and 3) of the Attachment 3-3 shall not be added as a prescription constituent.

[Certification Procedure]

a. The applicant or the manufacturer shall submit a certificate indicating the processing or non-processing of the product. If a type of processing or chemical agent that is being considered is made or used, a safety data sheet which confirms the non-use of the substance in Attachment 3-1, or a certified document of the test results, etc. shall be submitted.

b. For amount of free formaldehyde, test result by a third-party testing organization or an applying company itself shall be submitted.

c. The non-use substance or test results issued by the dye plant (including spin-dyeing and printing) shall be submitted. If the non-use of dyes, pigment and chromate stipulated in 1), 2) and 3) of Attachment 3-3 at each phase of the supply chain in relation to fiber materials excluding small accessories is confirmed by complying with voluntary standards (Japan Textile Federation), regarding the non-use of hazardous substances on fiber products and management is implemented by clarifying traceability, a certificate (including a sample of the confirmed documents), which describes the management method issued by the applicant or the manufacturer is acceptable

(29) Fibers shall not use resins containing halogens in the polymer

backbone(applyes to resin as fiber and post-processing in this criteria item, not to coloring materials and fluorine-based additives).

[Certification Procedure]

For fibers, use or not of resins containing halogens in the polymer backbone (resin as fibers and post-processing in this item) shall be indicated in the Attached Certificate

#### F. Rubber

- (30) The mass ratio of recycled rubber out of the total rubber used in the product shall be 10% or more. However, this shall be 60% or more for normal temperature molded products using rubber powder.

[Certification Procedure]

The mass ratio of recycled rubber materials making up the total rubber weight shall be indicated in the Attached Certificate. Raw material certificates issued by raw material suppliers shall be attached.

- (31) Harmful substances contained in rubber shall conform to criteria on heavy metals prescribed in the Ministry of Environment Notice No.46, Aug.23, 1991.

[Certification Procedure]

Certificates issued by raw material suppliers and documents certifying results of tests implemented by a third party testing center or public institution shall be submitted. However, if all the raw materials used do not contain the corresponding chemical substances as prescription components, documents certifying compliance with this criterion issued by the raw material suppliers or applicant can be submitted instead.

- (32) The product shall not contain Polybrominated biphenyl (PBB), Polybrominated diphenylether (PBDE) or short-chain chlorinated paraffin (the number of chained C is 10 to 13 and contained chloride concentration is 50% or over) as a prescription constituent when flame retardant is used in rubber.

[Certification Procedure]

Compliance with this item shall be indicated in the Attached Certificate. In the case of using flame retardant, the applicant shall submit a document specifying the names of chemical substances.

- (33) Information on appropriate handling of products such as precautions on handling and storage and allergy information, etc. shall be provided in instruction manuals, on product labels, and in pamphlets.

For labeling of allergy information on products, the following requirements shall be observed:

- a. In material labeling, name of materials related to natural rubber, rubber, or plastic shall be indicated. For synthetic rubber and plastic, indicate the specific name in brackets behind the name of the material.  
Example: Synthetic rubber (nitrile rubber), natural rubber



- b. For synthetic rubber, natural rubber and plastic products, in addition to the current precautions on use, also include precautions on use for allergy referring to Example 1 below. For natural rubber products, in addition to the current precautions on use, also include precautions on use for latex allergy referring to Example 2.

Example 1: May cause itchiness, skin irritation, rash. In such cases, discontinue use.

Example 2: This product is made of natural rubber. Natural rubber can rarely cause itchiness, redness, rash, bloating, fever, difficulty in breathing, asthma-like symptoms, drop in blood pressure, shock, and other allergic symptoms. In such cases, discontinue use promptly and consult your physician.

[Certification Procedure]

Labeling of allergy information shall be indicated specifically in the Attached Certificate. (Drawings and photographs can be used to supplement description)

G. Ceramics

- (34) For ceramics, for each raw material category given in Table 3, the mass ratio of recycled materials in the total mass of the product shall meet the standard content rate shown. For planters, the product can be molded at room temperature, and also sewage sludge which has been pre-treated for incineration ashing or liquid slagging can be mixed. However, for products made of several recycled materials so that they apply to several standard content rate in Table 4 below, the total mass ratio of all recycled materials shall be above the standard content rate shown. The standard content rate lower limit is calculated using the following equation based on the proportional composition.

$$\text{Standard content rate (lower limit of recycled material)}(\%) = \frac{(A \times X1 + B \times X2)}{(A + B)}$$

(Set for products using [Standard content rate X1% category material] = A% and [Standard content rate X2% category material] = B%)

Table 3 Raw Material Categories of Recycled Materials, Certification on Use, and Standard Content Rate

Category and name of waste serving as raw material of recycled materials		Standard Content Rate <sup>Note2)</sup> (mass%)
Category	Name of recycled material	
Waste from mines and quarries	-Waste sand from quarries and ceramics	35%
	-Micro silica sand generated at separation of silica by water	
Metal industry waste	-Steel slug -Casting sand	
	-Copper slug	
	-Ferro-nickel slug	
	-Electrical furnace slug	

Used pottery		15%
Glass cullet		Glass mass/product mass $\geq$ 15% Glass cullet use rate $\geq$ 70%
Other industrial waste	-Coal ash -Shell	50%
Sludge generated in daily life and naturally (only for planters)	-Sewage sludge (pre-treated for incineration ashing or liquid slagging)	50%

Note 1) For products in which a small amount of colorant is added to molten parts, the weight of colorant shall not be included in the weight of all materials used for calculating the standard content rate.

Note 2) For the products containing moisture, use dry weight, and for fired and molten products, the weight loss on burning shall not be included.

Note 3) For products applicable to several standard content rates in this table due to multiple recycled materials used, calculate the standard content rate on a proportional basis.

Example) Fired and molten parts using ceramic waste and sewer sludge

Ceramic waste A (%) (Standard content rate 35%)

Used pottery B (%) (Standard content rate 15%)

In this case, the standard content rate (lower limit of recycled material content) (%) is  $(Ax35+Bx15)/(A+B)$ .

Consequently, in this case, the A+B total content rate is required to be above the standard content rate calculated in the above equation.

Note 4) For products using glass cullet in the raw material category in Table 3, the mass ratio of glass materials making up the product mass shall be above 15%, and the rate of using glass cullet shall be 70%.

[Certification Procedure]

The standard content rate and total mass ratio of the recycled materials shall be indicated in the Attached Certificate for each raw material category in Table 3. Raw material certificates issued by raw material suppliers shall be attached.

(35) The Product shall conform to the standards concerning elusion of hazardous substances that are set forth in Attached Table 4 of the enforcement regulation of the Soil Contamination Countermeasures Law (2002 Ministerial Order No. 29 of the Ministry of the Environment) with respect to cadmium, lead, hexavalent chromium, arsenic, mercury, selenium, boron and fluorine among the specified hazardous substances listed therein. In case to use slag and/or eco-cement as recycled materials, the product shall conform to the standards with respect to boron and fluorine. In addition, for the cold molding products, molten products and burned products made only from the recycled materials which got melting treatment, the target of melting standard shall be the following eight substances including cadmium, lead, hexavalent chromium, arsenic, total mercury, selenium, boron and fluorine.

## [Certification Procedure]

The results of tests conducted by a third party testing organization or a public organization shall be submitted. .

- (36) For containing of toxic substances form the products mixed with sewage sludge shall meet the requirements of all specified toxic substances set forth in Attachment 5 of the enforcement regulations of Soil Pollution Policy Act (December 26, 2002, The ministerial Order No.29 of the Ministry of Environment). For the cold molding products, molten products and burned products made only from the recycled materials which got melting treatment, the target of melting standard shall be the following eight substances including cadmium, lead, hexavalent chromium, arsenic, total mercury, selenium, boron and fluorine.

## [Certification Procedure]

The results of tests conducted by a third party testing organization or a public organization shall be submitted. .

## 4-1-3. Criteria on individual products and Certification Procedures

- (37) For products composed of multiple materials parts composed of different materials shall be easy to separate to facilitate recycling. If the used materials are consistent, the standard content rate of each material shown in Table 4 shall apply.

Table 4 Criteria on Materials in which products composed of consistent material in multiple parts

Material	Standard content rate of recycled materials
Paper	Same as 4-1-2. Criteria for paper
Wood	Same as 4-1-2. Criteria for wood
Plastic	50% (Post consumer material is 50%)
Glass	60%
Fiber	Same as 4-1-2. Criteria for fibers
Rubber	Same as 4-1-2. Criteria for rubber
Ceramics	Value deducting 10% from the content rate shown in 4-1-2.(34) Table 3

## [Certification Procedure]

Documents with drawings showing clearly that products have been designed so that separation and sorting are easy shall be submitted. If materials used are consistent, document indicating this shall be submitted.

- (38) The content rate of recycled materials in absorbents of “pet sheet and cat litter of supplies for breeding birds and animals” shall be above 80%.

## [Certification Procedure]

The raw materials used and content rate of recycled materials of absorbents shall be indicated in the Attached Certificate. In addition, raw material certificates issued by raw material suppliers shall be attached.

#### 4-2. Quality criteria and Certification Procedure

(39) The product quality shall conform to Japanese Industrial Standard, Japan Agricultural Standards and the industry quality standards. In addition, the quality control is adequately implemented in the manufacturing stage.

[Certification Procedure]

Certificates of compliance with the corresponding quality criteria shall be submitted. At the same time, certificates and declarations issued by the manager of the plant manufacturing the product that quality control is implemented in the manufacturing stage and shipped that only products passing quality inspections are shipped shall be submitted. If the applied product or the manufacturing plant of the applied product is JIS or JAS certified, submission of a photocopy of such JIS or JAS certification shall be sufficient for certification of conformance to this item.

#### 5. Considerations

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) Products shipped in simple packaging shall meet the following criteria for packaging material.
  - a. Percentage of waste paper in the pulp mixture shall be 70% or more.
  - b. Mass ratio of recycled polymers in the total raw material polymers used in plastic sheets shall be 60% or more.

#### 6. Product Classification, Indication and Others

- (1) Products shall be classified by the sub-category purposes and by brand or series name indicated in 2. Applicable Scope. Also, products shall be classified into other product classification when materials used or the combination of materials used differ. (Each material classifications of A-G in 4-1-2., recycled plastic, bio-based plastic, unused fiber, recycled fiber and biobased synthetic fiber are considered as a different material.) Products shall not be classified by size or color.
- (2) In principle, Eco Mark shown as below shall be indicated on the product. Regarding licensee of Eco Mark Utilization Contract who already own Eco Mark products, the indication of the logo and certification number that have been used is also acceptable.



(Note for the indication)

\*For indicating the logo, Eco Mark certification number (eight-digit number) or the name of the licensee using the logo shall be appeared.

- \* Such expression as “Eco Mark product” can be used following the 2.(2) of the Guide to Eco Mark Usage.  
 “Eco Mark product”, “#Eco Mark”, “www.ecomark.jp”, “Eco Mark Certificate”
- \* In accordance with “Environmental Labeling Guidelines” of the Ministry of the Environment of Japan, etc., the environmental claims of certified products may be indicated in association with Eco Mark.  
[\(https://www.env.go.jp/policy/hozen/green/ecolabel/guideline/\)](https://www.env.go.jp/policy/hozen/green/ecolabel/guideline/)
- \* The Guide to Eco Mark Usage shall be followed for any cases not listed above.  
[\(https://www.ecomark.jp/office/guideline/guide/\)](https://www.ecomark.jp/office/guideline/guide/)

Established: July 1, 2004 (Version 1.0)  
 Revised: Oct 14, 2004, Applicable Products, etc (Version1.1)  
 Revised: May 13, 2005, 4-6(1) and Attachment 1 (Version1.2)  
 Revised: Sept. 8, 2005, 4-1-2.(15) (Version1.3)  
 Revised: October 19, 2006, 4.(23)-(26), 4.(51)-(54), 6(2) (Version1.4)  
 Revised: April 13, 2007, 4-1-2.(15) (Version1.5)  
 Revised: August 2, 2007, 4-1-3.(42) (Version1.6)  
 Extension of Expiration date: Oct. 5, 2007  
 Revised: Feb. 14, 2008, (Version1.7)  
 Revised: August 21, 2008, (Version1.8)  
 Revised: May 1, 2009, (Version1.9)  
 Revised: November 4, 2009, (Version1.10)  
 Revised: December 13, 2010, (Version1.11)  
 Revised: March 1, 2011, (Version1.12)  
 Revised: August 1, 2011, (Version1.13)  
 Revised: November 1, 2011, (Version1.14)  
 Revised: February 1, 2012, (Version1.15)  
 Revised: July 5, 2012 (Version1.16)  
 Extension of Expiration date: February 1, 2014  
 Revised: June 1, 2015, (Version1.17)  
 Revised: June 1, 2016 (Version1.18)  
 Revised: February 1, 2017, (Version1.19)  
 Plastic Products Using Recycled Materials  
 Extension of Expiration date: January 7, 2019  
 Revised: March 1, 2019, (category A, Version1.21)  
 Revised: March 1, 2020, (category E, Version1.22)  
 Revised: February 1, 2021, (category E, Version1.23)  
 Revised: February 1, 2023, (Version1.24)  
 Revised: September 1, 2023, (category I, Version1.25)  
 Extension of Expiration date: March 15, 2024  
 Expiration date: June 30, 2030

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

## Attachment 1 Forest Certification defined in Terminology

Certification criteria	Certification shall keep balance between ecological and social benefits, agree to Agenda 21 and the Declaration of Forest Principle, and observe related international agreements and treaties.
	Certification shall contain definite requirements and shall promote and be oriented to sustainable forest.
	Certification shall be nationally or internationally recognized and shall be recommended as part of an open process to which ecological, economic, and social interested parties can participate.
Certification system	The certification system shall provide high transparency, maintain extensive national or international reliability, and enable the verification of requirements.
Certification organization and association	Certification organization and association shall be highly impartial and reliable, allow them to be verified as to whether or not they satisfy requirements, report the verification results, and be able to effectively implement requirements.

Appendix1(a) Sustainability checklist of Bio-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 valuable land in biodiversity or land with high carbon storage (forests, peatland, etc.) since 2008?	Farm land	<input type="checkbox"/> Not converted <input type="checkbox"/> Converted <input type="checkbox"/> Not applicable due to residues or waste	<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 modified 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 (GM crops Not used) <input type="checkbox"/> Not applicable due to residues or waste	<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.

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
					·Name of certification system: <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"/> Not applicable due to residues or waste	<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"/> Not applicable due to residues or waste	<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



No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
					third party, regarding the procurement of plants. ·Name of certification system: <input type="checkbox"/> Others (Describe specifically.)
5	Use of recycled resources, avoidance of competition for food	If recycled resources are available as a part of crude raw materials of bio-based plastic (raw resin) on the site, did the Applicant preferentially use them?	Raw resin	<input type="checkbox"/> Yes/ <input type="checkbox"/> No/ <input type="checkbox"/> Not applicable (Not available)	Name of recycled resource in use [ ] Generated amount/percentage of recycled resources [ ]
6	Prevention of global warming	Has the Applicant gained the understanding of the processing status of methane having a high global warming potential if it is generated by fermentation in the main manufacturing plant for the crude raw material?	Crude raw material manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Others (Describe specifically.) [ ]
7	Utilization of non-fossil energy sources and renewable energy sources	In the course of cultivation to raw resin manufacturing, did the Applicant utilize as many non-fossil energy sources (for example, bagasse, biogas, off gas, etc.) or renewable energy sources as possible?	Manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	Energy name and method of utilization [ ]
8	Legal compliance	In manufacturing the bio-based plastic (raw resin), does the applicant follow related environmental laws and	Resin manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	Monomer manufacturer / plant name [ ] Resin manufacturer / plant name [ ]

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
		regulations and pollution control agreement with respect to air pollution, water contamination, noise, vibration, offensive odor, and emission of hazardous materials?			

\* Residues or Waste defined in Renewable Energy Directive (RED) of EU

**Appendix 1 (b)** Sheet for Providing Information for Application of Products Containing New types of Bio-based Plastics or Biomass Materials

Month/Day/Year

Submit to: Eco Mark Office, Japan Environment Association

Company name: \_\_\_\_\_

Department: \_\_\_\_\_

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

**1. Information on bio-based plastic used in a product applied for Eco Mark certification**

Item	Description
Type of plastic (PE, etc.)	
Chemical structural formula	
Major use (molded product, fiber)	
Launch onto the market and production volume of bio-based plastic	<input type="checkbox"/> Already put on the market ( <input type="checkbox"/> Japan / <input type="checkbox"/> Overseas) <input type="checkbox"/> Not yet (the scheduled time of launch      Month/Year) Production volume (actual, planned or estimated) tons (Year)
Manufacturer of bio-based plastic (and the URL of website) (Describe the name of manufacturer of bio-based plastic proposed in the form in addition to the applicant)	
Fossil-based plastic to be replaced with the bio-based plastic	
Manufacturing process chart from raw material to production of plastic (Description of processes from acceptance of raw material to production of monomer and plastic, with or without of fermentation process, etc.)	May be described in an attached sheet
100-percent bio-based/ Partially bio-based	<input type="checkbox"/> 100-percent bio-based (the bio-based synthetic polymer content is 100 percent) <input type="checkbox"/> Partially bio-based -> The maximum bio-based synthetic polymer content that can be mixed into the bio-based plastic [    %]
Management under the mass balance (MB) approach	<input type="checkbox"/> Plastic directly mixed with biomass / <input type="checkbox"/> MB approach *Bio-based plastics managed under the MB approach are not covered by the guidelines.
Biodegradability	<input type="checkbox"/> Yes    / <input type="checkbox"/> No
Disposal after use Issues in disposal and	

recycling in comparison with fossil-based plastics to replace with (possible disposal method, etc.)	
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## 2. Information on biomass material

Item	Description
Type of biomass material (name of plant, etc.)	
Cultivation area (country, state, city, etc.) or the generation process of waste and residues, etc.	
Production or generation volume of biomass material	
Main use of biomass material (principal product or by-product)	
State of cultivation land (for plants, describe type of land such as peatland)	
Possible influences on biomass material if production of bio-based plastic increases in the future (Influences on other uses of the biomass, influences caused by rapid expansion of production of the biomass, etc.)	
Competing demand against foods	
Use of recycled material in production of bio-based plastic (If recycled material can be used, describe the source, collection methods, management under EU RED, etc.)	

## 3. Information on sustainability of biomass material

Item	Description
Sustainability certificates and initiatives of biomass material (RSPO, ISCC, etc.) and acquisition (If acquired, describe the name and detailed criteria)	
Any sustainability issues pointed out by NGOs or researchers regarding the cultivation of biomass material (If any, describe the details and the URL of website of NGOs or researchers)	
Any other concerns about the biomass material	

## 4. Others

Item	Description
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Other bio-based plastics produced from the same biomass material (if any, describe the name of bio-based plastics)	
Others	

\* Attach relevant documents such as company profile of manufacturer.

The information provided in this form will be used as reference for examination of Eco Mark certification by Eco Mark Office and relevant committees only. The Certification Committee will assess the sustainability of bio-based plastic based on the information provided in the form. The Certification Committee may conduct additional study or consult with the Evaluation Panel established under the Committee as necessary. In this case, a longer assessment period will be taken than usual.

Attachment 3-1. Standard value for processing agents of fiber material

Name	Criteria	Test Method	Concerned Products
Organic mercury compound Triphenyltin compound Tributyltin compound	Shall not be detected	MHW Ordinance No. 34	Products using fungicide
Dieldrin DTTB	30 ppm or less	MHW Ordinance No. 34 OekoTex	Products using wool products or mothproofing agents
APO TDBPP Bis (2,3-dibromopropyl) phosphate compound	Shall not be detected	MHW Ordinance No. 34	Products using fire retardant agents
PFOS	1µg/m <sup>2</sup> or less	CEN/TS15968:2010 ISO25101 OekoTex	Products using fluorine system water repellent agents, oil repellent agents or soil-release finishing agents
PFOA	1µg/m <sup>2</sup> or less		
DEHP/ DBP/ BBP/ DNOP/ DINP/ DIDP	0.1wt% or less	EN15777:2009 MHL notification No. 370 OekoTex	Printed products for small babies

Attachment 3-2 Standard of formaldehyde amount

Name of Substance	Target Product			Test Method
	Clothes for infants (under 24 months old)	Products likely to touch the skin (beddings, towels, and fabricated basic textiles for inner wear and underwear)	Other products (curtains, carpets, aprons, etc.)	
Formaldehyde	Not detected (16ppm or less)	75ppm or less	300ppm or less	Ordinance No. 34 of the Ministry of Health and Welfare

## Attachment 3-3 List of prohibited dyes and pigments

1) Azo Dyes which may generate the following carcinogenic amines in degradation (Dyes whose detection value of the following aromatic amine exceed 30mg/kg according to JIS L 1940-1 and JIS L 1940-3 (ISO24362-1, ISO24362-3, or EN 14362-1, EN14362-2))

CAS No	Name
92-67-1	4-Aminobiphenyl
92-87-5	Benzidine
95-69-2	4-Chloro-o-toluidine
91-59-8	2-Naphthylamine
97-56-3	o-Aminoazotoluene
99-55-8	2-Amino-4-nitrotoluene
106-47-8	4-Chloroaniline
615-05-4	2,4-Diaminoanisole
101-77-9	4,4'-Diaminodiphenylmethane
91-94-1	3,3'-Dichlorobenzidine
119-90-4	o-Dianisidine; 3,3'-Dimethoxybenzidine
119-93-7	o-Tolidine; 3,3'-Dimethylbenzidine
838-88-0	4,4'-Diamino-3,3'-dimethyldiphenylmethane
120-71-8	p-Cresidine
101-14-4	4,4'-Diamino-3,3'-dichlorodiphenylmethane
101-80-4	4,4'-Diaminodiphenyl ether
139-65-1	4,4'-Diaminodiphenyl sulfide
95-53-4	o-Toluidine
95-80-7	2,4-Diaminotoluene
137-17-7	2,4,5-Trimethylaniline
90-04-0	o-Anisidine
95-68-1	2,4-Xylidine
87-62-7	2,6-Xylidine
60-09-3	4-Aminoazobenzene

## 2) Carcinogenic Dyes

CAS No	C.I.	
569-61-9	C.I. BASIC RED 9	CI 42500
2475-45-8	C.I. DISPERSE BLUE 1	CI 64500
3761-53-3	C.I. ACID RED 26	CI 16150
2602-46-2	C.I. DIRECT BLUE 6	CI 22610
1937-37-7	C.I. DIRECT BLACK 38	CI 30235
573-58-0	C.I. DIRECT RED 28	CI 22120
2832-40-8	C.I. DISPERSE YELLOW 3	CI 11855
632-99-5	C.I. BASIC VIOLET14	
82-28-0	C.I. DISPERSE ORANGE11	

## 3) Skin Sensitizing Dyes

2475-46-9	C.I. DISPERSE BLUE 3	CI 61505
12222-75-2	C.I. DISPERSE BLUE 35	
	C.I. DISPERSE BLUE 106	
	C.I. DISPERSE BLUE 124	
2832-40-8	C.I. DISPERSE YELLOW 3	CI 11855
730-40-5	C.I. DISPERSE ORANGE 3	CI 11005
	C.I. DISPERSE ORANGE 37	
2872-52-8	C.I. DISPERSE RED 1	CI 11110
2475-45-8	C.I. DISPERSE BLUE 1	CI 64500
3179-90-6	C.I. DISPERSE BLUE 7	CI 62500
3860-63-7	C.I. DISPERSE BLUE 26	CI 63305
	C.I. DISPERSE BLUE 102	
	C.I. DISPERSE ORANGE 1	CI 11080
	C.I. DISPERSE ORANGE 76	
2872-48-2	C.I. DISPERSE RED 11	CI 62015

	C.I. DISPERSE RED 17	CI 11210
119-15-3	C.I. DISPERSE YELLOW 1	CI 10345
	C.I. DISPERSE YELLOW 9	CI 10375
	C.I. DISPERSE YELLOW 39	
	C.I. DISPERSE YELLOW 49	
	C.I. DISPERSE BROWN1	