

Eco Mark Product Category No.121

“Returnable Containers and Packaging Materials

Version2.0”

Certification Criteria

—Applicable Scope—

- A. Glass bottles, glass containers, and packaging materials
- B. Plastic containers and packaging materials
- C. Paper containers and packaging materials
- D. Wood or bamboo containers and packaging materials
- E. Metal containers and packaging materials
- F. Pottery and earthenware containers
- G. Fiber packaging materials
- H. Other containers and packaging materials

Established: July 1, 2007 (scheduled)

Term of validity: June 30, 2012

Japan Environment Association

Eco Mark Office

Eco Mark Product Category No.121 “Returnable Containers and Packaging Materials Version2.0” Certification Criteria

Category H Other containers and packaging materials

Japan Environment Association
Eco Mark Office

1. Applicable Scope

- Other containers and packaging materials other than those in A-G
- (less than 70% in weight to the whole product as a major material)

2. Certification Criteria and Certification Procedure

To show conformance to the individual criteria, the Applicant shall submit the respective Attached Certificate forms duly filled in.

In the event re-examination under the present Certification Criteria is sought for a product that is already certified in the Product Category 121 “Returnable Containers and Packaging Materials Version 1,” the certifications procedures 4-1. (2), (3), (5), (8), (10) and (15) may be substituted by filling in necessary items on the Attached Certificate form and declaring further therein that no alternations have been made to the product already certified.

2-1. Environmental Criteria and Certification Procedure

- (1) An average product shall be repeatedly used at least five times.

[Certification Procedure] * Certifier: Applicant

The Applicant shall submit a document indicating that the actual average number of recycling uses of a product is five times or more (for new products, the data for comparable products may be submitted instead).

(2) The product shall be designed so as to be used repeatedly.

[Certification Procedure] Certifier: Applicant or a third party body

The Applicant shall submit a certificate by a third party or company design documents describing:

1. Strength (This item is not applicable for pottery and earthenware containers)
2. Cleaning characteristics (applicable only for containers)
3. Label's adhesive or removable characteristics (for those products requiring attachment or removal of a label after each reuse)

(3) A product collecting (recycling) system shall be established, and this fact shall be made known by marking or information disclosure.

[Certification Procedure] Certifier: Applicant

The Applicant shall submit the following:

1. A document describing a system or a product collecting route to make a product returnable
2. A document or photos illustrating a container (if any) in which products are put for transportation
3. Marking or information disclosure stating that a product is reusable

(4) Laws and regulations related to discharge of air and water pollutants, noise, odor, waste treatment, and emission of harmful substances as well as agreements on pollution prevention shall be followed during manufacturing.

[Certification Procedure] Certifier: final product manufacturer

The Applicant shall submit a certificate that a manufacturer complied with relevant local environmental laws and regulations for five years at the time of application.

(5) Of printing ink used on a product (product labels, etc.), substances restricted by the Japan Printing Ink Maker's Association's "Self-imposed Controls on Printing Ink for Food Packaging Materials (Negative List Control)" shall not be added as components.

[Certification Procedure] Certifier: Applicant

The Applicant shall state in the Attached Certificate that the product complies with Negative List regulations.

(6) Any plastic material that may be used for the product shall not contain any halogens in its polymer skeleton as formulation ingredients. If any such plastic is used, 70% or more of it shall be material-recycled.

[Certification Procedure] Certifier: Applicant

The following shall be stated in the attachment:

1. Use or non-use of plastic materials in the product
2. In the event of affirmative answer to 1 above, addition or non-addition of halogens in the polymer skeleton of the plastic materials used in the product
3. If the answer to 2 above is affirmative, a document assuring proper material recycling after disposal shall be submitted. The Secretariat reserves the right to collect reports on the recycling ratio (or conduct an audit) after conclusion of the license agreement, and the applicant hereby agrees to cooperate for these purposes.

(7) The product whose content is food, cosmetic containers, or medical related products shall meet the requirement of harmful substances in the Food Sanitation Law (December 24, 1947, Law No. 233).

[Certification Procedure] Certifier: Third party testing body, Applicant or manufacturer

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

(8) The amount of the material, such as throw-away attachments, of products which is discarded during distribution or after use shall be smaller than or equal to that of comparable one-way containers and packaging materials (this requirement does not apply to the coating (e.g., full-shrink) to protect glass surfaces (such as straw woven bags)). However, this requirement does not apply if there are no one-way containers or packaging materials to be compared with.

[Certification Procedure] Certifier: Applicant

A document prepared by the applicant shall be submitted that explains the generation of label, cap and other wastes during the phases of distribution, use and consumption is less than or equivalent to that generated by comparable one-way containers or packaging materials.

2-2. Material Criteria and Certification Procedure

The materials “A” through “G” the shares of which in the product (container or packaging material) by weight first exceed 70% when added in descending order shall satisfy the below-mentioned criteria “A.” though “G.”, respectively.

A. Glass materials

(9) Additives, such as coloring agents, used in the product shall not contain cadmium, lead, mercury, hexavalent chromium, arsenic, selenium or their compounds as formulation ingredients. Provided, however, additives, such as decolorizing agents, used in colorless glass bottles or in colorless lightweight glass bottles shall not contain cadmium, lead, mercury, hexavalent chromium, arsenic or their compounds as formulation ingredients.

[Certification Procedure] Certifier: Applicant (Applicant and manufacturer if the product is a glass bottle of other color or a lightweight glass bottle of other color.)
Use or non-use of the aforesaid substances shall be stated in the attachment. With respect to glass bottles of other colors and lightweight glass bottles of other colors, furthermore, the composition data or Material Safety Data Sheet (MSDS) issued by the manufacturer of the additives (such as coloring agents) shall be submitted in addition.

B. Plastic materials

(10) No ozone-depleting substances including substitute CFCs shall have been used in the manufacture of the product

[Certification Procedure] Certifier: Applicant
A certificate showing that no ozone-depleting substances including substitute CFCs have been used at the time of manufacture shall be submitted.

(11) With respect to products which are intended as containers for food, cosmetics, medicine-related products and the like and for which plastic materials are used, the plasticizers, colorants, stabilizers, lubricants and other plastics additives shall conform to the positive list of the Japan Hygienic Olefin and Styrene Plastics Association. In case of using the plastic additives which are not listed in the positive list for the products which are not intended as containers for food, cosmetics, medicine-related products and the like, the plastic additives shall meet the requirements of harmful substances described in ISO 8124-3 (Corresponding

standard: 88/378/EEC EN71 Part 3).

[Certification Procedure] Certifier: Manufacturing process manufacturer or a third party body

Certification to indicate that products which are intended as containers for food, cosmetics, medicine-related products and the like and for which plastic materials are used, the plasticizers, colorants, stabilizers, lubricants and other plastics additives shall conform to the positive list of the Japan Hygienic Olefin and Styrene Plastics Association shall be submitted.

In case of using the plastic additives which are not listed in the positive list for the products which are not intended as containers for food, cosmetics, medicine-related products and the like, test results to indicate that the plastic additives can meet the requirements of harmful substances described in ISO 8124-3 (Corresponding standard: 88/378/EEC EN71 Part 3) shall be submitted.

(12) Cadmium, lead, hexavalent chromium, mercury, or their compounds as formulation ingredients shall not be added.

[Certification Procedure] Certifier: Applicant

Certification to indicate not to add chemical substances as formulation ingredients during manufacturing process shall be submitted.

(13) With respect to products which are intended as containers for food, cosmetics, medicine-related products and the like shall not be added the substances classified as Groups 1, 2A and 2B by IARC (International Agency for Research on Cancer) as formulation ingredients. However, it excludes the chemical substances to use for the purpose of making polymers by polymerization reaction (ex; polyvinyl monomer, styrene).

[Certification Procedure] Certifier: Applicant

Fill in the attached certificate that if the applied product falls under this criteria item or not. In the case that the product falls under this criteria item, document certifying that the products do not contain chemical substances described in each criteria item as formulation ingredients during manufacturing process shall be submitted.

(14) The parts of different construction materials shall be separable at the time of disposal. Provided, however, this separation performance shall not be required if the product is made of FRP.

[Certification Procedure] Certifier: Applicant
Documents explaining that the product can be separated into parts of different construction materials at the time of disposal shall be submitted.

(15) Products made of FRP, in case of failure, shall be repairable.

[Certification Procedure] Certifier: Applicant
Documents indicating the address, repair methods and the capability of the facility shall be submitted.

(16) The product shall be marked to facilitate recycling. To indicate a type of polymers, a symbol of JIS K 6899-1 or ISO 1043-1 is used, and regarding to the indicating method, it shall follow the JIS K 6999. Though the above mentioned display method is basically followed, it is possible to substitute it by the display that is obligated by other laws, etc. In addition, for the product to use multiple types of polymers, the indication such as “R-PE, PP, PS” can be used. In case to use three or more types of polymers, indicate the top two polymers and the rest can be omitted.

[Certification Procedure] Applicant
Photographs and/or design drawings to show the contents and the labeled portion of indication shall be submitted.

C. Paper materials

(17) Fluorescent whitening agents as prescription constituents shall not be used.

[Certification Procedure] Certifier: Manufacturing process manufacturer
Certificates issued by the paper manufacturer indicating whether fluorescent bleach is used shall be issued.

(18) No chlorine gas shall be used in the pulp bleaching process.

[Certification Procedure] Certifier: Manufacturing process manufacturer
Certificates issued by the paper manufacturer shall be submitted.

(19) The materials used in the container shall not be those listed in Table 1.

Table 1 Materials Not Suitable for Recycling

Category	Container material
Processed paper	Colored paper, fancy paper, resin-impregnated paper (except for water soluble), parchment paper, tarpaulin paper, wax paper, cellophane, synthetic paper, carbon paper, non-carbon paper, heat-sensitive paper, pressure-sensitive adhesion paper, printing paper, sublimation transfer printing paper, heat-sensitive foamed paper, scented paper
Special ink	Heat-sensitive ink, desensitizing paper, magnetic ink, sublimation ink, foaming ink, scenting ink

[Certification Procedure] Certifier: Manufacturing process manufacturer
Non-use of any of the materials listed in Table 1 shall be stated in the attachment.

D. Wood or bamboo materials

(20) With respect to products for which adhesives or additives are used or decorative finishing is made, the formulation ingredients and their respective weight percentages shall be reported

[Certification Procedure] Certifier: Applicant and raw material supplier
The formulation ingredients shall be specified in the attachment. Furthermore, addition or not of the substances in question shall be stated in the attachment.

(21) Products do not contain preservatives (termicides, pesticides and fungicides) as formulation ingredients

[Certification Procedure] Certifier: Applicant
Addition of the chemical substance, whether it is used or not, shall be

indicated on the attached certificate..

E. Metal materials

- (22) The construction materials of the product (for example, steel or aluminum) shall be easily recognizable at the time of recovery for recycling. The ratio of material recycling for other uses shall be documented and submitted

[Certification Procedure] Certifier: Applicant

Photographs and the like showing the section that indicates the identification of the product construction materials shall be submitted. A document describing that the product is in fact directed for material recycling shall be submitted.

F. Pottery and earthenware

- (23) The content of hazardous materials in products shall satisfy the requirements of six substances in (attached) Table 3 (December 26, 2002, Environment Ministerial Ordinance No. 29); cadmium, lead, hexavalent chromium, arsenic, mercury, and selenium.

[Certification Procedure] Certifier: Third party

Documents certifying test results implemented by third party testing centers or public institutions shall be submitted.

G. Fiber materials

- (24) Various types of finishing to the product (fungicidal, fluorescent, softener, hygienic, product bleaching, flame retardant/resistant) shall be kept to the minimum required and maximum care shall be taken to prevent excess application of finishing. Use of finishing agents that are suspected of their safety to human health shall be refrained. Provided, the finishing of wool products by the use of dieldrin or DTTB shall conform to the provisions of Ordinance No.34 of the Ministry of Health and Welfare, in addition to the aforesaid general attention to finishing

[Certification Procedure] Certifier: Applicant and manufacturing process manufacturer

Finishing or non-finishing of the product shall be stated in the attachment. If any finishing is given, the identity of finishing agents,

their dosage and other information shall be reported in accordance with the attachment. With respect to wool products, finishing or non-finishing by the use of dieldrin or DTTB shall be stated, and if affirmative, conformance to Ordinance No.34 of the Ministry of Health and Welfare shall be shown.

(25) The amount of free formaldehyde shall be no more than 300 ppm by the test method prescribed in Ordinance No.34 of the Ministry of Health and Welfare.

Provided this criterion shall not apply to products that are used outdoors only

[Certification Procedure] Certifier: Applicant or a third party body
Test results for every different fabric pursuant to Ordinance No.34 of the Ministry of Health and Welfare shall be submitted.

(26) With respect to the colorants used in the product, no azo dyes that are likely to generate one or more of the amines listed in Table 1 through reduction decomposition of one or more of their azo radicals, no carcinogenic dyestuffs listed in Table 2, and no skin-sensitive dyestuffs listed in Table 3 shall have been added as formulation ingredients. Except for wool fibers, no chromic dyestuffs shall have been added formulation ingredients.

[Certification Procedure] Certifier: Applicant and manufacturing process manufacturer
A certificate issued by the general manager of the dye-house for the product shall be submitted.

Table 1 Amines that should not be generated by reduction decomposition of azo radicals

		CAS No
1	4-amino diphenyl	92-67-1
2	Benzidine	92-87-5
3	4-chloro-o-toluidine	95-69-2
4	2-naphthyl amine	91-59-8
5	σ amino azo toluene	97-56-3
6	2-amino-4-nitrotoluene	99-55-8
7	<i>p</i> -chloroaniline	106-47-8
8	2,4-diamino anisole	615-05-4
9	4,4'-diamino diphenyl methane	101-77-9
10	3,3'-dichloro benzidine	91-94-1

11	3,3'-dimethoxy benzidine	119-90-4
12	3,3'-dimethyl benzidine	119-93-7
13	3,3'-dimethyl-4,4'-diamino diphenyl methane	838-88-0
14	<i>p</i> -cresidine	120-71-8
15	4,4'-methylene-bis-(2-chloroaniline)	101-14-4
16	4,4'-oxydianiline	101-80-4
17	4,4'-thiodianiline	139-65-1
18	σ toluidine	95-53-4
19	2,4-toluilene diamine	95-80-7
20	2,4,5-trimethylaniline	137-17-7
21	σ anisidine	90-04-0
22	4-aminoazobenzene	60-90-3

Table 2 Carcinogenic dyestuffs

CAS No.	Name	Color Index
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
6459-94-5	C.I. ACID RED 114	CI 23635
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
	C.I. DISPERSE YELLOW 3	CI 11855

Table 3 Skin-sensitive dyestuffs

CAS No.	Name	Color Index
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	

Reference: International Agency for Research on Cancer (IARC)

National Toxicity Program (NTP)

EU Directive 76/769/EC

EU Directive 2006/61/EC

Ecological and Toxicological Association of Dyes and
Organic Pigments Manufacturers (ETAD)

(27) Each construction material shall be separable at the time of disposal.

Documents showing that each construction material is separable at the time of disposal shall be submitted.

2-3. Quality Criteria and Certification Procedure

(28) The quality of the product shall conform to the applicable JIS standards, voluntary standards of the industry or in-house standards.

[Certification Procedure] Certifier: Applicant

Documents prepared by the applicant that prove conformance to the applicable JIS standards, voluntary standards of the industry or in-house standards shall be submitted.

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Validity Period: June 30, 2012

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