

A criterion using recycle contents in appliance

1. Applicable Scope

Air conditioners, Refrigerators, Washing machines, TV

2. Terminology

Recycling	Collecting used materials and putting them into recycling processes for the purpose of reuse, recycle, energy recovery, production of gas or oil, blast furnace reduction, or production of chemical raw materials for coke-oven
Recycled materials	Post-consumer materials or pre-consumer materials, or a combination of these. However, this product category shall include thinned wood, less useful wood, slag resulting from industrial activities, etc., in recycled materials.
Recyclability rate	The material recycling rate that is determined when the appliances is produced, and that can be achieved when the appliances becomes used in the future (The percentage of weight that can be reused or material-recycled to weight of one appliance). Note that the recyclability rate in the Certification Criteria shall be independently calculated by an applicant (manufacturer) by reference to IEC/TR 62635, etc.
Pre-consumer materials	Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.
Post-consumer material	Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
Prescribed constituent	A material component added for the intended purpose of giving certain characteristics to a product. Impurities of 0.1wt% or less that are technically unavoidable in the manufacturing process are not included.

3. Certification Criteria and Certification Procedure

3-1. Resource Saving /Resource Circulation

(1) Any one of parts weighing more than 25g shall be a recycled plastic part or reused plastic part at a minimum.

【Certification Procedure】

An applicant shall submit Form 1 showing a list, etc. of the corresponding parts in use (percentage of recycled plastic parts to be used, type of recycled plastics (post-consumer materials collected from own products, open post-consumer materials, pre-consumer materials), etc.).

- (2) Each individual plastic casing part of more than 25g shall be made of one single polymer or polymer blends. In addition, all plastic parts of more than 25g used for casing parts shall be made of four or fewer types of mutually separable polymers or polymer blends.

【Certification Procedure】

An applicant shall submit a list (Form 2) of plastic materials and labels, etc. in use.

- (3) The recyclability rate of product shall be calculated.

【Certification Procedure】

The recyclability rate per product and its breakdown shall be submitted (Entry Table 3).

In addition, it is recommended that a form is performed based on IEC/TR62635" Guidelines for end-of-life information provided by manufacturers and recyclers, and for recyclability rate calculation of electrical and electronic equipment".

- (4) Equipment shall conform to Form 4 "Product Design Checklist".

【Certification Procedure】

Compliance with this item shall be indicated in the attached certificate. The applicant shall enter requirements in Form 4 "Product Design Checklist" and submit it.

- (5) Packaging or packing of equipment shall be as simple as possible and give consideration to ease of reuse and environmental burden when packaging or packing materials are disposed of. Specifically, the product shall comply with "Packaging Material Check List" of Form 5.

【Certification Procedure】

An applicant should submit “Packaging Material Check List” of Form5.

3-2. Climate

<PlanA>

- (6) For appliances required for Energy label, they should be considered at the highest rank of stars in Energy label. For appliances targeted by Energy Star program, they should be complied with the latest version of its Energy Star standard.

<Plan B>

- (6) For appliances targeted by Energy Star program, they should be complied with the latest version of its Energy Star standard.

【Certification Procedure】

Copies of certificate, test report, catalog, website, and others that indicate the matters related to this item should be submitted.

3-3. Human health (Hazardous substances)

- (7) Polymer containing halogen shall not be used for plastic casing parts. In addition, organohalogen compounds as flame retardants shall not be added as prescribed constituents. However, this item shall not apply to a part that falls under one or more of the following;
- a. Fluoroorganic additives (for example, anti-dripping agents, etc.) used to improve the physical properties of plastics, provided that they do not exceed 0.5wt%.
 - b. Fluoroplastics, for example, PTFE, etc.
 - c. Recycled/reused plastic parts
 - d. Plastic materials of 25g or less

【Certification Procedure】

The list of plastic materials used (Form 2) shall be submitted. The manufacturer of the raw material and whether polymers containing halogens, and organohalogen compounds and the CAS number of the flame retardants used or the code number according to the ISO1043-4 (JIS6899-4) shall be indicated.

In addition, it is recommended that checking is performed based on IEC/TR62476: “Guidance for evaluation of products with respect to substance-use restrictions in electrical and electronic products”.

- (8) The content rate of lead, mercury, cadmium, hexavalent chromium compounds, Polybrominated biphenyl (PBB) or Polybrominated diphenylether (PBDE) in the product shall comply with Annex II (Table 2) of the amended RoHS Directive (2011/65/EU). However, this does not apply to those substances specified in Annex III.

In addition, the product shall have no flame retardant of short-chain chlorinated paraffin (the number of chained C is 10 to 13 and contained chloride concentration is 50% or over) added as prescribed constituents.

【Certification Procedure】

It is recommended that checking is performed based on IEC/TR62476 “Guidance for evaluation of products with respect to substance-use restrictions in electrical and electronic products”

- (9) Each substance listed in the following a. to e. shall not be added to plastic casing parts as prescribed constituents.
- a. Carcinogenic substances based on Category 1A or 1B of Table 3.1 in Annex VI of EC Regulation 1272/2008/EC
 - b. Mutagen based on Category 1A or 1B of Table 3.1 in Annex VI of EC Regulation 1272/2008/EC
 - c. Reproductive toxic substances based on Category 1A or 1B of Table 3.1 in Annex VI of EC Regulation 1272/2008/EC
 - d. Persistent, bio-accumulative and toxic substances (PBTs) or very persistent or very bio-accumulative substances (vPvBs) based on the criteria in Annex XIII of the REACH Regulation
 - e. Substances of very high concern in the list (so-called “list of SVHC candidates”) in REACH Regulation, Article 59, para. 1.

【Certification Procedure】

Form 2 shall be submitted. In addition, it is recommended that checking is performed based on IEC/TR62476 “Guidance for evaluation of products with respect to substance-use restrictions in electrical and electronic products”

3-4. Communication

- (10) Information on the matters (table below) related to collection/recycling, resource saving, energy saving and impact on human health shall be provided to users. Basically, information shall be provided in instruction manuals in an

easy-to-understand manner, and attempts shall be made to widely distribute information by utilizing websites, leaflets, etc.

- a. Information on attention for proper disposal of used equipment (method of collection, contact address for collection, etc.)
- b. Information on energy saving
- c. Method of using or setting, which results in energy saving
- d. Information on compliance with RoHS Directive (Lead, Mercury, Cadmium, Hexavalent chromium, PBB, PBDE)

【Certification Procedure】

Copies of a corresponding part in an instruction manual, leaflet, web site, etc. that indicates the matters related to this item shall be submitted.

- (11) Maintenance and repair subcontract systems shall be available, and repairs shall be carried out as requested by the users (repair system). The following items a to b shall be satisfied to improve the system, PERATURAN MENTERI PERDAGANGAN REPUBLIK INDONESIA NOMOR 19/M-DAG/PER/5/2009 can be taken into account:

- a. Information that repair services are available shall be provided;
- b. Information that the scope of repair (details of services), repair time, costs, how services are provided to users, etc. shall be provided.

【Certification Procedure】

For a and b, an applicant shall submit copies of product documentation showing that the proper system is available (processing ability, details of provided information specified in criteria, etc.).

- (12) Supply of the spare parts (parts for maintenance and repair to keep the functions/performance of a product) shall be ensured for 5 years after production of the product stops.

【Certification Procedure】

Copies of a corresponding part in an instruction manual, leaflet, web site, etc. that indicates the matters related to this item shall be submitted.

3-5. Quality related and others

- (13) Quality requirements for products shall conform to the relevant latest standard.

【Certification Procedure】

A certificate or a documentation to confirm conformity with the relevant quality standards shall be submitted.

- (14) 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.

【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 (Form 6) 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.