

Korea Eco-label Standards

**EL508**

Revised 14. MAR. 2012

Ministry of Environment

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## **Filters for Air Cleaners**

**EL508:2012**



Ministry of Environment

<http://www.me.go.kr>



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Prepared by the president KEITI

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For opinions and inquiries on this standards, please contact the KEITI Environmental Certification Strategy Office(Tel. 1577-7360), or refer to the website(<http://el.keiti.re.kr>).

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## Foreword

This standard is the certification criteria for environmental covers revised through deliberation of a committee to set up the certification criteria according to the procedure specified in the 「Environmental Technology and Environmental Industry Support Act」.

Accordingly, EL508 Filters for Air Cleaners【EL508-1992/6/2001-107】 was revised and incorporated into this standard.

It should be noted that parts of this standard may in conflict with patent rights having technical characteristics, patent applications after laying-open of application, utility model rights or application for the utility model registration after laying-open of application. The Minister of Environment shall have no responsibility for confirmation of matters related to patent rights having technical characteristics, patent applications after laying-open of application, utility model rights or application for the utility model registration after laying-open of application.







## 1 Scope

This standard specifies a method to confirm the certification criteria and conformance of dry or moist filters for air cleaners that are used for the engine of cars or farm machines (tractors, cultivators, etc.) with 50 horsepower or less.

## 2 Normative references

The following documents, in whole or in part, are indispensable for application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

KS R 3029, Air cleaner element for engines  
KS Q 5002, Statistical presentation of data

## 3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

### 3.1

#### **waste materials**

both 'post-consumer waste materials' and 'pre-consumer waste materials'

### 3.2

#### **post-consumer waste materials**

waste materials used and discharged after normal distribution processes

### 3.3

#### **pre-consumer waste materials**

materials which are not used as normal materials because they are scraps made during the production

**NOTE** Materials that are generated from the production and are used for the same process, shall be excluded.

## 4 Environment related criteria

Environment related items considering the whole process of filters for air cleaners given in the Table 1.

**Table 1 — Environment related items considering the whole process of filters for air cleaners**

Step	Items related to environment	Effects on improving the environment
Acquiring raw materials	—	—
Manufacture	• The usage rate of waste materials	• Recycling available resources
Distribution, Usage, consumption	• Replenishment products	• Reduction of waste generation amount
Discard	—	—
Recycle	—	—

#### **4.1 The usage rate of waste materials**

Products using recycled waste materials (waste cotton, waste fiber) shall comprise the waste materials of 60 % or more by weight.

#### **4.2 Replenishment products**

Products with replacing paper filters shall comply with the following requirements.

- a) structure that is easily assembled  
Products with replacing paper filters shall comply with the following requirements.
- b) Functions and structure  
The paper filters for replacement shall have the same structure and capacity with the filter papers of original product.

### **5 Quality related criteria**

The results of ventilation resistance, initial clarifying performance, life clarifying performance, restoring force, rupture and distortion tests shall comply with the quality regulations of KS R 3029.

### **6 Consumer information**

Information on a collection system for discharged products and the use of replacing parts should be provided

**NOTE** The usage method for replenishment parts is only for a product with replacing paper filters.

### **7 Verification methods**

Test method and verification methods by each item of certification criteria are given in **Table 2**.



**Table 2 — Test methods and verification methods by each item of the certification criteria**

Certification criteria	Test and verification methods
Environment related criteria	Verification of submitted documents
Quality related criteria	Test report by an accredited testing laboratory in accordance with <b>8.2</b> or certificate in accordance with equivalent standards or higher
Consumer information	Verification of submitted documents

## 8 Test methods

### 8.1 General

- a) The number of test specimens is one piece per each applied product in principle. But, the number may increase depending on the situation.
- b) Test samples shall be collected at random by eco-label certification body from products in the market or those in storage at the production site.
- a) The test result shall conclude the value by adding 1 to a cipher of individual standard value according to KS Q 5002. However, if the cipher is specified in the test method, it shall be followed accordingly

**NOTE** Matters related to conclusion of numerical value shall be recorded in the test result.

### 8.2 Quality standards

Test is carried out according to KS R 3029.

## 9 Reasons for certification

Category of reasons	Improvement of resource circulation <sup>a</sup>	Energy saving <sup>b</sup>	Reduction of environmental pollution on earth <sup>c</sup>	Reduction of regional environmental pollution <sup>d</sup>	Reduction of harmful substances <sup>e</sup>	Reduction of life environmental pollution <sup>f</sup>	Reduction of noise and vibration <sup>g</sup>
Concerned	●			○ <sup>h</sup>			
<sup>a</sup> Resource saving, water saving, improvement of recycling, recycling of effective resources and etc. <sup>b</sup> Energy saving, use of renewable energy and etc. <sup>c</sup> Reduction of greenhouse gas emission, reduction of ozone layer-depleting substance emission and etc. <sup>d</sup> Reduction of air pollutant emission, reduction of water pollutant emission, reduction of soil pollutant emission, reduction of waste discharge, better biodegradation and etc. <sup>e</sup> Reduction of use of harmful substances, reduction of exposure to harmful substances and etc. <sup>f</sup> Reduction of indoor air pollutant emission, reduction of light pollution and etc. <sup>g</sup> Low noise, reduction of vibration <sup>h</sup> Only products with replacing paper filters							

## **Common Criteria, Notice No. 2017-103, the Ministry of Environment**

1. Those who have received the eco-label certification shall comply with the environment regulation standards during the certification period. In case of a breach of the environmental regulation standards, the details of such violation, an improvement measure, and a recurrence-preventive measure including data listed below shall be submitted to the Director of the Korea Environmental Industry & Technology Institute (hereinafter referred to as "the KEITI Director") within one month from the date of such violation. If the required set of documents and data is submitted and implemented as planned, it shall be deemed conforming.
  - A. A list of the environment regulation standards applicable to the area where the applicant is located
  - B. The company system to implement the environment regulation standards (including an organization chart describing roles and responsibilities)
  - C. The company regulation for archiving records and documents related to implementation of the environment regulation standards.
2. In relation to the "Consumer Information" label specified in the certification criteria for each product, the followings shall be complied with.
  - A. "Consumer Information" related to the product shall be marked on the surface of the product. However, in the case where the KEITI director acknowledges that it is not possible to mark it on the surface of the product or that the marking itself is undesirable, Consumer Information may be marked on other appropriate area(s) where can be easily recognized by consumers such as the product packages, product guides or user guides.
  - B. "Consumer Information" related to the service shall be displayed on the inside/outside of the premises of the service operation business. However, in the case where the KEITI director acknowledges that it cannot be displayed on the inside/outside of the premises, or that the marking itself is not desirable, Consumer Information may be displayed on other appropriate area(s) where can be easily recognized by consumers such as contracts, delivery statements, warranties, or promotion materials.
3. Those who wish to receive the eco-label certification or who have been eco-label certified shall comply with the Act on Fair Labeling and Advertising in order to establish fair trade order and protect consumers. In addition, unfair labels or advertisements that are related to the environmental aspects of the product are not allowed in accordance with Clause 10 of Article 16 of the Act.
4. In the case where there is a restriction related to the raw materials in use or the place of product use in accordance with other laws or regulations or in the case where the product needs to be certified prior to its production, all those applicable certification standards and regulations shall be complied with.
5. With respect to the various standards cited in the certification criteria for the target product, only the latest versions of the standards shall apply unless otherwise noted. If the applicable regulation criteria is strengthened compared to the certification criteria of each product due to a revision of relevant laws and regulations, the strengthened regulation criteria shall tentatively apply; if the regulation criteria is to be abolished, its current version shall tentatively apply until the applicable certification criteria is revised.
6. When it is judged that application of quality-related criteria in accordance with the certification criteria of each product is inappropriate, the KEITI Director may set and implement the needed quality criteria for relevant products.

[Verification method in accordance with the certification criteria]

1. The test certificate in accordance with the prescribed test methods shall mean a test report issued by one of the agencies (listed below) designated by the KEITI Director. When a person applying for the Eco-label certification seeks to be verified by a test/inspection institution not included in the list below, such verification shall be conducted in the presence of a professional designated by the KEITI Director.
  - A. Korea Environmental Industry & Technology Institute in accordance with 12 of Clause 4, Article 5 of the Act
  - B. Test/inspection institutions recognized in the accreditation system for test/inspection institutions in accordance with the Article 23 of the 「Framework Act on National Standards」 (e.g. test/ inspection institutions accredited by KOLAS)
  - C. Test/inspection institutions designated and accredited by the president of central administrative agency in accordance with relevant laws
  - D. Foreign test/inspection bodies complying with the ISO/IEC 17025
  - E. Test/inspection institutions recognized by the KEITI Director in case that it is difficult to conduct tests in one of the institutions specified from A to D.
2. A test and inspection organization that issued a test certificate in accordance with Clause 1 herein shall comply with the KEITI Director's request for data related to the test unless there is a specific reason. If the institution rejects the request of KEITI Director without a justifiable reason, the test/inspection institution is subject to restrictions on their testing & inspection work.
3. The submitted documents shall be verified according to the test certificate, raw material supply/production statement, product related certificate(s), user manual, guidebook, or product provided by the person who wishes to receive the eco-label certification in order to prove that the product complies with relevant certification criteria. If it is a service, it may include performance data, documentary evidence and on-site photos. However, when such verification cannot be complete only with the submitted documents, more tests according to Clause 1 may be added.
4. In case that the person who has already received the certification seeks for additional certification on models using the same materials, parts or components as the certified product, the previous verification results of raw materials, parts or components may be used again; provided, however, that the additional certification shall be applied within 12 months from the date of initial certification.
5. In case of certification in accordance with 2 of Clause 3, Article 4, the KEITI Director shall randomly select a sample from models in the product line for verification.
6. In case of certification in accordance with 3 of Clause 3, Article 4, the KEITI Director shall randomly select a sample from models in the product line for verification. However, in the case where some of environmental and quality information is different from model to model and affects their verification results, each model shall be separately verified according to the environment-related or quality-related criteria.