

# EL101.Printing paper

[EL101-1992/9/2011-10]



## 1. Scope

The criteria shall apply to newsprint paper, uncoated paper including wood free paper and medium quality paper and stencil papers or cutting papers of art paper. However, excluded shall be a product having a special criteria set up, printing paper such as laminated paper which would be difficult in recycling as waste paper, and primarily processed printing papers such as envelopes, business cards, and wrapping paper.

## 2. Definitions

### 2.1

"Newsprint paper" refers to papers, main components of which are machine pulp and recycled pulp having been mixed with a little chemical pulp. It is categorized into newsprint web used for rotation type news printing and papers used for due form, cartoon, yellow pages.

### 2.2

"Uncoated paper" refers to printing papers on which pigments have not been applied. Uncoated paper is classified into special grade, first grade, second grade, and third grade according to the mixture ratio of pulp. Generally, it is classified into wood free paper and medium quality paper.

### 2.3

"Art paper" refers to coated printing papers coated on the surface with mineral pigment in order to improve the printing quality.

### 2.4

"Waste Paper" refers to both post-consumer waste paper etc and pre-consumer waste paper.

### 2.5

"Post-consumer waste paper" refers to papers drained after serving its intended end use through the distribution channel.

## 2.6

"Pre-consumer waste paper" refers to papers not used as a complete product and occurs in the form of scrap during the subsequent processing after stencil paper is produced. However, exception should be made to papers occurring during the manufacturing process of stencil paper and then putting it again in the same manufacturing process.

## 2.7

"Waste Paper input rate" refers to the mass percentage of waste paper over the total raw material for products. As calculated on mass percentage, the raw material of pulp is applicable to the weight with 10 % of water contents, while waste paper is applicable to the weight when it becomes naturally dried.

## 2.8

"Optical Brightener" refers to materials having an effect of appearing whitened and fluorescing with blue or yellow color being reacted by the ultraviolet out of radiated lights by using it.

## 2.9

"Bleaching" refers to a process for improving the degree of brightness of pulp by reducing or eliminating color of pulp happened from having residual lignin and coloring agents reacted chemically.

## **3. Certification Criteria**

### **3.1 Environment Criteria**

#### 3.1.1

Waste paper as a raw material for printing paper should be used appropriately in accordance with the following reference based on the paper type.

##### 3.1.1.1

Newsprint Paper

Basis Weight Range [g/m <sup>2</sup> ]	≤ 50	> 50
Waste Paper Input Rate [weight%]	≥ 50	≥ 60

### 3.1.1.2

#### Uncoated Paper (Medium Quality Paper)

Basis Weight Range [g/m <sup>2</sup> ]	≤ 70	70 ~ 120	> 120
Waste Paper Input Rate [weight%]	≥ 10	≥ 30	≥ 50

### 3.1.1.3

#### Uncoated Paper (Wood Free Paper)

Basis Weight Range [g/m <sup>2</sup> ]	≤ 70	70 ~ 90	> 90
Waste Paper Input Rate [weight%]	≥ 10	≥ 20	≥ 30

### 3.1.1.4

#### Art Paper

Basis Weight Range [g/m <sup>2</sup> ]	≤ 80	80 ~ 120	> 120
Waste Paper Input Rate [weight%]	≥ 10	≥ 20	≥ 30

### 3.1.2

With respect to chemical use during the manufacturing process and recyclability at disposal stage, the product shall comply with the following requirements.

#### 3.1.2.1

Optical brightener shall not be used excessively during the manufacturing process.

#### 3.1.2.2

Chlorine-bleaching agent (sodium hypochlorite, chlorine dioxide, etc.) shall not be used during the manufacturing process for the purpose of bleaching or dissociation.

#### 3.1.2.3

Art paper shall keep an amount of pigments with the following requirements.

Basis Weight Range [g/m <sup>2</sup> ]		≤ 80	80 ~ 120	> 120
Pigment coating input rate [weight%]	Both sides	≤ 40	≤ 40	≤ 35
	One side	≤ 20	≤ 20	≤ 17.5

## 3.2 Quality Criteria

### 3.2.1

Tensile strength, tearing strength, and elongation of newsprint web used for rotation type news printing shall satisfy the quality standards provided in the KS M 7101 (Newsprint paper).

### 3.2.2

Tensile strength, tearing strength, and elongation of newsprint paper except for the item mentioned in the paragraph 3.2.1 and uncoated paper shall satisfy the quality standards provided in the KS M 7102 (Printing paper).

### 3.2.3

If Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality or performance criteria of the standard in question. However, items related to “3.1 Environmental Criteria” are excluded.

### 3.2.4

If no Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality and performance criteria according to the following sequence. However, the items related to “3.1 Environmental Criteria” are excluded. Also, if the E-Mark Certification Criteria Setting Committee determines that the applying criteria are not reasonable considering the characteristic of the product, it should satisfy the standards that were modified by the committee (test item, test method, standards, etc.).

#### 3.2.4.1

National standards other than Korean Industrial Standards.

#### 3.2.4.2

Overseas national standards or international standards regarding the product quality in question.

#### 3.2.1.3

Standards of the organizations at home and abroad that are referred by the current E-mark target product and certification standard.

#### 3.2.4.4

A private standard that is recognized as higher than the national standard in the industry of the product in question.

### 3.3 Consumer Information

Mark the certification background of the corresponding product in the product consumption phase, such as resource saving, use of recycled materials, or less pollutants.

Ex) Resource saving via basis weight loss, reduction of air & water pollutants, the usage rate of waste paper, etc.

## 4. Test Methods

Certification Criteria		Test and Verification Methods
Environmental Criteria		Verification of submitted documents and actual location
Quality Criteria	3.2.1	Test report by an accredited testing laboratory in accordance with the KS M 7101 (Newsprint paper) or certificate of the equivalent standards or over
	3.2.2	Test report by an accredited testing laboratory in accordance with the KS M 7102 (Printing paper) or certificate of the equivalent standards or over
	3.2.3~3.2.4	Test report by an accredited testing laboratory in accordance with the applicable standards or certificate of the equivalent standards or over
Consumer Information		Verification of submitted documents

### 4.1 General Matters

#### 4.1.1

One test sample shall be required for each applied product. Only if more than one test sample is needed, the former requirement may not be met.

#### 4.1.2

Test samples shall be collected at random by eco-label certification body from products in market or those in storage at the production site.

#### 4.1.3

The result of test shall be numerically set according to KS Q 5002 (Statistical interpretation method of the data – Part 1: Statistical description of the data).

## 5. Reasons for Certification

“Resource-saving or Use of recycled materials (only for products used waste paper), Less pollutants”

## **Common Criteria, Notice No. 2012-36, the Ministry of Environment**

1. Eco-label products must follow the following provisions with regard to the proper treatment of environmental pollution substances, such as air and water wastes and noxious chemical substances emitted in the process of manufacturing or service operation.

A. When first applying for certification, the product manufacturer should observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located for a period of one year prior to the date of application. Any case of violation of the penalty clause will be verified by confirming documents involved during a period of one year to the date of application. Regarding any violation not related to the penalty clause, confirmation will be made on the completion of appropriate measures.

B. A person who has received a certification of eco-labeling shall observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located during the period of certification. However, regarding any violation besides a penalty, confirmation will be made on the completion of appropriate measures.

2. As a general rule, information for consumers shall be indicated on the surface of the product in such a way not to be easily erased. However, in case that indication on the surface of the product is impossible or undesirable, it can be indicated on the appropriate part such as product packaging, product guidebook and user's manual that consumers can recognize. However, the service information should be indicated inside and outside of the place of service operation. In case that indication inside and outside of the place of service operation is impossible or undesirable, it can be indicated on the appropriate

part such as an agreement, letter of delivery, letter of guarantee, and PR materials that consumers can recognize.

3. In order to establish fair trade and to protect consumer, the applicant for eco-label and the holder of eco-label license shall observe the Act on the Fairness of Indication and Advertisement with respect to the environmental aspects of the product.

4. For Various standards referred in the certification criteria by target product, the latest revised edition applies at the date of application, if not specified otherwise.

5. In applying the quality related criteria for each target product, if no standard is available that can be applied as the quality criteria, the president of Korea Environmental Industry & Technology Institute (KEITI) (hereafter referred to as "president of KEITI") may establish and operate the quality criteria for the product involved after review by a competent committee.