

EL108. Stationery

[EL105-2013/1/2013-23]



1. Scope

The criteria are intended for writing supplies, office supplies, art supplies and other stationery^{Note1)}, and divide stationery by material^{Note2)} into synthetic resins, rubber, fiber (including leather and filling), paper, wood (including woody material) and metal. However, products for which separate certification criteria have been established shall be excluded.

Note1) The products specified in <Attached Table 1> shall apply.

Note2) If a component made of separate material is 1 % or more by weight or if a raw material accounts for 2 % or more by weight when totaling the weight of the same components, they shall apply to the criteria.

2. Definitions

2.1

“Marking pens” refer to a type of writing supplies made by attaching fiber or synthetic resin material to the end of an ink cartridge (a container or absorber filled with ink), which is a consuming part of writing supplies.

2.2

“Consuming part” by stationery type is defined as follows:

Classification	Products
Writing supplies	Lead, colored pencil lead, sharp lead and cartridge, ball-point pen lead, ink cartridge for marking pens and nib
Correction tool	Eraser, eraser rod for refill and the refill of correction paper
Art supplies	Consuming parts, such as crayon, crapas (oil pastels) and watercolor/oil paints

2.3

“Adhesive layer” refers to the surface of a tape or sheet on which adhesive is applied.

2.4

“Phthalate plasticizer” refers to a plasticizer used to give flexibility to synthetic resin, such as PVC, or used as a solvent for liquid chemical products. It is a compound classified as 1,2-benzenedicarboxylic acid.

2.5

“PAHs: polycyclic aromatic hydrocarbons” refer to aromatic hydrocarbon with 2 or more benzene rings.

2.6

“Packaging space ratio” is defined in KS T 1303 [The Method for Measurement of Packaging Space Ratio of Commercial Packaging (consumer packaging)], which refers to the percentage of packaging space volume over packaging volume.

3. Certification Criteria

3.1 Environmental Criteria

3.1.1

The following criteria shall be met in respect to the use of chemical materials in the course of production or the discharge of hazardous materials in the use of products.

3.1.1.1

The following criteria shall be met in respect to the use of chemical materials in the course of production.

a) According to UN Globally Harmonized System (GHS) for the classification and indication of chemical substances, the chemical substances that fall under the following H code category may not be used.

Note) For each list of substances, EU REGULATION (EC) No 1272/2008 ANNEX VI part 3 (HARMONIZED CLASSIFICATION AND LABELING TABLES) shall tentatively apply.

- Toxic substances:

H300	:	fatal if swallowed
H301	:	toxic if swallowed
H304	:	may be fatal if swallowed and enters airways
H310	:	fatal in contact with skin
H311	:	toxic in contact with skin
H330	:	fatal if inhaled

- H331 : toxic if inhaled
- H370 : causes damage to organs
- H371 : may cause damage to organs
- H372 : causes damage to organs
- H373 : May cause damage to organs
- Carcinogenic, mutagenic and reprotoxic substances :
 - H340 : may cause genetic defects
 - H341 : suspected of causing genetic defects
 - H350 : may cause cancer
 - H350i : may cause cancer by inhalation
 - H351 : suspected of causing cancer
 - H360F : may damage fertility
 - H360D : may damage the unborn child
 - H360FD : may damage fertility. May damage the unborn child
 - H360Fd : may damage fertility, suspected of damaging the unborn child
 - H360Df : may damage the unborn child, suspected of damaging fertility
 - H361f : suspected of damaging fertility
 - H361d : suspected of damaging the unborn child
 - H361fd : may damage fertility, may damage the unborn child
 - H362 : may cause harm to breast-fed children

b) The materials that fall under “Group 1”, “Group 2A” and “Group 2B”, which are categories for carcinogenic substances defined by the International Agency for Research on Cancer (IARC), shall not be used. However, carbon black shall be excluded.

c) Products and their packing material shall not contain fluorescent whitening agent or flavoring.

d) Allergenic disperse dye, carcinogenic dye and other dye specified in <Attached Table 2> shall not be used.

e) If paint is used on the surface of a product, one of the following criteria shall be met in respect to harmful elements of paint.

- ① The sum of lead (Pb), cadmium (Cd), mercury (Hg) and hexavalent chromium (Cr^{6+}) in paint shall be 0.1% (1000 mg/kg) or less by weight .
- ② Harmful elements of non-volatile part of paint shall meet the following criteria.

Item	Lead (Pb)	Arsenic (As)	Cadmium (Cd)	Antimony (Sb)	Barium (Ba)	Chromium (Cr)	Mercury (Hg)	Selenium (Se)
Criteria [mg/kg]	90 or below	25 or below	75 or below	60 or below	500 or below	60 or below	60 or below	500 or below

③ Of the certification criteria by subject product for Ecolabel, products certified under "Paint (EL241)" shall be used.

f) If organic solvents are used to ink for writing supplies, correction liquid or etc, the following materials shall not be a component of such products.

CAS No.	Substance	CAS No.	Substance
56-23-5	carbon tetrachloride	95-50-1	o-dichlorobenzene
67-66-3	chloroform	106-93-4	ethylene dibromide
68-12-2	N,N-dimethylformamide	107-06-2	1,2-dichloroethane
71-43-2	benzene	108-90-7	mono-chlorobenzene
71-55-6	1,1,1-trichloroethane	109-86-4	2-methoxyethanol
75-09-2	methylene chloride	110-80-5	2-ethoxyethanol
79-01-6	trichloroethylene	111-15-9	2-ethoxyethyl acetate
79-34-5	1,1,2,2-tetrachloroethane	127-18-4	tetrachloroethylene
79-46-9	2-nitropropane	540-59-0	1,2-dichloroethylene

g) Harmful elements in stationery and the consuming part of stationery shall meet the following criteria.

Item	Lead (Pb)	Arsenic (As)	Cadmium (Cd)	Antimony (Sb)	Barium (Ba)	Chromium (Cr)	Mercury (Hg)	Selenium (Se)
Criteria [mg/kg]	90 or below	25 or below	75 or below	60 or below	500 or below	60 or below	60 or below	500 or below

3.1.1.2

Synthetic resins and rubber material shall meet the following criteria.

a) Lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr⁶⁺) and their compounds and organotin compounds (TBT, TPT) shall not be used as additives.

b) Flame retardants shall not be used specified in <Attached Table 2>, and sum of each content of polybrominated biphenyls(PBBs), polybromodiphenyl ethers(PBDEs), tetrabromobisphenol A(TBBPA) and hexabromocyclododecane(HBCD) shall not exceed 100 mg/kg.

Note) If the content of total Br is 30 mg/kg or below, it shall be considered that this criteria is met.

c) If polyvinyl chloride (PVC) is used as thermoplastics, the following criteria shall be met.

① The content of vinyl chloride monomer shall be 1 mg/kg or below.

② Phthalate plasticizer shall not be used as plasticizer, and the sum of the content of phthalate plasticizer^{Note)} contained in a product shall not exceed 0.1% by weight.

Note) It is regarded as the sum of the content of DBP (dibutylphthalate), BBP (butylbenzylphthalate), DEHP (di-(2-ethylhexyl)phthalate), DINP (di-(iso-nonyl)phthalate), DNOP (di-n-octyl phthalate) and DIDP (di-(iso-decyl)phthalate).

d) If carbon black is used, the content of PAHs shall be 10 mg/kg or less according to <Attached Table 2>, and the content of benzo(a)pyrene shall be 1 mg/kg or less.

3.1.1.3

Cellulose materials used in a product shall meet the following criteria.

a) The following materials shall not be used as preservatives of wood used in a product.

① In the classification of hazardous preservatives defined by WHO, the preservatives that fall under extremely hazardous (class 1a) and highly hazardous (class 1b)

② Active materials based on organotin compound or creosote oil

b) In the production of paper used in a product, chlorine bleaching agents (hypochlorite, chlorine dioxide, etc.) shall not be used for dissociation or bleaching.

3.1.1.4

Paper material shall meet the following criteria.

a) Azo compounds that can be degraded into arylamine specified in <Attached Table 2> shall not be used, and azo dye detected in a product shall be 30 mg/kg or below.

b) In using adhesive in a product, water soluble adhesive shall be used.

c) Inks used in printing on paper shall be the ecolabeled one based on "Printing Inks and Writing Inks (EL602)" of the certification criteria by subject for ecolabel, or meet the '3.1 Environmental Criteria' of EL602.

d) Adhesives used for adhesive layer shall not contain organic solvent, or if adhesives are the ecolabelled one based on "Paper Adhesive Tape and Paper Adhesive Sheet (EL103)" of the certification criteria by subject for ecolabel, they shall be considered to meet this requirement.

3.1.1.5

Nickel emissions of metal materials shall be $0.5 \mu\text{g}/\text{cm}^2 \cdot \text{week}$ or less. However, painted parts or parts out of reach shall be excluded.

3.1.2

For recycling in the process of manufacturing or the recyclability of a product in its stage of disuse, the applicant shall comply with the following matters.

3.1.2.1

A product shall be designed taking into account the ease of recycling and separate collection. In particular, separation of different kinds of materials shall be available without special tools.

3.1.2.2

For products whose consumable supplies can be refilled, the availability of refill and the method of refill shall be specified on the package, manual or pamphlet of the product.

3.1.2.3

Packing material of a product shall not contain halogen synthetic resins, such as PVC.

3.1.2.4

Paper packing materials shall not be coated as it can deteriorate their recyclability.

3.1.2.5

To make it easy to separate and collect a disused product, each part to be separated shall be marked with material classification.

3.1.2.6

The packing space ratio of a product shall be 30% or below.

3.2 Quality Criteria

3.2.1

A product shall apply to the criteria for “School things” of the 「KC Safety Criteria」 according to the 「Quality Management and Safety Control of Industrial Products Act」. However, items related to “3.1 Environmental Criteria” shall be excluded.

3.2.2

If the national standards for the relevant product include Korean Standard, it shall meet the criteria for quality or performance of the relevant standard. However, the items related to “3.1 Environmental Criteria” shall be excluded.

3.2.3

If the national standards for the relevant product do not include Korean Standard, the product shall meet the criteria for quality and performance of the standard according to the following order. However, the items related to “3.1 Environmental Criteria” shall be excluded, and if Eco-Label Criteria Establishment Committee decides the criteria to be applied are not reasonable for the characteristics of the product, the product shall meet the criteria (test items, test method, reference values, etc.) modified to suit the characteristics of the product by the committee.

3.2.3.1

National standards other than Korean Standard

3.2.3.2

Foreign standards or international standards for the quality of the relevant product

3.2.3.3

Domestic and foreign groups' standards quoted by the current ecolabel subject products and certification criteria

3.2.3.4

Private-sector standards equivalent to, or higher than, national standards in the industrial area of the relevant product

3.3 Consumer Information

Indication of matters on the certification reasons (easy recycling, reduced harmful materials) to which the relevant product contributes in the stage of consumption

4. Test Method

Criteria Item			Test and Verification Method		
Envir. Criteria	3.1.1	3.1.1.1	a)-d)	Verification of submitted documents	
			e)	①	Test report of authorized institute according to the following test method <ul style="list-style-type: none"> ▪ Pb: KS M ISO 3856-1 (Paints and varnishes – Determination of “soluble” metal content – Part 1: Determination of lead content – Flame atomic absorption spectrometric method and dithizone spectrophotometric method) ▪ Cd: KS M ISO 3856-4 (Paints and varnishes – Determination of “soluble” metal content – Part 4: Determination of cadmium content – Flame atomic absorption spectrometric method and polarographic method) ▪ Cr⁶⁺: KS M ISO 3856-5 (Paints and varnishes – Determination of “soluble” metal content – Part 5: Determination of hexavalent chromium content of the pigment portion of the liquid paint or the paint in powder form – Diphenylcarbazide spectrophotometric method) ▪ Hg: KS M ISO 3856-7 (Paints and varnishes – Determination of “soluble” metal content – Part 7: Determination of mercury content of the pigment portion of the paint and of the liquid of water-dilutable paints – Flameless atomic absorption spectrometric method)
				②	Verification of submitted documents and a test report of authorized institute according to the following test method or a certificate of equivalent or higher criteria <ul style="list-style-type: none"> ▪ KS G ISO 8124-3 (Safety of Toys – Part 3: Migration of Certain Elements)
				③	Verification of submitted documents
			f)	Verification of submitted documents	
			g)	Verification of submitted documents and the test report of authorized institute according to the following test method or a certificate of equivalent or higher criteria <ul style="list-style-type: none"> ▪ KS G ISO 8124-3 (Safety of Toys – Part 3: Migration of Certain Elements) 	
			3.1.1.2	a)	Verification of submitted documents
		b)		Verification of submitted documents and the test report of authorized institute according to the following test method or one equivalent to it. <ul style="list-style-type: none"> ▪ PBBs, PBDEs: KS C IEC 62321 (Procedures for the 	

			<p>Determination of Levels of Six Regulated Substances(Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers) in Electrotechnical Products)</p> <ul style="list-style-type: none"> ▪ TBBPA, HBCD : KS M 1072 (Determination of TBBPA (Tetrabromobisphenol-A) and HBCD (Hexabromocyclododecane) in Polymer Materials) ▪ Total Bromide (Br): KS M 0180 (Standard Test Method for Halogen(F, Cl, Br) and Sulfur Content by Oxidative Pyrohydrolytic Combustion Followed by Ion Chromatography Detection(Combustion Ion Chromatography – CIC))
		c)	① Verification of submitted documents and the test report of authorized institute according to KS M0031 (General Rules for Gas Chromatographic Analysis)
			② Verification of submitted documents and the test report of authorized institute according to KS M 1991 (Determination of Phthalates Contents in Polymer Materials)
		d)	Test report of authorized institute according to '[Attached Table 2] Test Method for the Content of Polycyclic Aromatic Hydrocarbons in Kids' Products' of "Test Method for Exposure of PCBs and PAHs" of the 「Enforcement Decree of the Environmental Conservation Act」
	3.1.1.3	a)	① ~② Verification of submitted documents
			b)
	3.1.1.4	a)	Test report of authorized institute according to KS K 0147 (Test Method for Determination of Aryl Amine level on the Dyestuff and Dyed Products)
		b)	Verification of submitted documents
		c)	Verification of submitted documents and the test report of authorized institute according to "3.1 Environmental Criteria" of "Printing Inks and Writing Inks (EL602)" or a certificate of equivalent or higher criteria
		d)	Verification of submitted documents and the test report of authorized institute according to "3.1 Environmental Criteria" of "Paper Adhesive Tape and Paper Adhesive Sheet (EL103)" or a certificate of equivalent or higher criteria

		3.1.1.5	Verification of submitted documents and the test report of authorized institute according to KS K 0853 (Test Method for Determination of Nickel Release from Products intended to come into Direct and Prolonged Contact with the Skin: Alternate Exposure) or equivalent or higher criteria
	3.1.2	3.1.2.1 ~5	Verification of submitted documents
		3.1.2.6	Verification of submitted documents or test report of authorized institute according to KS T 1303 [Measuring Methods for Space Proportion of Consumer Packaging]
		3.1.2.7	Verification of submitted documents
Quality Criteria			Test report of authorized institute according to the relevant standards or a certificate of equivalent or higher standard
Consumer Information			Verification of submitted documents

4.1 General Matters

4.1.1

In principle, the number of test samples shall be one per product, unless more than one test sample is required.

4.1.2

For test samples, consigned ecolabel certification institute shall conduct a random sampling of products on the market or ones stored in production fields.

4.2.3

Rounding-off of test results shall be conducted according to KS Q 5002 (Statistical Data Analysis Method – Part 1: Statistical Description of Data).

5. Certification Reasons

“Easiness to Recycle, Reduction in Harmful Substances”

<Attached Table 1> List of Subject Stationery Products

Classification		Subject
Writing supplies	Fountain pen	Fountain pen
		Nib for fountain pens
	Sharp pencil	Sharp pencil
		Sharp lead
	Ball-point pen	Oil/water-based pen
		Oil/water-based ball-point pen ink
	Pencil	Pencil/colored pencil
	Marking pen	Water/oil-based marker
		Marker cartridge
Marking pen for enameled board		
Office supplies	General office supplies	Pencil case, pencil holder, pencil sharpener, punch and awl
		Adhesive tape, tape cutter, etc.
		Stapler, staples
		Staple remover, clip, clip case, pin, tack
		Letter opener, cutter
		Cutting mat, desk mat, and plastic products such as name tag
	Draftsman's materials	Drafting board, ruler, triangle, protractor, compass for students
Art supplies	Painting supplies	Watercolor paints
		Crayon, craypas (oil pastels)
		Water bottle, palette
	Sculpture supplies	Carving knife
Other stationery ^{Note1)}	Adhesive tools	Office glue / synthetic glue / solid glue
	Correction tool	Eraser
		Correction liquid and collection tape
	Other office supplies	Blackboard ^{Note2)} , whiteboard and board eraser
Colored paper		

Note 1) Certification Deliberation Committee may determine products which can be recognized as other stationery.

Note 2) It refers to Size 1 products specified in "3. Title and Size" according to KS G 2002 (Blackboard).

<Table 2> List of Chemical Materials

(related to '3.1 Environmental Criteria' of "3. Certification Criteria")

1. Dyestuffs classified as allergenic

CAS No.	Substance	CAS No.	Substance
2475-45-8	C.I. Disperse Blue 1	12223-33-5	C.I. Disperse Orange 37
2475-46-9	C.I. Disperse Blue 3	13301-61-6	C.I. Disperse Orange 76
3179-90-6	C.I. Disperse Blue 7	2872-52-8	C.I. Disperse Red 1
3860-63-7	C.I. Disperse Blue 26	2872-48-2	C.I. Disperse Red 11
12222-75-2	C.I. Disperse Blue 35	3179-89-3	C.I. Disperse Red 17
12222-97-8	C.I. Disperse Blue 102	119-15-3	C.I. Disperse Yellow 1
12223-01-7	C.I. Disperse Blue 106	2832-40-8	C.I. Disperse Yellow 3
61951-51-7	C.I. Disperse Blue 124	6373-73-5	C.I. Disperse Yellow 9
23355-64-8	C.I. Disperse Brown 1	12236-29-2	C.I. Disperse Yellow 39
2581-69-3	C.I. Disperse Orange 1	54824-37-2	C.I. Disperse Yellow 49
730-40-5	C.I. Disperse Orange 3		

2. Dyestuffs classified as carcinogenic

CAS No.	Substance	CAS No.	Substance
3761-53-3	C.I. Acid Red 26	573-58-0	C.I. Direct Red 28
569-61-9	C.I. Basic Red 9	2475-45-8	C.I. Disperse Blue 1
632-99-5	C.I. Basic Violet 14	82-28-0	C.I. Disperse Orange 11
1937-37-7	C.I. Direct Black 38	2832-40-8	C.I. Disperse Yellow 3
2602-46-2	C.I. Direct Blue 6		

3. Other banned dyestuffs

CAS No.	Substance	CAS No.	Substance
85136-74-9	C.I. Disperse Orange 149	6250-23-3	C.I. Disperse Yellow 23

4. Azo dyestuffs

Note) Dyes that have azo group (-N=N-) as chromophores, which are the compounds that can be degraded into the following amines.

CAS No.	Substance	CAS No.	Substance
92-67-1	4-aminodiphenyl	95-69-2	4-chloro-o-toluidine
92-87-5	benzidine	91-59-8	2-naphthylamine
97-56-3	o-aminoazotoluene	101-14-4	4,4-methylene-bis-(2-chloroanilene)
99-55-8	2-amino-4-nitrotoluene	101-80-4	4,4-oxideaniline
106-47-8	p-chloroaniline	139-65-1	4,4-thiodianiline
615-05-4	2,4-diaminoanisole	95-53-4	o-toluidine
101-77-9	4,4-diaminodiphenylmethane	95-80-7	2,4-toluylenediamine
91-94-1	3,3-dichlorobenzidine	137-17-7	2,4,5-trimethylaniline
119-90-4	3,3-dimethoxybenzidine	90-04-0	o-anisidine
119-93-7	3,3-dimethylbenzidine	95-68-1	2,4-xylidine
838-88-0	3,3-dimethyl-4,4'-diaminodiphenylmethane	87-62-7	2,6-xylidine
120-71-8	p-cresidine	60-09-3	4-aminoazobenzene

5. Flame retardant

CAS No.	Substance	CAS No.	Substance
59536-65-1	PBBs: polybrominated biphenyls	25637-99-4	HBCD: hexabromocyclododecane
126-72-7	TRIS: tri-(2,3-dibromopropyl)- phosphate	85535-84-8	short chain chlorinated paraffins (C10 ~ C13)
545-55-1	TEPA: tris-(aziridinyl)-phosphin oxide	115-96-8	TCEP: tris(2-chloroethyl)- phosphate
32534-81-9 32536-52-0 1163-19-5	PBDEs: polybromodiphenyl ethers	79-94-7	TBBPA: tetrabromobisphenol A

6. Polycyclic aromatic hydrocarbons; PAHs

CAS No.	Substance	CAS No.	Substance
83-32-9	acenaphthene	218-01-9	chrysene
208-96-8	acenaphthylene	53-70-3	dibenz[a,h]anthracene
120-12-7	anthracene	206-44-0	fluoranthene
56-55-3	benzo[a]anthracene	86-73-7	fluorene
50-32-8	benzo[a]pyrene	193-39-5	indeno[1,2,3-c,d]pyrene
205-99-2	benzo[b]fluoranthene	91-20-3	naphthalene
191-24-2	benzo[g,h,i]perylene	85-01-8	phenanthrene
207-08-9	benzo[k]fluoranthene	129-00-0	pyrene
205-82-3	benzo[j]fluoranthene	192-97-2	benzo[e]pyrene

Common Criteria

1. Ecolabelled 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 during 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 ecolabelling 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 appropriate parts 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 appropriate parts 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 protect consumer, the applicant for ecolabel and the holder of ecolabel 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 to 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.