



EcoLogo™

Environmental Standard - Certification Criteria Document

Draft 1: CCD-172 Toys

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Draft Environmental Standard CCD-172: Toys



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Certification Criteria Document 172, CCD-172, is proposed for use of the EcoLogo™ in association with toys.

Feedback from individuals and organizations on this initial draft of the toy standard is essential to ensure that the criteria represent environmental leadership and are realistic for companies to achieve. This first draft incorporates feedback from a public comment period that occurred from August 4 to September 29, 2009, subsequent follow-up research, and input to date from the Advisory Committee. A summary of the comments received from stakeholders in August and September 2009 on the discussion document can be found here:

http://www.ecologo.org/en/criteria/subpage.asp?page_id=170

Although specific questions are posed throughout the document in red text, EcoLogo encourages you to provide feedback and comment on all aspects of the proposed standard during this time. Should you be interested in providing feedback, please forward it directly to [Katherine Stewart](#) by May 17, 2010 and accompany your suggestions with a clear rationale and scientific evidence whenever possible.

Overarching discussion points include:

- Will the proposed standard lead to the certification of environmentally preferable products (i.e. environmental leadership as defined by the EcoLogo Program)? Why or why not?
- Are there any additional toxic chemicals that should be restricted from use in the standard, or should some of the chemicals listed as restricted be allowed? If so, why?
- Do you agree with the criteria contained in the proposed standard? If not, please delineate your concerns.

The stakeholder comment period will be open for 30 days beginning April 16, 2010. The deadline for public comment on this first draft is May 17, 2010.

Please forward all comments directly to:

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Introduction

The EcoLogo™ Program develops standards designed to reduce environmental impacts by specifying criteria for: safer chemicals and materials, use of recycled and recyclable materials, and minimizing pollution generated by the production, use and disposal of these products and their packaging. EcoLogo is committed to recognizing a wide variety of environmentally preferable play products, ranging from balls and action figures, to costume clothing and jewellery.

The first draft of this standard currently includes play products made from wood, plastic, rubber, textiles, metal and bio-based materials. The proposed standard prohibits added fragrances, anti-microbial and antibacterial agents, heavy metals such as lead, cadmium and mercury and substances that are known carcinogens, mutagens or reproductive toxins. While CCD-172 is a materials-based standard, some categories of toys are explicitly excluded at this time, because the criteria in the standard do not adequately address all components of the toy.

The requirements of the EcoLogo Toy Standard, CCD-172, are intended to encourage the design and development of toy products that are more environmentally sound than those currently on the market, and are produced in a way that is socially responsible. Based on a review of currently available life cycle information, the product category requirements will produce an environmental benefit through a substitution of less intrusive raw materials, a reduction in environmental hazards, and an increase of product recyclability and use of recycled materials. Life cycle assessment is an ongoing process. As new information becomes available about life cycle impacts, the product category requirements will be reviewed and possibly amended.

Notice

Any reference to a standard means to the latest edition of that standard. The EcoLogo Program reserves the right to accept equivalent test data for the test methods specified in this document.

1.0 Interpretation

In this standard:

“Asthmagens” are substances designated as asthma causing agents by the Association of Occupational and Environmental Clinics, or AOEC, which after review by AOEC have met the AOEC sensitization criteria.

“Bisphenol A” is an organic compound with two phenol functional groups such as, inter alia, 2,2-(4,4'-dihydroxydiphenyl) propane, 4,4'-isopropylidenediphenol, or 2,2'-bis(4-hydroxyphenyl) propane.

“Biobased” means commercial or industrial goods (other than food or feed) composed in whole or in significant part of biological products, forestry materials, or renewable domestic agricultural materials, including plant, animal, or marine materials.

“Carcinogens” means chemicals listed as a known, probable, reasonably anticipated, or possible human carcinogen by the IARC (Groups 1, 2A, and 2B), NTP (Groups 1 and 2), EPA IRIS (weight-of-evidence classifications A, B1, B2, C, carcinogenic, likely to be carcinogenic, and suggestive evidence of carcinogenicity or carcinogen potential), or by OSHA (as carcinogens under 29 CFR 1910.1003(a)(1)).

“Elemental chlorine free” means that the paper fiber has been bleached by means other than gaseous elemental chlorine (Cl₂). Alternative methods include hydrogen peroxide bleaching, use of chlorine dioxide, or other bleaching compounds.

“Endocrine disruptor” means an exogenous substance or mixture that alters function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub) populations. Candidate endocrine disruptors are listed in the EUROPEAN COMMISSION DG ENV: Towards the establishment of a priority list of substances for further evaluation of their role in endocrine disruption (Final Report 2000)
http://ec.europa.eu/environment/docum/pdf/bkh_annex_13.pdf.

“Genetically modified organism” means wood and natural materials derived from organisms with human induced genetic structural changes. Traditional breeding programs do not constitute genetic modification. (For a definition of genetically modified, please refer to the EU Directive 2001/18/EC on the deliberate release of genetically modified organisms in the environment).

“Halogenated organic compounds” means any organic compound containing halogens including fluorine, chlorine, bromine and iodine.

“High conservation value communities” means communities that possess one or more of the following attributes:

- Contain globally, regionally or nationally significant concentrations of biodiversity values; and/or large landscape level communities, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.
- Communities that are in or contain rare, threatened or endangered ecosystems.
- Communities fundamental to meeting basic needs of locally indigenous human populations and/or critical to these people’s traditional cultural identity.

“Illegal harvesting” means wood and natural materials harvested, traded, or transported in a way that is in breach of applicable national regulations.

“Mutagen” means a chemical that meets the criteria for category 1, chemicals known to induce heritable mutations or to be regarded as if they induce heritable mutations in the germ cells of humans, under the Globally Harmonized System for Classification and Labeling of Chemicals (GHS).

“Package” refers to a container providing a means of marketing, protecting, or handling of product and shall include a unit package, an intermediate package, and a shipping container as defined in American Society for Testing and Materials (ASTM) D 996.

“Primary packaging” means the material physically coming into contact with and containing the product; also includes those materials that ensure product integrity, safety, regulatory compliance (on-package labels, e.g.) and prevent illicit tampering.

“PVC” means polyvinyl chloride, an industrial plastic derived from the polymerization of vinyl chloride, also known as chloroethene (CH₂CHCl).

“Post-consumer” means material that has served its end-use at the consumer level, has been discarded by the consumer, and unless diverted, would enter the waste stream.

“Recyclable material” means material that can be diverted from the waste stream through available processes and programs, and can be collected, processed, and returned to use in the form of raw materials or products.

“Recycled content exemption” is defined as specified in the Model Toxics in Packaging Legislation (www.toxicsinpackaging.org/model_legislation.html), and is as the follows: “packages and packaging components that would not exceed the maximum contaminant levels set forth in subsection c of Section 4 of this Act but for the addition of recycled materials; provided that none of the four regulated metals in the packaging or packaging components has been recovered and/or separated from other materials for use as a metal or metallic compound; and provided that the packages or packaging components do not exceed a maximum concentration limit of 200 ppm for the sum of the four regulated metals.”

“**Reproductive toxin**” means a chemical listed as a reproductive toxin (including developmental, female, and male toxins) by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (California Code of Regulations, Title 22, Division 2, Subdivision 1, Chapter 3, Sections 1200, et. Seq., also known as Proposition 65).

“**Secondary packaging**” means any packaging material other than primary packaging, including wrappers, boxes, and blister packs, but excluding shipping packaging.

“**Shipping packaging**” means any packaging material, such as corrugated containers, required to ensure product integrity during shipping, but excluding the pallet and pallet load wrapping.

“**Textile and padding material**” means all textiles and padding materials made from natural growth fibers (including cotton, linen, bamboo, hemp, kenaf, kapok and similar materials), and synthetic fibers.

“**Wood-based materials**” means solid wood, wood laminate, plywood and other materials such as willow and bamboo.

Q1: The standard development team is considering making the toy standard a tiered standard to reward levels of environmental leadership. A tiered standard would include a rigorous base level of prerequisites with optional, additional criteria for companies to meet to demonstrate higher levels of leadership (i.e. silver, gold, platinum). The purpose of a tiered standard is to encourage companies to make continuous improvements in their products over time, thereby achieving a higher level of recognition.

Do you think it would be valuable to create a tiered standard for this product category? Please comment.

2.0 Category Definition

This standard is intended to cover play products designed or intended by the manufacturer for children 14 years of age or younger. Toys for children made of one or more of the following materials are eligible:

- Wood-based materials
- Plastics (petroleum-based)
- Bio-based materials
- Rubber
- Textiles and padding material
- Metals.

Remaining materials may each make up to 1% in weight of the toy. In total, remaining materials may make up a maximum of 2% in weight of the toy.

Articles not covered by this standard are as follows:

- Children's furniture
- Sporting goods or athletic equipment intended for competitive use or personal protective equipment
- Arts and crafts items, including model kits, in which the finished product is not primarily of play value
- Cosmetics
- Electronic devices that include video screens or that are designed to be networked to a video device.
- Toys and play items that promote violence (for example, toy guns, toy grenades etc.). As necessary, EcoLogo shall make this determination on a case-by-case basis.

Q2: Are there other broad classifications of play products that you would recommend be excluded from this standard? If so, why?

3.0 General Requirements

To be authorized to carry the EcoLogo, toy products must:

- Meet or exceed all applicable toy safety standards;
- Meet or exceed all applicable governmental and industrial safety and performance standards;
- Be manufactured and transported in such a manner that all steps of the process, including the disposal of waste products arising there from, will meet the requirements of all applicable governmental acts, bylaws and regulations; and
- Meet both the requirements listed under product-specific and materials-specific categories.

4.0 Product Specific Requirements

To be authorized to carry the EcoLogo, toys must meet the following requirements:

Prohibited and Restricted Substances

- a) Fulfill all chemical safety requirements as described in the EU Directive 2009/48/EC on the safety of toys;

- b) Not contain any substances or components that are carcinogens, mutagens, or reproductive toxins. The product also shall not contain any ingredients known to produce or release carcinogens, mutagens, or reproductive toxins;
- c) Not contain the following heavy metals: lead, cadmium, mercury, hexavalent chromium, arsenic, organotins either in their elemental form or compounds;
- d) Not contain any ingredients that have been identified as asthmagens;
- e) Not contain substances that are persistent, bioaccumulative, and toxic (PBTs), or very persistent and very bioaccumulative (vPvBs) according to Annex XIII of the EU REACH regulation (EC 1907/2006);
- f) Not contain substances that are under assessment as endocrine disruptors;
- g) Not contain known neurotoxins;
- h) Not contain any added fragrance; and
- i) Not contain any agents added specifically to infer anti-bacterial or anti-microbial properties.

Q3: Are there other chemicals of concern that you feel should be prohibited in the Toy Standard that are not incorporated in one of the categories list above? Please list.

5.0 Material Specific Requirements

The requirements in this section apply to each type of material contained in the finished product.

A) Wood-Based Materials

To be authorized to carry the EcoLogo, wood-based materials must meet the following criteria:

- i) The license holder and/or manufacturer must be able to identify the origins of all wood (with the exception of small parts that make up less than 1% of the weight cumulatively of the toy);
- ii) Wood-based materials must not derive from forest environments that are protected for social or biological reasons;
- iii) Chemical products used for impregnating wood must contain $\leq 5\%$ by weight organic solvents. The content of aromatic compounds must not exceed 5% by weight;

- iv) Chemical products used for impregnating wood (with the exception of small parts that make up less than 1% of the weight cumulatively of the toy), must be disclosed and must not be classified as being from any of the following hazard classification lists (with risk phrases in brackets):
- May cause cancer with symbol T (R45, R49)
 - May cause cancer with symbol XN (R40)
 - May impair fertility with symbol T (R60, R61)
 - May impair fertility with symbol XN (R62, R63)
 - May cause heritable genetic damage with symbol T (R46)
 - May cause heritable genetic damage with symbol XN (R68)
 - Very poisonous with symbol T+ (R26, R27, R28)
 - Poisonous with symbol T (R23, R24, R25)
 - May cause allergies with symbol Xn (R42)
 - May cause environmental damage with symbol N (R50, R50 + 53, R51 + 53)
 - May cause environmental damage without symbol (R52 + 53, R52, R53)
- v) Wood must derive from certified forestry operations, where certification must be performed by a third party in accordance with a credible and well-recognized forestry standard such as the Forest Stewardship Council (www.fsc.org). Certification must ascertain that the material does not originate from illegal harvesting, genetically modified organisms, or uncertified high conservation value communities;
- vi) Paper and paperboard present in components of the toy or in included printed material must be harvested under a third party certification system, such as the Forest Stewardship Council (FSC), Canadian Standards Association (CSA), Sustainable Forestry Initiative (SFI), American Tree Farm System (ATFS), or another forestry certification scheme recognized by the Program for the Endorsement of Forest Certification Schemes (PEFC). If the paper is not eco-labeled, the following requirements apply:
- Origin of the raw material must not derive from forest environments that require protection for biological and social reasons, and
 - At least 40% by weight of board and paper content of the toy must be sourced from certified forestry OR
 - At least 30% of the board and paper content of the toy must be sourced from recycled fiber;
- vii) Paper and paperboard must be manufactured so that effluent from the paper mill or any mill which produces a component of pulp, if such mills operate a chlorine bleaching plant, does not contain a measurable concentration of 2,3,7,8- TCDD or a measurable concentration of 2,3,7,8-TCDF.

Q4: Should the standard include salvaged or reclaimed wood?

Q5: The hazard classification is listed in accordance with the regulations on the classification and labeling of hazardous chemicals in force under the EU classification system, which is broadly used and referenced (see (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0059:EN:HTML>))

Is this a useful style to reference in the Toy Standard? The alternative is to reference the broad list of overall prohibited materials and separately call out substances of concern that may not fall within one of those categories. Please comment.

B) Plastic (Petroleum-based) and Rubber Materials

To be authorized to carry the EcoLogo, plastic and rubber-based components comprising 1% or more of the total weight of the toy must meet the following criteria:

- i) Be described in terms of polymer and any key additives for specialty resins;
- ii) Aromatic solvents in excess of 1% by weight must not intentionally be added to the plastic or rubber;
- iii) Nitrosamines or nitrosamine-forming substances in excess of 0.1 mg/kg must not be intentionally added to plastic or rubber; and
- iv) All plastic components must be recyclable and marked with an appropriate resin code in accordance with ISO 11469.

C) Textiles and Padding Materials

To be authorized to carry the EcoLogo, all textile and padding materials must meet the following criteria:

- i) Growth fibers, wool and synthetic fibers must satisfy all requirements of the Oeko-Tex 100 Standard (see: http://www.oeko-tex.com/OekoTex100_PUBLIC/index.asp);
- ii) The quantity of free formaldehyde in padding materials must not exceed 30ppm;
- iii) No CFCs, HCFCs, HFCs or methylene chloride may be used as blowing agents or auxiliary blowing agents;
- iv) Padding materials must not contain colorants; and
- v) Content of antimony in polyester fiber must not exceed 60ppm.

Q6: Are there other third party certified textile eco-labels that should be considered for this section?

D) Other Bio-based Materials

To be authorized to carry the EcoLogo, all bio-based materials must meet the following criteria:

- i) Be ecologically sustainable; and
- ii) Harvested in accordance with the Council for Sustainable Biomass Production's sustainability standard for biomass growers and bioenergy producers (or comparable standard).

E) Metals

To be authorized to carry the EcoLogo, all metal components of the toy must meet the following criteria:

- i) Halogenated organic compounds must not be used in the degreasing of metals;
- ii) Chromium III and/or nickel must not be used to treat metal surfaces, except in exceptional circumstances of heavy physical wear and tear, or where parts must have a particularly tight fit;
- iii) Chromium treatment must be based on Chromium III and not contain Chromium VI at any stage in the preparation and surface treatment;
- iv) Air Emissions from the final product from surface treatment with chromium must not exceed 0.1 mg/L;
- v) Emissions from surface treatment with nickel must not exceed 0.1 mg/L;
- vi) Defoaming chemicals used in chromium-plating must not contain halogenated organic compounds, including PFOS (perfluorooctanesulfonate);
- vii) Halogenated organic compounds, phthalates, aziridine, polyaziridines, and pigments and additives based on lead, tin, cadmium, chromium VI and mercury and their compounds must not be intentionally added to products for preparing or treating surfaces;
- viii) The content of organic solvents must not exceed 5% by weight, of which the content of aromatic solvents must be less than or equal to 1% by weight;
- ix) All steel for use in toys must be derived from steel feedstocks with either of the following requirements:
 - Contain a minimum total recycled content of 50%, based on a rolling 12-month average; or
 - Included a minimum total post-consumer content of 15%, based on a rolling 12-month average; and
- x) All metals must be 100% recyclable.

F) Volatile Organic Compound Emissions

To be authorized to carry the EcoLogo, the following requirements must be met:

- i) Products must not produce a total VOC concentration greater than that specified below at time of unpacking, when measured against the GreenGuard Emission Criteria for Low Emitting Products under the Children & Schools Program:

VOC	Amount	Note
Individual VOCs ¹	≤1/100 TLV and ≤½ CA chronic REL	Any VOC not listed must produce an air concentration level no greater than 1/100 the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, Cincinnati, Ohio 45211-4438) and/or no greater than 1/2 the CA Chronic Reference Exposure Level (CREL) (http://www.oehha.ca.gov/air/chronic_rels/AllChrels.html - (CRELs) Adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA), February 2005).
Formaldehyde ²	≤0.0135 ppm/13.5 ppb	Formaldehyde criteria established so that emission levels reach 0.014 ppm (13.5 ppb) within 14 days of installation (meeting CA 1350 requirements).
Total VOCs ³	≤0.22 mg/m ³	Defined to be the total response of measured VOCs falling within the C6 – C16 range, with responses calibrated to a toluene surrogate.
Total Aldehydes ⁴	≤0.043 ppm/43 ppb	Defined to be the total response of a specific target list of aldehydes (2-butenal; acetaldehyde; benzaldehyde; 2,5-dimethylbenzaldehyde, 2-methylbenzaldehyde; 3-and/or 4-methylbenzaldehyde; butanal; 3-methylbutanal; formaldehyde; hexanal; pentanal; propanal), with each individually calibrated to a compound specific standard.
Total Phthalates ⁵	≤0.01 mg/m ³	Defined to be the total response of a specific target list of phthalates including dibutyl (DBP), diethylhexyl (DEHD), diethyl (DEP), butylbenzyl (BBP), di-octyl (DOP), and dimethyl (DMP) phthalates (conducted using a modified phthalate specific analytical method, OSHA 104).
Total Particles (≤ 10µm) ⁶	≤0.02 mg/m ³	Particles applicable to fibrous, particle-releasing products with exposed surface area in air streams (a forced air test with specific test method).

G) Adhesives

- i) To be authorized to carry the EcoLogo, adhesives must comply with all requirements stated under Section 4 of this Standard pertaining to Prohibited and Restricted Substances.

6.0 Packaging

The requirements in this section apply to all primary and secondary packaging included with the toy. To be authorized to carry the EcoLogo, packaging materials must meet the following criteria:

- a) Styrofoam and/or PVC plastic shall not be used;
- b) Heavy metals shall not be intentionally added to any package or packaging component. For incidental presence, the sum of the concentration levels of lead, cadmium, mercury and hexavalent chromium present in any package or packaging component shall not exceed 100ppm by weight (0.01%), with the exception of packages or packaging components that qualify for the recycled content exception cited in the Model Toxics in Packaging legislation;
- c) At least 90% of the packaging must be recyclable or compostable;
- d) Packaging must include a minimum of 25% post-consumer recycled content;
- e) All virgin fiber-based packaging content must be responsibly sourced by taking the following aspects of forest production and fiber processing and manufacturing into consideration: sustainable forest management, traceability, monitoring and verification and legality. The requirement is fulfilled when the packaging is certified by EcoLogo or by another type-1 ecolabel;
- f) Paper used in packaging must not be bleached with any compounds containing or giving rise to elemental chlorine;
- g) All plastic packaging must be identified by material type (resin identification code, DIN, or country specific).

7.0 Socially and Environmentally Responsible Manufacturing

Socially and environmentally responsible manufacturing includes careful attention to both environmental management and working conditions. This section includes criteria for assessing and improving environmental management and for systematically evaluating labor practices and encouraging continuous improvement of working conditions.

To be authorized to carry the EcoLogo, the following requirements must be met:

- a) Manufacturers must document compliance with local, regional and national environmental and occupational health and safety requirements. Any violations must be reported along with plans for addressing noncompliance;
- b) Manufacturing facilities must provide documentation that they have in place an effective environmental management system. Facilities that are certified to ISO 14001, EMAS, or another equivalent certification will be considered to have met this criterion. Manufacturing facilities that do not hold an EMS certification must provide written documentation of their environmental management system;
- c) Manufacturing facilities must demonstrate that production is conducted in accordance with the International Labor Organization's and the United Nation's conventions including, but not limited to, child labor, forced labor, health and safety, freedom to organize and the right to collective bargaining, discrimination, discipline, working hours and pay. Manufacturers must also document that there is a management system in place to evaluate and improve working conditions. Workers and their unions shall be informed of their rights according to the law and how the company will comply with this law. Facilities may demonstrate that they meet these requirements as follows:
 - Valid Seal of Compliance with ICTI CARE Code of Business Practices, or
 - Documentation that factory has been monitored to ICTI CARE standards in locations where Seal of Compliance is not available, or
 - Documentation that manufacturing facility meets requirements of an alternative code of conduct that is recognized as being substantially equivalent to that required by ICTI CARE program, or
 - Facilities not monitored by ICTI CARE or another auditing system must provide alternative documentation of monitoring that evaluates working conditions and addresses child labor, forced labor, health and safety, freedom to organize and the right to collective bargaining, discrimination, discipline, working hours and pay.

8.0 Verification

To certify a claim that a product meets the criteria listed in this document, the EcoLogo Program will require access, as is its normal practice, to relevant quality control and product records and the right of access to production facilities on an announced basis.

Compliance with section 3 shall be attested to by a signed statement of the Chief Executive Officer or the equivalent officer of the manufacturer. The EcoLogo Program shall be advised in writing immediately by the licensee of any non-compliance that may occur during the term of the license.

On the occurrence of any non-compliance, the license may be suspended or terminated as stipulated in the license agreement.



Conditions for EcoLogo Use

The EcoLogo™ may appear on wholesale or retail packaging, or on the product itself, provided that the product meets the requirements in this standard.

A criteria statement must appear with the EcoLogo whenever it is used in association with toy products. The intent of this statement is to provide clarification as to why the product was certified, and to indicate any constraints to which the certification is limited. This is to ensure no ambiguity over, or misrepresentation of, the reason(s) for certification.

The suggested criteria statement for this product is 'Certified Toy CCD-172.' The licensee may propose alternative wording for the criteria statement, however any such proposed wording must be approved by the EcoLogo Program.

All licensees and authorized users must comply with the U.S. Federal Trade Commission's Guides for the Use of Environmental Marketing Claims, the Canadian Competition Bureau's Environmental Claims: A Guide for Industry and Advertisers, and the EcoLogo Program's Guide to Proper Use of the EcoLogo™ regarding the format and usage of the EcoLogo.

Any accompanying advertising must conform with the relevant requirements stipulated in this guideline, the license agreement, the U.S. Federal Trade Commission's Guides for the Use of Environmental Marketing Claims, the Canadian Competition Bureau's Environmental Claims: A Guide for Industry and Advertisers, and the EcoLogo Program's Guide to Proper Use of the EcoLogo™ regarding the format and usage of the EcoLogo™.

For additional copies of this standard, or for more information about the EcoLogo Program, please contact:

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