

The Australian Ecolabel Program

Good Environmental Choice Australia Standard

Recycled Paper Products



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Use of This Standard

This voluntary environmental labelling standard may be used by competent environmental assessors to establish product compliance to the Australian Ecolabel Program. Products that are certified with the mark of conformity, the “Good Environmental Choice Label” have been independently tested and demonstrate compliance to the environmental and social performance criteria detailed in this standard. The overall goal of environmental labels and declarations is the communication of verifiable and accurate information, which is not misleading, on environmental aspects of products and services. This encourages the demand for, and supply of, those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

This standard identifies environmental, quality, regulatory and social performance criteria that products sold on the Australian market can meet in order to be considered as good “environment practice”. Products that have been certified as complying to this standard may gain greater market recognition and a marketing advantage in government and business procurement programs, as well as broad consumer preference.

This standard can be used by Australian producers to guide their designs for environment programs by using the environmental criteria as key performance benchmarks to reduce the environmental loads of their product. The standard is necessarily restricted in its identification of environmental loads from the product life-cycle. Producers should consider other environmental measures along the product cycle, which are not included in this standard, in their environment program designs for and aim for even higher levels of environmental performance where technically possible.

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GOOD ENVIRONMENTAL CHOICE AUSTRALIA STANDARD

Recycled Paper Products

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Abstract

This Standard specifies environmental performance requirements of recycled paper products for the Australian Ecolabel Program. The Australian Ecolabel Program complies with ISO 14024: "Environmental labels and declarations - Guiding principles" which requires environmental labelling specifications to include criteria that are objective, reasonable and verifiable.

Definitions

AOX (absorbable organic halogens) means the amount of organic halogens present in water. In paper manufacture, organic halogens of concern are commonly by-products of the chlorine bleaching processes.

Chemical Oxygen Demand (COD) means the mass concentration of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant under defined conditions.

Label means the Environmental Choice Australia Label.

Readily biodegradable surfactants are those where the average level of biodegradation observed in an aerobic sewage treatment plant is at least 90% during a residence time of not more than 3 hours. In order to meet this requirement the surfactant must either meet the requirement for "ready biodegradability" when determined using any one of the five test methods described in the OECD Guidelines for Testing of Chemicals, Test Guidelines 301A-301E **OR** achieve a biodegradability of at least 80% when tested by the OECD method, published in the OECD technical report of 11 June 1976 on the "Proposed Method for the Determination of the Biodegradability of Surfactants used in Synthetic Detergents". The pass level of 80% recognises the inherent experimental variability of the OECD test.

Recycled Content includes:

Post-Consumer: 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.

Pre-Consumer: Material diverted from the waste stream during a manufacturing process. Excluded is re-utilisation of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Sulphur (S) means gaseous emissions of sulphur to the atmosphere, such as sulphur dioxide and reduced sulphur compounds.

1 INTRODUCTION

1.1 Purpose

This Standard seeks to define good environmental performance benchmarks for recycled paper products. The voluntary environmental labelling standard implemented by the Australian Environmental Labelling Association (GECA) specifies environmental performance criteria for a broad range of recycled paper products. This Standard stipulates the environmental load of such products throughout the major aspects of their life cycle.

1.2 Background

Paper products have long been the subject of community concern regarding the environmental impacts arising from their production, particularly the sourcing of wood pulp from virgin or unsustainably managed native forests, and emissions during the energy and chemical intensive manufacturing processes.

The standard aims in particular at promoting:

- The reduction of discharges of certain toxic or otherwise polluting substances into waters.
- The reduction of environmental damage or risks related to the use of hazardous chemicals.
- A high-level of paper recycling in order to reduce the impact of paper consumption on forests.

2 STANDARD CATEGORY SCOPE

This standard is applicable to a very broad range of recycled paper products. This standard covers paperboard, macerated and moulded paper products and the full range of general recycled paper products. This standard is not intended to be used for office or printing papers or thermal insulation materials. Specific categories are outlined below.

2.1 Corrugated Fibre-board Products

These are made by combining one or more fluted mediums with one or more external and/or internal liners. Such products are used in the manufacture of packaging (including cases, boxes, cartons, packing and wrappers).

2.2 Solid Fibre-board Products

These are made from multiple laminated plies. Such products are used in the manufacture of picture backs, art board, game boards, book covers and packaging (including cases, boxes and cartons).

2.3 Carton Board Products

These are made from coated or uncoated folding carton boards (boxboards). These materials are generally manufactured as multi-ply sheets of thickness between 300 and 1100 μm , often incorporating fibre of lower quality in the “filler” or interior plies. Such products are used in a variety of applications but predominantly in the manufacture of retail cartons.

2.4 Macerated Paper Packaging Products

These are made from mechanically engineering existing paper products and form the basis of packaging products such as padded envelopes

2.5 Outer Liners for Packaging Products

These are products are intended to enhance the presentation of packaging and must form less than 10% of the weight of the main packaging product.

2.6 Moulded Paper Products

This category includes all moulded paper products made from recycled paper, such as egg cartons, fruit trays and hobby and craft forms.

2.7 General Recycled Paper Products

This category includes other recycled paper products not covered under the above categories.

3 ENVIRONMENTAL PERFORMANCE CRITERIA

3.1 Fitness for Purpose

Certified products should be good performers in their intended application. Certain standards of quality and durability are implicit in the Label. The manufacturer must ensure that the product is fit for its intended purpose and:

3.1.1 Applicable Standards

The product meets or exceeds the requirements of the relevant Australian Standard, or the product meets the applicable and accepted standard in its target market if it is to be exported, or

3.1.2 Demonstrated Performance

If there is no relevant Australian Standard, the product can demonstrate sufficient quality by providing testing reports from an independent organisation or case studies from installations demonstrating market suitability and quality, and

3.2 Material Requirements

3.2.1 Recycled Content

Certified products shall meet the minimum resource efficiency requirements outlined below for recycled material content by weight.

Table 1: Minimum recycled content requirements for certified paper products.

Category	Total Recycled Content	Post Consumer Content
2.1 - 2.3	70 %	25 %
2.4	100 %	80 %
2.5	20 %	10 %
2.6	75 %	75 %
2.7	50 %	50 %

Note: For clay coated board, the percentages apply to the uncoated base stock weight.

3.2.2 Recyclability Requirements

No certified product may be plastic laminated, extrusion coated, coated or impregnated with wax or otherwise treated in such a manner which would prevent further recycling at the end of the normal life of the product.

3.2.3 Fibre Sources

Virgin fibre used in certified products must not be sourced from Australian or any other indigenous ecosystems.

The geographical origin of virgin fibre material must be documented, allowing confirmation of origin throughout the supply chain. Fibre for certified products shall be from:

3.2.3.1 Sustainable Plantations

These include plantation wood fibre, cellulose fibre, return fibre, cotton fibre or other waste fibre or fibre sourced from plantation forests certified by the Forest Stewardship Council or the Australian Forestry Standard or an acceptable or equivalent overseas sustainable forestry certification program. The plantation must have been established prior to 2000 and should not have impacted primary forest at the time of establishment. Establishment includes the immediate logging of primary forest followed by the establishment of the plantation within a period of ten years.

3.2.3.2 Degraded Plantations

These include fibre sourced from forests certified by the Forest Stewardship Council or the Australian Forestry Standard or equivalent forestry certification scheme where the forest has been degraded of biodiversity due to continual intensive forestry uses in a similar way for over 60 years or at least three generations of harvesting. Chain of custody standards and mechanisms of monitoring fibre source such as procedures by the Australian Forestry Standard, Pan-European Forestry Scheme, the Forest Stewardship Council or equivalent scheme must be implemented for all fibre sources subject to this criterion. The remainder shall be fibre sourced according to the requirements of the previous Section.

3.2.4 Emissions Requirements

Combined emissions from the production of all the paperboard components (apportioned to the product being licensed) must achieve weighting results for AOX, COD and sulphur (S) discharge in accordance with the limits set out below.

3.2.4.1 Bleached pulp and paper production

Products must achieve a final weighting using Table 2 of not more than 6.

3.2.4.2 Unbleached pulp and paper production

Products must achieve a final weighting using Table 2 of not more than 4.

3.2.4.3 Weighted averages

Measurements must be weighted on the basis of an annual mean of the test results derived from at least one sample per week with regard to COD and at least one sample per month with regard to sulphur.

Measurements must be weighted on the basis of an annual mean derived from the results of daily AOX tests on composites of samples taken at appropriate intervals over 24 hours, every day for seven consecutive days, every three months, or more frequently over longer periods.

Table 2: Points systems for the assessment of recycled paper products.

Parameter	Weighting Points		
	1	2	3
AOX (kg/t) paper	< 0.1(*)	0.1 < AOX < 0.3	0.3 < AOX < 0.5
COD (kg/t) paper	< 20.0	20.0 < COD < 30.0	30.0 < COD < 50.0
S (kg/t) paper	< 1.0	1.0 < S < 1.5	1.5 < S < 2.5

(*) In the case of a bleaching process without use of chlorine compounds the points incurred shall be zero.

Note: In the case of recycled paper, the emission data used apply from the receipt of the recycled paper input. Emissions arising from the original production of the paper being recycled should not be included in the calculations. Each parameter must be expressed in kilograms discharge per tonne of paperboard product.

3.3 Hazardous Substances

3.3.1 Surfactants

When surfactants are used in the manufacturing process, such as for the de-inking of recycled paper input, where quantities ≥ 100 g/ADT (summed over all the surfactants used in all the different formulations used in de-inking return fibres), each surfactant shall be readily biodegradable in accordance with OECD test method No. 301 A-F. Where such surfactants are used in quantities < 100 g/ADT, each surfactant shall be readily biodegradable or ultimately biodegradable in accordance with OECD test method No. 302 A-C. Foam inhibitors used for chemical recycling are exempted from this requirement.

3.3.2 Bleaching

The recycled paper input must not be bleached during the recycling process (including de-inking, pulping and paper making) with substances containing chlorine.

3.3.3 Dyes

3.3.3.1 Prohibited Dyes

The following dyes shall not be used:

- 4- aminodiphenyl benzidine
- 4-chloro-o-toluidine
- 2-naphtylamine
- o-aminoazotoluene
- 2-amino-4-nitrotoluene
- 4-chloroaniline
- 2,4 – diaminioanisole
- 4,4 – diaminodiphenylmethane
- 3,3 – dichlorobenzidine
- 3,3 – dimethoxybenzidine
- 3,3 – dimethylbenzidine
- 3,3 dimethyl-4,4 diaminodiphenylmethane
- p-cresidine
- 4,4 methylene-bis-(2-chloroaniline)
- 4,4-oxidianiline
- 4,4 – thiodianiline
- o-toluidine
- 2,4-toluylenediamine
- 2,4-diaminotoluene
- 2,4,5 –trimethylaniline
- o-anisidine
- 4-aminoazobenzene

3.3.3.2 Risk Phrases

No dyes or pigments shall be used on either pulp or paper that is assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof) in accordance with EU Directive 67/548/EEC:

- R50: Very toxic to aquatic organisms
- R51: Toxic to aquatic organisms
- R52: Harmful to aquatic organisms
- R53: May cause long-term adverse effects in the aquatic environment
- R58: May cause long-term adverse effects in the environment

3.3.3.3 Heavy Metals

No dyes or pigments shall be used that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts. Copper phthalocyanine dyes or pigments are excepted.

The levels of ionic impurities in the dye stuffs used shall not exceed the following: Ag 100 ppm; As 50 ppm; Ba 100 ppm; Cd 20 ppm; Co 500 ppm; Cr 100 ppm; Cu 250 ppm; Fe 2 500 ppm; Hg 4 ppm; Mn 1 000 ppm; Ni 200 ppm; Pb 100 ppm; Se 20 ppm; Sb 50 ppm; Sn 250 ppm; Zn 1 500 ppm.

3.3.3.4 Carcinogenic Substances

No dyestuffs or any other additive may be used which have been identified as carcinogenic substances in categories 1, 2A and 2B as classed by the International Agency for Research on Cancer – <http://www.iarc.fr>.

3.3.4 Solvents and Cleaning Agents

Solvents used in the cleaning of production equipment must be free of halogenated hydrocarbons and alkylphenol ethoxylates or other alkylphenol derivatives (APEO's). Testing equipment is excluded from this requirement.

Solvents used to clean production equipment must not contain ozone depleting substances as listed in Annex A, B or C of the Montreal Protocol.

3.4 Packaging Requirements

Used packaging shall be able to be recycled by local recycling systems.

Chlorinated or halogenated plastics must not be used in product packaging.

4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS

The applicant is required to comply with relevant environmental legislation and government orders at the Local, State, and Commonwealth levels, if these have been issued. An applicant's compliance with these criteria may be established by undertaking a series of random checks; and/or by gathering samples of applicant operational procedures and documents from approved assessors as evidence to support compliance during the verification. Where an applicant is from an overseas jurisdiction, that jurisdiction's environmental regulations apply. Where the applicant is subject to a guilty verdict by a legally constituted court in the last 24 months on the basis of a breach of any environmental legislation or permits, there must be evidence of corrective action.

5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS

An applicant shall demonstrate that all employees are covered by a Federal or State award or a certified industrial agreement or a registered workplace agreement as determined by the Industrial Relations Commission, the Employment Advocate or a State or Territory Workplace Relations Agency or a workplace agreement in compliance with Workplace Relations Act 1996 Part 7 – The Australian Fair Pay and Conditions Standard.

An applicant shall demonstrate general compliance to the terms of State or Territory Legislation concerning Occupational, Health and Safety and/or the *Commonwealth Safety, Rehabilitation and Compensation Act 1988*, where applicable. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court within the last 24 months, on the basis of a breach of State, Territory or Commonwealth Occupational, Health and Safety Legislation, there must be evidence of corrective action.

The applicant shall demonstrate general compliance to the requirements of the Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Equal Opportunity for Women in the Workplace Act 1999, and complementary State Legislation. Applicants cannot be in the list of 'named' or non-compliant employers under the Equal Opportunity for Women in the Workplace Act 1999. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court in the last 24 months on the basis of a breach of these Acts, there must be evidence of corrective action.

Where an applicant is from an overseas jurisdiction, the applicant shall demonstrate general compliance to that jurisdiction's anti-discrimination, occupational health and safety, and workers' compensations regulations. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by a legal court in their respective country within the last 24 months on the basis of a the breach of anti-discrimination, occupational health and safety, and workers' compensation regulations, there must be evidence of corrective action.

An applicant's compliance with these criteria may be established by undertaking a series of random checks; gathering samples of applicant operational procedures and documents from approved assessors; and/or by providing a self-declaration document signed by an executive officer of the applicant organisation as evidence to support compliance during verification.

6 COMPLIANCE TESTING

6.1 Audit Methodology

Conformance with this standard shall be demonstrated by undertaking an assessment under the above criteria by an approved assessor, following the certification and verification procedures detailed in the Good Environmental Choice Australia Ltd Documented Quality Management System, which generally follows the environmental auditing requirements of ISO 19 011.

6.2 Assessor Competency

The Australian Ecolabel Program classifies approved assessors as:

- a. Assessors registered by Good Environmental Choice Australia Ltd as environmental professionals that hold expertise relevant for an assessment, and who have undertaken training in the procedures of the Australian Ecolabel Program; or
- b. Environmental auditors accredited with the RABQSA.

6.3 Suitable Sources

Audit evidence should be of such a quality and quantity that competent environmental auditors, working independently of each other, will reach similar audit findings from evaluation of the same audit evidence against the same audit criteria.

Suitable sources of information to establish compliance may be, but are not limited to:

- a. Technical specification of the product.
- b. Obvious characteristics of the product under examination.
- c. Scientific test results and reports.
- d. Environmental management system and audit reports and results.
- e. Life-cycle assessment of each stage of the product life-cycle via a physical audit and examination.
- f. Life-cycle assessment via scientific testing.
- g. A statement of confirmation by an executive officer.
- h. An assessment of company or government records.
- i. Other material that can be considered objective evidence.

6.4 Laboratory Testing

New testing shall be undertaken by a laboratory accredited by the National Association of Testing Authorities (NATA), or similar overseas accreditation agents who can conduct the relevant tests and/or provide documentation detailing environmental performance against the criteria of this standard. The test results should be presented on NATA-endorsed reports or from a laboratory acceptable to Good Environmental Choice Australia Ltd.

If test results or environmental auditing results are not available, and/or there is insufficient data to establish full compliance with the criteria required by this standard, then certification cannot be awarded.