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The Eco-Choice Ecolabel Programme Product Standard

Personal Shampoos and Soaps



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Use of This Standard

This voluntary environmental labeling standard may be used by competent environmental assessors to establish product compliance with the Heritage Eco-Choice Ecolabel Programme. Products that are certified with the mark of conformity in terms of this standard have been independently assessed 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 South African 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 South African 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 lifecycle. 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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ECO-CHOICE ECOLABEL PROGRAMME STANDARD FOR PRODUCT**Personal Shampoo and Soap Products**

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Definitions

AC represents Active Content. It is the quantity, in weight, of all organic substances present in the product, excluding the water content of the components. Rubbing/abrasive agents in hand cleaning agents are not included.

Anaerobically biodegradable means that, when measured as directed in ISO 11734 "Water quality - Evaluation of the "ultimate" anaerobic biodegradability of organic compounds in digested sludge - Method by measurement of the biogas production", the substance achieves at least 60 % degradation.

ASTM means American Society for Testing and Materials.

Bioaccumulative: A substance is classified as potentially bioaccumulative if its octanol-water partition coefficient is greater than 1000 when measured with the following:

OECD 107. Octanol-Water Partition Coefficient (Flask Method).

OECD 117. Octanol-Water Partition Coefficient (HPLC Method).

OECD 107 must not be used for surfactants. Other test methods may be accepted, including OECD 305.

Carcinogenic means capable of causing cancer. The International Agency for Research on Cancer is the internationally accepted body for the classification of carcinogenic substances. See <http://www.iarc.fr>

Endocrine disruptor is an exogenous substance that mimics endocrine hormones and disrupts the endocrine systems of living organisms. Such action may lead to future health problems.

Fragrance or **Colouring** means organic substances that are added primarily for aesthetic reasons to give colour or smell. Fragrance can also be for the purpose of concealing smells from other ingredients.

Genotoxin means a substance capable of causing damage to genetic material, such as DNA.

ISO means the International Organisation for Standardization.

Label means the Eco-Choice Label.

OECD means Organisation for Economic Co-operation and Development.

pH is formally the negative log function of the activity of the hydrogen ion in solution. In practice, it is a scale indicating how acidic or alkaline a solution is. For water, a pH of 7 is neutral, higher pH values are progressively more alkaline and lower pH values are progressively more acidic. Each pH unit represents a ten-fold concentration change of the hydrogen ion.

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 of the following test methods:

OECD Guidelines for Testing of Chemicals Test Guidelines 301A-F

ISO 7827 (1994)

Relevant South African standard

or achieve a biodegradability of at least 80% when tested by the OECD method. The pass level of 80% recognises the inherent experimental variability of the OECD test.

Solvent is a general term for a chemically diverse range of liquid phase substances which dissolve other materials.

Surfactant or "**surface-active agent**" means any substance which is intended to reduce surface tension thereby helping water to surround and remove dirt or staining from surfaces.

Teratogenic means any substance capable of producing congenital deformations or birth defects.

1 INTRODUCTION

1.1. Purpose

This Standard seeks to define good environmental performance benchmarks for personal shampoos, liquid and solid soaps and body washes on sale to the South African consumer. The voluntary environmental labeling standard implemented by the Eco-Choice Africa Ecolabel Programme (ECA) specifies environmental performance criteria for both domestic and professional products. This standard stipulates the environmental load of such products throughout the major aspects of their life cycle.

All products applying for certification under this standard must comply with the relevant laws of South Africa or those of countries to which the products are exported for use. Without commenting on the chemical, biological or health aspects of consumer products, this standard is intended to address the most important environmental impacts posed by such products and seeks to define environmental performance benchmarks over and above relevant local minimum standards.

1.2. Background

This Standard is a voluntary environmental labelling standard which specifies requirements for shampoos, body soaps as well as liquid and solid soap products available on the South African market.

In developing this standard, requirements have been imposed on the classification of substances used, on degradability and bioaccumulability, fragrances and colouring agents, packaging and also on the efficiency of the products. As products are discharged to water after use, properties such as biological degradability, bioaccumulation and toxicity in aquatic environments are key considerations. This applies in particular to surfactants which are the most important component of the product, in terms of quantity and function. Hence, the environmental loads of such certified products are lowered compared to non-certified products.

Skin sensitisers and other harmful substances are also considered in this standard. This Standard therefore not only recognises environmentally preferable shampoos and soaps, but are also those products that are less harmful to consumer health.

1.3 Notice

This standard has no precedence over existing national or international laws, standards or guidelines pertaining to health, safety or manufacturing standards. Eco-Choice Africa cannot be held accountable for any non-conformances in this regard by any certified product.

2 STANDARD CATEGORY SCOPE

This standard is applicable to the following categories of personal shampoos, soaps and other products for cleaning of skin or hair and which are removed by water after use. This shall include:

- a. Products for use by humans**
 - I. Shampoos
 - II. Liquid and solid soap
 - III. Shower Gel

- b. Products for use on animals**
 - I. Shampoos
 - II. Liquid and solid soap

2.1 Use of the Eco-Choice Label

The Label must be used appropriately by certified organisations in line with the licensing agreement offered to successful applicants. This includes specification of the certified service and licence number alongside any display of the label. The Label must not be used to over-represent the extent and scope of certification under this Standard.

Certification under this Standard applies only to the administrative function of the retailer seeking certification. The Label must not be associated with goods or with other services excluded by this scope that are provided by the retailer, or as part of advertising material for those goods or services.

Physical goods may be certified by Eco-Choice under the relevant product category standard and may only then carry the Eco-Choice Label for goods. The Eco-Choice label for retail services does not in any way constitute endorsement of products provided by the retailer.

3 ENVIRONMENTAL PERFORMANCE CRITERIA

3.1 Fitness for Purpose

Certified products should be good performers in their intended application. Certain standards of quality and effectiveness 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 South African Standard applicable to the product (e.g.: SANS 232; SANS 1044; SANS 1828), or the product meets the applicable and accepted standard in its target market if it is to be exported to any market in which a similar Eco label standard exists.

3.1.2 **Demonstrated Performance**

If there is no relevant local Standard, the product can demonstrate sufficient quality by providing testing reports from an independent organisation or case studies from trials conducted by an independent organisation demonstrating suitability and quality. In all independent testing practices, the ISO 17025 standard must be met.

3.2 Material Requirements

Details of all ingredients used in all certified personal shampoo or soap products must be provided with the application for certification.

3.2.1 **Prohibited Substances**

The following substances are prohibited in all certified products.

- Linear alkylsulphonates (LAS), alkylphenolethoxylates (APEO) and alkylphenol derivatives (APD)
- Nitrotriacetate (NTA) (CAS No. 139-13-9)
- Boric acid, borates and perborates (including as pH regulators)
- Substances classified as R23 - R29 inclusive.
- Substances classified as R45 - R49 inclusive.
- Substances classified as R60 - R68 inclusive.
- Chemical compounds that have been identified as a Priority Existing Chemicals.
- Chemical compounds that are considered as or have been prioritised for research by the European Union as Endocrine disruptor.

3.2.1.1 **Carcinogenic Substances**

Products shall not contain carcinogenic substances in categories 1, 2A as classed by the International Agency for Research on Cancer - <http://www.iarc.fr> at levels which expose the user at a maximum level of one twentieth of the allowable limit determined by the National Occupational Health and Safety Act (NHSA)

3.2.1.2 **Pollutants**

Individual components ranked within the top 200 toxic compounds listed by the Hazardous Materials Act shall not exceed 1 % by volume.

3.2.1.3 **Environmentally Hazardous Substances**

The total amount of components classified as hazardous to the environment shall not exceed 2% by volume.

3.2.2 **Restricted Substances**

3.2.2.1 The complexing agent EDTA (CAS No 64-2-8), its salts or phosphonates in solid soap may not exceed a total quantity of 0.6mg/g AC. It may not be present in any liquid soap products.

- 3.2.2.2** Aerobic and anaerobic non-biodegradable organic substances (aNBDO and anNBDO), with the exception of surfactants may not exceed the following levels:

<u>Substance</u>	<u>Limit</u>
Shampoo, Body Wash, Liquid Soap	15mg/g AC
Solid Soap	10mg/g AC
Conditioner	30mg/g AC

These limits shall also apply to products intended for animal use.

3.2.3 Surfactants

- 3.2.3.1** All surfactants must be readily biodegradable. In testing biodegradability, test method No.301 (A to F) in *OECD Guidelines for the Testing of Chemicals (ISBN 92-64-1222144)* or other equivalent test methods should be used.
- 3.2.3.2** All surfactants must also be anaerobically biodegradable. For testing anaerobic biodegradability, ISO 11734, ECOTOC No.28 (1988) or equivalent test methods should be used. The requirement is a minimum of 60% degradability under anaerobic conditions.

3.2.4 Fragrances and Colourants

- 3.2.4.1** Fragrance must be produced and used in accordance with the "Code of Practice" compiled by the International Fragrance Association (IFRA).

Fragrances containing mitomusk compounds must not be used because of possible carcinogenic risks. These shall include:

Common Name	CAS number
Moskusxylene	81-15-2
Moskusambrette	83-66-9
Moskene	116-66-5
Moskustibetin	145-39-1
Moskusetone	81-14-1
AHTN	1506-02-1
	21145-77-7
HHCB	114109-62-5
	114109-63-6
	1222-05-5
	78448-48-3
	78448-49-4

Colourants used must be included on the "List of Colouring Agents Allowed for use in Cosmetic Products" in Annex IV of the European Union Commission Directive 76/768/EEC or applicable South African standards (e.g.: SANS 10049:2012). A copy of the Directive(s) is available at::

<http://ec.europa.eu/enterprise/cosmetics/html/consolidated/dir.htm>
<https://www.sabs.co.za/>

- 3.2.4.2** The following sensitizing fragrances or substances may not be present in the product in quantities that exceed 0.01% w/w.

Name	CAS no.
Amyl cinnamal	122-40-7
Benzyl alcohol	100-51-6
Cinnamyl alcohol	104-54-1
Citral	5392-40-5
Eugenol	97-53-0

Name	CAS no.
Hydroxycitronellal	107-75-5
Isoeugenol	97-54-1
Amylcinnamyl alcohol	101-85-9
Benzyl salicylat	118-58-1
Cinnamal	104-55-2
Coumarin	91-64-5
Geraniol	106-24-1
Methyl heptine carbonate	31906-04-4
Anisyl alcohol	105-13-5
Benzyl cinnamat	103-41-3
Farnesol	4602-84-0
2-(4-tert-butylbenzyl)-propionaldehyd (Lilial)	80-54-6
Linalool	78-70-6
Benzyl benzoate	120-51-4
Citronellol	106-22-9
Hexyl cinnamaldehyd	101-86-0
d-Limonen	5989-27-5
Methyl heptin carbonat	111-12-6
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-on	127-51-5
Oak moss	90028-68-5
Tree moss	90028-67-4

3.2.4.3 All colourants used must be included in the "List of Colouring Agents Allowed for Use in Cosmetic Products" in Annex IV (pg 48 - 53) of *European Commission Directorate 76/768/EEC, (1976) on the Approximation of the Laws of the Member States relating to Cosmetic Products (OJ, L 262, 27.9.1976, p169)*.

3.2.4.4 Organic colouring agents must not be bioaccumulative. In testing bioaccumulativity, test method ISO 11734 *Water quality - Evaluation of the "ultimate" anaerobic biodegradability of organic compounds in digested sludge - Method by measurement of the biogas production, or other equivalent test methods should be used*

3.3 Packaging and Labeling

3.3.1 Recyclability

All plastic containers and plastic components must be made of a plastic type that is recycled in South Africa (or the country to which the product is exported and sold). If only one plastic type is used in the product packaging, major parts must be marked with the appropriate resin identification code in accordance with ISO 11469.

Plastic packaging weighing greater than 50g must be labelled with an appropriate resin identification code in accordance with ISO 11469.

Packaging made from more than one type of material must be easily and quickly separable into component recyclable parts without the need for any tools, and each component must be marked with the appropriate resin identification code promulgated by the Plastics and Chemical Industry Association or in accordance with ISO 11469.

Packaging must not be impregnated, labeled, coated or otherwise treated in a manner, which would prevent recycling (e.g., reinforced sleeves, metallic labels).

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

Cardboard packaging must contain at least 70% recycled pulp, or meet the requirements of ECA Standard for Recycled Paper Products (ECSA-P13-2010).

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

3.3.2 Product Information

The manufacturer must provide written information to the consumer clearly stating:

- Instructions for proper use so as to maximise product performance and minimise waste.
- The packaging and labeling of the product must meet the requirements of the South African National Consumer Protection Act.
- Packaging must display a list of product ingredients
- Environmentally responsible disposal instructions must be provided.
- If the product is to be exported, instructions for safe disposal must be provided in all appropriate languages.

3.3.3 Product Testing

Certified products shall not be tested on animals.

4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS

The applicant is required to comply with relevant environmental legislation and government regulations at the Local, National and Regional 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 bound by foreign jurisdiction, that jurisdiction's environmental regulations will 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. Failure to provide such evidence shall disqualify the applicant.

5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS

The applicant shall demonstrate that all employees are protected in terms of the Basic Conditions of Employment Act (Act 75; 1997) and Amendments (2002).

The applicant shall demonstrate general compliance to the terms of the Labour Relations Act (Act 66; 1995); the Occupational, Health and Safety Act (Act 85; 1993) and any other legislation related to anti-discrimination; sexism; child labour or applicable labour standards. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by a South African Court within the last 24 months, there must be evidence of corrective action.

Where the applicant is from a foreign jurisdiction, the applicant shall demonstrate 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.

The 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 EVIDENCE OF CONFORMANCE

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 Heritage Green Business Management System, which generally follows the environmental auditing requirements of ISO 14001.

6.2 Assessor Competency

The Eco-Choice Ecolabel Program classifies approved assessors as:

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

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 a 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, including minutes of meetings, policy documents and receipts.
- i. Other material that can be considered objective evidence.

6.4 Laboratory Testing

New testing shall be undertaken by a laboratory accredited by SANAS, or equivalent international accreditation agents or ISO 17025 registered 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 in a prescribed manner or from a laboratory acceptable to Eco-Choice Ecolabel Programme.

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.