



The New Zealand Ecolabelling Trust

Licence Criteria for Hand Dishwashing Detergents

EC-01-15

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Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in January 2014

Date	Version	Change
18/02/14	EC-01-14 February	Correction. 5.12 e, was reinstated, It had been accidentally omitted from the final copy in January 2014
04/08/15	EC-01-15 August 2015	Update of Clause 5.12c (cardboard packaging) The requirement has been updated to align with the revised criteria in EC-10-14 Packaging and Paperboard Products and is consistent with cardboard packaging requirements across all relevant ECNZ specifications.

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1 Introduction

Environmental Choice New Zealand (ECNZ) is an environmental labelling programme which has been created to help businesses and consumers find products and services that ease the burden on the environment. The programme results from a New Zealand Government initiative and has been established to improve the quality of the environment by minimising the adverse and maximising the beneficial environmental impacts generated by the production, distribution, use and disposal of products, and the delivery of services. The programme is managed by the New Zealand Ecolabelling Trust (the Trust).

ECNZ operates to the ISO 14024:1999 standard "Environmental labels and declarations – Type I environmental labelling – Principles and procedures" and the Trust is a member of the Global Ecolabelling Network (GEN) an international network of national programmes also operating to the ISO 14024 standard.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, attainable and verifiable. It requires that interested parties have an opportunity to participate and have their comments considered. It also requires that environmental criteria be set, based on an evaluation of the environmental impacts during the actual product or service life cycle, to differentiate product and services on the basis of preferable environmental performance.

The life cycle approach is used to identify and understand environmental issues (adverse or beneficial impacts) across the whole life of a product or service (within a defined product or service category). This information is evaluated to identify the most significant issues and from those to identify the issues on which it is possible to differentiate environmentally preferable products or services from others available in the New Zealand market. Criteria are then set on these significant and differentiating issues. These must be set in a form and at a level that does differentiate environmentally preferable products or services, is attainable by potential ECNZ licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECNZ specification on all aspects of the life cycle of a product or service. If stages of a product or service life cycle are found not to differentiate environmentally preferable products or services, or to have insufficient data available to allow objective benchmarking in New Zealand, those stages will not generally be included in criteria in the specification. For some issues, however, (such as energy and waste) criteria may be set to require monitoring and reporting. These criteria are designed to generate information for future reviews of specifications.

The Trust is pleased to publish this specification for Hand Dishwashing Detergents. The specification has been published to take account of substances and processes harmful to the environment, energy management and waste management.

This specification sets out the requirements that Hand Dishwashing Detergents will be required to meet in order to be licensed to use the ECNZ Label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to demonstrate and verify conformance with the environmental criteria and product characteristics.

This specification has been prepared based on an overview level life cycle assessment, information from specifications for similar products from other GEN-member labelling programmes, relevant information from other ECNZ specifications, publicly available information, and information provided by current licensees.

This specification is valid for a period of five years. Twelve months before the expiry date (or at an earlier date if required), the Trust will initiate a further review process for the specification.

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2 Background

The major active component in hand dishwashing detergents is surfactant, which contributes to food soil removal. These surfactants may accumulate and may be toxic or otherwise harmful in the environment. To reduce environmental health impacts, hand dishwashing detergent components should either be environmentally innocuous or should be readily biodegradable, and the degradation products should not pose an increased risk to the environment.

Other components of detergents may include solubility enhancers, preservatives, perfumes, dyes and opacifiers. While these ingredients do not contribute to the performance of the detergent they have other purposes and associated environmental impacts. A desirable goal is to reduce or eliminate components that do not aid the removal of food from dishes. To maintain a balance between consumer acceptability and environmental concerns, the advantages and disadvantages must be weighed for each component. While phosphates are an active component in many cleaning products, phosphates are not typically used within hand dishwashing detergent products.

Small quantities of biocides are used to preserve the products which reduce the potential for the product to spoil and become waste. The use of biocides for purposes beyond preserving the product such as use as disinfectants can pose significant risk to the environment, human health and welfare. Biocides are intended to kill living organisms including beneficial organisms. Excessive use of biocides can result in residual biocides in dishwashing detergents while in use which can lead to exposure to biocides as well as excessive loading of biocides on waste water systems.

Packaging of detergents also has environmental impacts, depending upon the type of packaging used and disposal options. Reducing, reusing and/or recycling packaging will conserve valuable resources and reduce the volume of packaging entering the waste stream.

Criteria have also been included in this specification for waste management and energy management. These have been included to address environmental issues across the entire life-cycle of the products.

The following product category requirements will produce environmental benefits through the reduction of hazardous substances; minimising potential for contaminants in water; improving energy efficiency and minimising the impacts of packaging. As information and technology change, product category requirements will be reviewed, updated and possibly amended.

3 Interpretation

BCF means Bioconcentration Factor. It is the (Concentration of X in an organism) / (Concentration of X in the surrounding environment) and is determined experimentally according to the method in OECD Guidelines for the Testing of Chemicals no. 305.

Biodegradable Material means a degradable material in which the degradation must result from the action of naturally occurring microorganisms over a period of time (up to 2-3 years in a landfill).

DID means Detergent Ingredient Database, developed by the EU and Nordic Swan ecolabelling authorities. Available from http://ec.europa.eu/environment/ecolabel/documents/did_list/didlist_part_a_en.pdf.

Energy Management Programme means a program to achieve and sustain efficient and effective use of energy including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Energy Policy.

Formulated or manufactured with refers to the preparation of the cleaning product and not to the preparation of the components of the cleaning product unless the components are specifically mentioned in the product specific requirements. Residual or unreacted components are covered by the product specific requirements.

Fragrance & Colouring means organic substances that are added primarily for aesthetic reasons to give colour and smell. Fragrance can also conceal smells from other ingredients.

GEN means Global Ecolabelling Network.

GreenPalm means GreenPalm and GreenPalm Brokerage as trading names of Book&Claim Limited, which is a wholly owned subsidiary of AarhusKarlshamn UK Ltd (AAK) and is endorsed by the RSPO as the official broker for the trade in sustainable palm oil certificates. www.greenpalm.org.

Hand Dishwashing Detergents means any product designed to perform on a variety of hard surfaces for household purposes. It excludes industrial and institutional cleaning products.

HSNO means the Hazardous Substances and New Organisms Act

ISO means International Organisation for Standardisation.

Label means the Environmental Choice New Zealand Label.

OECD means Organisation for Economic Co-operation and Development.

Primary packaging means the retail packaging and includes the caps, stoppers, bottles and hand pumps/ spraying devices. Primary packaging does not include any packaging to group retail packages or for shipping.

Readily biodegradable compounds are those which exhibit 70% removal of Dissolved Organic Carbon (DOC), or 60% of Theoretical Oxygen Demand (ThOD) or Theoretical CO₂ (ThCO₂) production for respirometric methods, when tested in accordance with Directive 67/548/EEC and its subsequent amendments, in particular the methods detailed in Annex V.C4, or their equivalent OECD test methods (No. 301 (A to F) in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144), or their equivalent ISO tests.

pH is a scale of numbers indicating how acidic or alkaline a water is. A pH of 7 is neutral, higher pH values are progressively more alkaline and lower pH values are progressively more acidic.

RSPO means the Roundtable for Sustainable Palm Oil. www.rspo.org

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RSPO-certified means Palm Oil that has been certified by an independent accreditation body as meeting the RSPO Principles and Criteria for Sustainable Palm Oil Production (Including Indicators and Guidance October 2007). www.rspo.org

Safety Data Sheet (SDS) means a document that describes the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information in accordance with the New Zealand Chemical Industry Council – Preparation of Safety Data Sheets Code of Practice.

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

Surfactant or surface-active agent means any substance that is intended to reduce surface tension thereby helping water to surround and remove soils from surfaces.

Volatile organic compound (VOC) means any organic compound which has a vapour pressure more than 0.1mm Hg at 25 oC. Organic compounds with a boiling point higher than 250 oC, measured at a standard pressure of 101.3 kPa, are not considered to be VOCs.

4 Category definition

This category includes all liquid hand dishwashing detergents for household use, the main function of which is washing up by hand.

Products with the purpose of disinfecting or limiting growth of micro-organisms (e.g. bacteria) are not included in this product category.

To be licensed to use the Label, a Hand Dishwashing Detergents must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

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5 Environmental criteria

5.1 Legal requirements

Criteria

The product must comply with the provisions of all relevant environmental laws and regulations that are applicable during the product's life cycle.

Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on regulatory compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by current documentation:

- identifying the applicable regulatory requirements including specific obligations arising from permits, regulations, and plan rules; and
- demonstrating how compliance is monitored and maintained.

Where the Licence applicant/holder is not the manufacturer of the cleaning products, information must be provided on environmental regulatory compliance of the manufacturing facility.

Verification of continued compliance with legal requirements will form part of the Licence Supervision Plan.

Explanatory notes

Relevant laws and regulations applicable to the facilities that are manufacturing the ECNZ-licensed product and the Licence holder's distribution and sales operations, could, for example, include those that relate to:

- producing, sourcing, transporting, handling and storing raw materials and components for manufacture;
- manufacturing processes;
- handling, transporting and disposing of waste products arising from manufacturing;
- transporting product within and between countries; and
- using and disposing of the product.

The documentation required may include, as appropriate:

- procedures for approving and monitoring suppliers and supplies; and
- information provided to customers and contractors regarding regulatory requirements.
- evidence of a formal certified environmental management system (for example an ISO 14001 certificate) and supporting records on regulatory compliance (for example, copies of regulatory requirements registers, procedures to manage regulatory compliance, monitoring and evaluation reports on regulatory compliance, internal or external audits covering regulatory compliance and management review records covering regulatory compliance);

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- copies of published environmental, sustainability and/or annual reports expressly addressing environmental regulatory compliance (for example verified Environmental Statements prepared under the European EMAS regulations);
- audit reports completed by independent and competent auditors addressing regulatory compliance (for example, reports for other eco-label licences or reports from regulator audits);
- participation by the supplier in the licence applicants/holders own supplier audit programme.

It is not intended to require licence holders to accept increased legal responsibility or liability for actions that are outside their control. The Trust's intention is to ensure any potential for environmental regulatory non-compliance associated with an ECNZ labelled product is managed to a level that minimises risk of reputation damage to the ECNZ label and programme.

5.2 Formulation requirements

5.2.1 Hazardous substances

Criteria

- a Hand Dishwashing Detergents shall not be formulated or manufactured with substances (active content only) that are:
 - i classified as Category 1 or Category 2 under the European Commission priority list developed under the Community strategy for endocrine disruptors;
 - ii classified under the Hazardous Substances and New Organisms Act (HSNO) as:
 - 6.6 (mutagens);
 - 6.7 (carcinogens);
 - 6.8 (reproductive/ developmental toxins) ;
 - 9.1B (aquatic ecotoxins).
- b Any raw ingredient that is classified as 9.1A (aquatic ecotoxin) must be readily biodegradable and not potentially bioaccumulative.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive of the applicant company/Licence holder. This statement shall be supported with formulation and ingredient information including:

- product formulation information;
- ingredient lists; and
- copies of the safety data sheets, test reports (or other evidence) for all ingredients, demonstrating that they do not contain any substances with of the above classifications.

Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with the requirement is checked and consistently achieved.

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Explanatory notes:

- Licence levels (<0.1 % by weight) of substances reported in SDS to potentially be present as contaminants or impurities in raw materials or component substances are exempt from 5.2.1
- Fragrances are exempt from the requirements of aquatic ecotoxins
- In this context, a substance is considered to be potentially bioaccumulative if the log Kow (log octanol/water partition coefficient) ≥ 3.0 (unless the experimentally determined BCF ≤ 100)
- The list of Category 1 and 2 substances under the European Commissions, Community strategy for endocrine disruptors can be requested from The Trust.

Test methods

The following test methods, or equivalents shall be used. If equivalent tests are to be used, The Trust may require details of the methods and validation.

- Test methods for readily biodegradable shall be as referred to in Directive 67/548/EEC, and its subsequent amendments, in particular the methods detailed in Annex V.C4, or their equivalent OECD test methods (No. 301 A to F) in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144) or their equivalent ISO tests. The 10 days window principle shall not apply. The pass levels shall be 70% for the tests referred to in Annex V.C4-A and C4-B of Directive 67/548/EEC (and their equivalent OECD 301 A and E tests and ISO equivalents), and shall be 60% for tests C4-C, D, E and F (and their equivalent OECD 301 B, C, D and F tests and ISO equivalents).
- Test methods for bioaccumulative shall be as referred to in Directive 98/73 EC, and its subsequent amendments, in particular the methods detailed in Annex V.C13, or their equivalent OECD test methods (No. 305 in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144) or their equivalent ISO tests.
- The BCF shall be determined experimentally according to the method in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144 no. 305.

5.2.2 Formulation limits

Criteria

Hand Dishwashing Detergents shall not exceed the following limits by weight of the formulated product of substances (active content only) that are classified under HSNO as:

HSNO Classification	Formulation Limit
6.5 (respiratory and contact sensitisers)	0.1%
8.3A (corrosive to eyes)	10%

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive of the applicant company/Licence holder. This statement shall be supported with formulation and ingredient information including:

- formulation information and calculations sufficient to establish if the above % limits or specific ingredient requirements are met;
- copies of the safety data sheets, test reports (or other evidence) for all ingredients.

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Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with the requirement is checked and consistently achieved.

Explanatory notes

Enzymes, fragrances and preservatives are exempt from the requirement of respiratory sensitisers.

5.2.3 Banned substances

Criteria

Hand Dishwashing Detergents shall not be formulated or manufactured with the following compounds or substances:

- i ethylene diamine-tetra-acetic acid or ethylene dinitrilo-tetra-acetic acid (EDTA) or any of its salts
- ii nitrilotriacetic acid or any of its salts (NTA)
- iii diethylene triamine pentaacetic acid (DTPA) or any of its salts
- iv alkyl phenol ethoxylates (APEOs) or their derivatives
- v reactive chlorine compounds such as sodium hypochlorite or organic compounds of chlorine
- vi quaternary ammonium salts that are not readily biodegradable
- vii phosphates

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive of the applicant company/Licence holder. This statement shall be supported with formulation and ingredient information including:

- product formulation information;
- ingredient lists; and
- copies of the safety data sheets, test reports (or other evidence) for all ingredients, which indicate that they do not contain any of the listed banned substance.

Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with the requirement is checked and consistently achieved.

5.2.4 Heavy metals

Criteria

Hand Dishwashing Detergents shall not be formulated or manufactured with compounds or substances that contain toxic metals, including arsenic (As), cadmium (Cd), chromium (Cr), lead (Pb), or mercury (Hg).

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive of the applicant company/Licence holder. This statement shall be supported with formulation and ingredient information including:

- product formulation information;
- ingredient lists; and
- copies of the safety data sheets, test reports (or other evidence) for all ingredients, which indicate that they do not contain any of the listed banned substances.

Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with the requirement is checked and consistently achieved.

Explanatory notes:

Trace levels (<0.1 % by weight) of substances reported in SDS to potentially be present as contaminants or impurities in raw materials or component substances are exempt from 5.2.4.

5.3 Surfactants

Criteria

All surfactants must be readily biodegradable and anaerobically degradable.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with details of:

- formulation information identifying all surfactants;
- whether each surfactant is readily biodegradable as determined using the DID list or results of relevant tests. (Surfactants with an entry “I” or “P” in the relevant column are not readily biodegradable and shall not be used. If test reports are provided they must be from a laboratory competent to carry out the relevant test methods);
- whether each surfactant is anaerobically biodegradable as determined using the DID list in or results of relevant tests. (Surfactants with an entry “N” in the relevant column in are not anaerobically biodegradable and shall not be used. If test reports are provided they must be from a laboratory competent to carry out the relevant test methods).

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Explanatory notes

Where documentation is lacking in accordance with the below testing requirements, the substance may be exempted from the requirement of anaerobic biodegradability if any of the three alternatives are satisfied:

- Readily biodegradable and low adsorption ($A < 25\%$) or
- Readily biodegradable and high desorption ($D > 75\%$) or
- Readily biodegradable and not bioaccumulative.

The DID list can be found at

http://ec.europa.eu/environment/ecolabel/documents/did_list/didlist_part_a_en.pdf or can be obtained on request from The Trust.

Test methods

The following test methods, or equivalents shall be used. If equivalent tests are to be used, The Trust may require details of the methods and validation.

- Test methods for readily biodegradable shall be as referred to in Directive 67/548/EEC, and its subsequent amendments, in particular the methods detailed in Annex V.C4, or their equivalent OECD test methods (No. 301 (A to F) in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144) or their equivalent ISO tests. The 10 days window principle shall not apply. The pass levels shall be 70% for the tests referred to in Annex V.C4-A and C4-B of Directive 67/548/EEC (and their equivalent OECD 301 A and E tests and ISO equivalents), and shall be 60% for tests C4-C, D, E and F (and their equivalent OECD 301 B, C, D and F tests and ISO equivalents).
- The test method for anaerobic degradability is ISO 11734, Ecetoc No. 28 (June 1988). The requirement is a minimum of 60% ultimate degradability under anaerobic conditions (up to 60 days based on OECD Guideline 311).

5.4 Biocides and preservatives

Criteria

- a The product may only include biocides in order to preserve the product, and in the appropriate dosage for this purpose alone.
This criterion does not apply to ingredients (eg: quaternary ammonium salts) added for other functions but which may also have biocidal properties.
- b The concentration of biocides in the final product shall not exceed the maximum authorized concentration in Council Directive 76/768/EEC of 27 July 1976 relating to cosmetic products, and its subsequent amendments.

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Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- copies of the safety data sheets of any preservatives added, together with information on their exact concentration in the final product.
- information on the dosage necessary to preserve the product

Explanatory notes

The Council Directive can be found at

<http://ec.europa.eu/consumers/sectors/cosmetics/documents/directive/>

Please use the most recent version

5.5 Enzymes

Criteria

- a The enzyme production micro-organism shall be absent from the final enzyme preparation.
- b Enzymes must be present in liquid form or as a dust-free granulate.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation including a signed declaration of compliance with these requirements from the enzyme producer.

5.6 Fragrance

Criteria

- a Fragrance must be produced and used in accordance with the “Code of Practice” compiled by the International Fragrance Association (IFRA). A copy can be obtained from the IFRA website at www.ifraorg.org
- b Fragrance containing nitromusk or polycyclic musk compounds must not be used.

Fragrance ingredients added for functions other than smell must also comply with all other requirements in this specification.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- signed declaration(s) on compliance with the IFRA Code of Practice, from the fragrance manufacturer(s) covering all fragrances used; and

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- formulation and ingredient information including details of fragrance ingredient contents, identifying fragrances used and their CAS numbers.

Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with these requirements is checked and consistently achieved.

5.7 Colourants

Criteria

Colouring agents may be added to liquid products only, provided they have been approved as a food additive or are not bioaccumulative.

- The colouring agent is not considered to be bioaccumulative if the BCF <100 or if $\text{Log } K_{ow} < 3.0$.
- Where there is information on both BCF and $\text{Log } K_{ow}$, the values for BCF must be used.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- formulation and ingredient information, identifying colourants used and their colour Index (CI) numbers,
- E-number (or number allocated by the New Zealand Food Safety Authority) for each colourant which proves that it has been approved for use in foodstuffs,
- copies of the material safety data sheets, test reports (or other evidence) for all colourants, which indicate that they are not bioaccumulable.

Additional supporting documentation about quality control and production processes may also be required to demonstrate that compliance with this requirement is checked and consistently achieved.

Test methods

The BCF shall be determined experimentally according to the method in OECD Guidelines for the Testing of Chemicals, ISBN 92-64-1222144 no. 305.

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5.8 Palm oil and palm kernel oil

Criteria

- a The licence applicant (or holder) must have an effective purchasing policy for all palm oil, palm kernel oil (or derivatives) or raw materials that are manufactured from palm kernel oil (including surfactants) to maximise the use of palm oil and palm kernel oils from sustainable sources. This shall include implementing a preferential purchasing policy that includes the following stepped policy:
 - i Purchasing raw materials from suppliers which contain RSPO-certified sustainable palm oil or palm kernel oil;
 - ii Purchasing raw materials which use palm oil or contain palm kernel oil from suppliers who have policies in place to purchase certified sustainable palm kernel oil or who support sustainable palm oil and palm kernel oil through GreenPalm and to increase the percentage over time;
 - iii Where suppliers of raw materials who have policies around sustainable palm oil and palm kernel oil are not available, directly purchasing and redeeming GreenPalm certificates for the volume of palm oil and palm kernel oil used within the product.
- b Licence holders must report annually to The Trust on palm oil and palm kernel oil, including:
 - i quantities of raw materials from suppliers whose products contain RSPO-certified sustainable palm oil and palm kernel oil;
 - ii quantities of raw materials from suppliers who support sustainable palm oil production through GreenPalm and the percentage of palm oil and/or palm kernel oil used in the production of the raw materials procured with GreenPalm certificates;
 - iii quantities of any GreenPalm certificates procured and redeemed by the licence holder.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- recording the raw materials and the supplier of these materials which contain palm kernel oil;
- including a copy of the palm oil and palm kernel oil purchasing policy;
- including certificates for RSPO certification and chain of custody for any certified palm oil or palm kernel oil;
- copies of palm oil and palm kernel oil policies from suppliers and evidence of any RSPO certified palm oil and palm kernel oil used or GreenPalm certificates redeemed in relation to the raw material ingredients;
- copies of any GreenPalm certificates purchased and redeemed directly by the licence holder;
- annual reports on the palm oil and palm kernel oil procurement programme;
- describing management systems in place to ensure that these requirements are consistently met.

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5.9 Waste management

Criteria

- a The licence applicant/holder and product manufacturer must have effective waste management policies and procedures and/or a waste management programme.
- b Licence holders must report annually to The Trust on waste management, including:
 - quantities and types of waste recovered for reuse internally and externally;
 - quantities and types of waste recycled internally and externally;
 - quantities and types of waste disposed of to landfill;
 - quantities and types of waste burned internally for energy recovery;
 - waste generation related to production;
 - initiatives taken to reduce waste generation and improve recovery/recycling of waste; and
 - initiatives or requirements for suppliers or contract manufacturers.

Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation that:

- describes the waste management policies, procedures and programmes; and
- includes annual reports to The Trust on waste generation, minimisation and management.

5.10 Energy management

Criteria

- a The licence applicant/holder and product manufacturer must have effective energy management policies and procedures and/or an energy management programme.
- b Licence holders must report annually to The Trust on energy management, including:
 - total energy use;
 - breakdown of total energy use to types of energy used;
 - energy use related to production;
 - initiatives taken to reduce energy use and improve energy efficiency;
 - initiatives taken to calculate and reduce CO₂ emissions associated with energy use; and
 - initiatives or requirements for suppliers or contract manufacturers.

Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation that:

- describes the energy management policies, procedures and programmes; and
- includes annual reports on energy use and management.

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5.11 Consumer information

5.11.1 Product labels

Criteria

- a The Hand Dishwashing Detergents shall be accompanied by instructions for proper use so as to maximise product performance and minimise waste. These instructions shall include information on reuse, recycling and/or correct disposal of packaging.
- b If the product requires dilution before use, the recommended dosage at a normal level of soiling/normal use must be stated clearly on the primary packaging in ml/L diluting water.
 - A second well-known metric, such as teaspoons, shall additionally be given in brackets. However, if the packaging has an efficient and convenient dosing system that can provide an equally reliable dosage, an alternative metric (e.g. capfuls, squirts, or other) can be used.
 - The dosing instructions may be stated for various water hardnesses and for various levels of soiling.
- c All Hand Dishwashing Detergents must display on the container a list of product ingredients that complies with the labelling requirements of Article 11 of Regulation (EC) No. 648/2004 of the European Parliament and of the Council of 31 March 2004 on Detergents, as amended by Regulation (EC) No 907/2006 of 20 June 2006.
- d The following or equivalent words should be clearly displayed on the packaging. Any proposed changes/alterations to this wording must be submitted to and approved by The Trust.

“All detergents have an effect on the environment. Always use the correct dose for maximum efficiency and minimum environmental impact.”
- e All labelling shall comply with the requirements of the HSNO legislation or the appropriate hazardous substance legislation for the country where the product is sold.
- f No claim or suggestion, on the packaging or by any other means, shall be made that the product has an antimicrobial action.
- g All packaging shall include a website reference where a copy of the product data sheet can be obtained..

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with samples of labels/ packaging.

The applicant must provide evidence that the product label complies with the requirements of HSNO or hazardous substance labelling requirements for the country where the product is sold. This evidence shall include:

- copies of the labels;
- confirmation of the method used to meet the requirements (including providing copies of any relevant legislation or requirement).

If the product has been imported into New Zealand and the labels are based on requirements from Australia, USA, Canada, the European Union or any other country as approved by the New Zealand

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Environmental Protection Agency, evidence that the product meets the requirements of the relevant country shall be provided.

Additional supporting documentation about quality control and labelling processes may also be required to demonstrate that compliance with these requirements is checked and consistently achieved.

5.11.2 Product information

Criteria

Where a product is marketed and sold to household consumers, product data sheets shall be prepared and available on a website with public access and shall include:

- i the product name;
- ii contact details of the New Zealand importer, supplier or manufacturer including a phone number;
- iii listing of all hazardous ingredients added to the product;
- iv identification of any hazards associated with the product as sold and used;
- v directions for use, including relevant dilution rates and dose rates; and
- vi disposal information.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with copies of the product data sheet.

Additional supporting documentation about quality control and labelling processes may also be required to demonstrate that compliance with these requirements is checked and consistently achieved.

Explanatory notes

Individual constituents for fragrances and colourants are not required and trace levels (<0.1 % by weight) of substances potentially present as contaminants or impurities in raw materials or component substances are exempt.

5.11.3 Product claims

If the licence holder includes claims relating to the product being “natural” or “plant based” the licence holder shall provide evidence to support the claim, including but not limited to:

- i the definition used by the licence holder to support the “natural” or “plant based” claim;
- ii the source of all ingredients including whether they are synthetic versions of the chemicals; and
- iii evidence of chain of custody where synthetic versions exist and the ingredients are non-synthetic versions

This criterion does not apply to palm oil or palm kernel oil (see Clause 5.9 for relevant requirements).

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Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with:

- information on the definition used;
- the source of ingredients; and
- evidence of chain of custody.

Additional supporting documentation about quality control and labelling processes may also be required to demonstrate that compliance with these requirements is checked and consistently achieved.

5.12 Packaging requirements

Criteria

- All plastic packaging must be made of plastics that are able to be recycled in the country where the product is sold.
- Primary packaging must not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent recycling (i.e. PVC sleeves, metallic labels).
- Cardboard packaging shall consist of any combination of:
 - Packaging approved under EC-10
OR
 - recycled content.
AND/OR
 - waste wood or virgin fibre from native forests provided the forests are certified under the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC) as sustainably managed (or equivalent certification)
AND/OR
 - waste wood or virgin fibre from plantations (including from farm forests or wood lots), provided the plantations are legally harvested.

NOTE: Please see Appendix A for details of acceptable certifications for certified sustainable forest management and legally harvested wood.
- The primary packaging, shall have a weight utility ratio (WUR) of less than or equal to 1.2 g/l. The WUR is calculated for the primary packaging (including caps, stoppers bottles and hand pumps/ spraying devices) using the following formula.
$$\text{WUR} = \text{weight of primary packaging} / \text{number of doses recommended for 1 litre of washing water}.$$
- Information shall be provided to The Trust on the use of refillable containers. This should information on:
 - consumer demand for refillable containers;
 - volume of product sold in refillable containers; and
 - difference in the WUR between refillable containers and non-refillable containers.

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- f Information shall be provided to The Trust at application and thereafter reported annually on PVC and/or phthalates used in the packaging. This should include information from production records and/or suppliers on:
- i the percentages by weight of recycled and virgin PVC;
 - ii the particular production processes (membrane cells, non-asbestos diaphragms, modified diaphragms, graphite anodes, mercury cells, closed-lid production etc) used to produce chlorine and VCM for the PVC being used in the packaging for ECNZ-licensed products (including the locations of the production);
 - iii information, where available, on waste disposal, wastewater treatment and emissions to air (occupational exposure, emissions from the factory and emissions from the final PVC resin);
 - iv information on any Environmental Management System (EMS) for the production process, including requirements for waste, water, air and product-related requirements;
 - v the types of stabilisers used;
 - vi the types and amounts of any phthalate plasticisers present in recycled content of the PVC (if that information is available) and/or added when manufacturing PVC;
 - vii research and initiatives implemented on substitutes for phthalates identified as of concern by regulators; and
 - viii any product stewardship arrangements for the packaging.

Note: Regulators have identified the following phthalates to be of concern - dibutyl phthalate (DBP), diisobutyl phthalate (DIBP), butyl benzyl phthalate (BBP), di-n-pentyl phthalate (DnPP), di(2-ethylhexyl) phthalate (DEHP), di-n-octyl phthalate (DnOP), diisononyl phthalate (DINP) and diisodecyl phthalate (DIDP).

Verification required

Conformance with these criteria shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with the following documentation and evidence:

- Conformance with criterion (a) shall be supported by documentation verifying the packaging is recyclable
- Conformance with criteria (b) shall be demonstrated by providing samples of all plastic containers and components, and information on their constituent parts and their recyclability
- Conformance with criterion (c) shall be supported by documentation from the packaging manufacturer verifying the source of all fibre in the cardboard packaging or by providing evidence that the packaging is covered by an Environmental Choice New Zealand licence
- Conformance with criterion (d) shall be supported by examples of packaging and copies of calculations demonstrating that the WUR meets the requirements. Calculations may be based on the theoretical fill volume, provided that a specification for the method of filling is provided in support of the theoretical value. Otherwise, the WUR should be determined at the time of filling the packaging, or soon thereafter, to avoid erroneous results due to settling of the product
- Conformance with criterion (e) shall be supported by documentation on the use of refillable containers

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- Conformance with criterion (f) shall be demonstrated by providing initial and ongoing annual reports to the Trust on PVC and plasticisers used. This should include as much of the available information required in f) as possible.

6 Product characteristics

6.1 Hazardous properties of the product

Criteria

The Hand Dishwashing Detergent must not be classified under the HSNO regulations as:

- Class 1 (explosive)
- Class 3 (flammable)
- Class 5 (oxidising)
- Subclasses 6.1A or 6.1B (acutely toxic)
- Subclass 6.5 (sensitisers)
- Subclass 6.6 (mutagenic)
- Subclass 6.7 (carcinogenic)
- Subclass 6.8 (reproductive/developmental toxicants)
- Subclass 6.9A (target organ systemic toxicants)
- Class 8.2 (skin corrosive)
- Subclasses 9.1A or 9.1B (ecotoxic)

Verification required

Conformance with these criteria shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with product Safety Data Sheets (meeting the requirements of the NZCIC Code of Practice for Safety Data Sheets), showing the classification of the product

Explanatory notes

Information about the New Zealand Chemical Industries Council Code of Practice for Safety Data Sheets is available at www.nzcic.org.nz.

6.2 Product performance

Criteria

The product must be fit for its intended use and conform, as appropriate, to relevant product performance standards.

Performance of the product with respect to both cleaning ability (ability to remove soil) and cleaning performance (the total amount of soil removed per dish wash) must be assessed.

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Verification

Conformance with this requirement shall be demonstrated by providing a written statement of compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- identifying the applicable standards, specifications and or consumer/customer requirements;
- demonstrating how compliance is monitored and maintained (including quality control and assurance procedures);
- records of customer feedback and complaints.

7 Requirements and notes for Licence Holders

Monitoring compliance

Prior to granting a licence, The Trust will prepare a plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and types of products covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

As part of the plan, The Trust will require access to relevant quality control and service delivery records and the right of access to the office facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

The monitoring plan will require the Licence holder to advise The Trust immediately of any noncompliance with any requirements of this specification which may occur during the term of the licence. If a non-compliance occurs, the licence may be suspended or terminated as stipulated in the Licence Conditions. The licensee may appeal any such suspension.

ECNZ will maintain the confidentiality of identified confidential information provided and accessed during verification and monitoring of licences.

Using the Environmental Choice Label

The Label may appear on the wholesale and retail packaging for the product, provided that the product meets the requirements in this specification and in the Licence Conditions.

Wherever it appears, the Label must be accompanied by the words 'Hand Dishwashing Detergents' and by the Licence Number e.g. 'licence No1234'.

The Label must be reproduced in accordance with the Environmental Choice NZ programme's keyline art for reproduction of the Label and the Licence Conditions.

Any advertising must conform to the relevant requirements in this specification, in the Licence Conditions and in the keyline art.

Failure to meet these requirements for using the Environmental Choice NZ Label and advertising could result in the Licence being withdrawn.

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Appendix A: Explanatory notes for types of claims that can be used to demonstrate compliance with the criteria set in 5.12c).

Part A:

Sustainable Forest Management (SFM):

The FSC and PEFC certification schemes each have a range of certificates/labels. Some of these allow for wood/fibre from certified sustainably managed plantations or forests to be mixed with non-certified wood/fibre. Under FSC Mixed Credit or PEFC Volume Credit methods, wood/fibre or products associated with the certification claim or label may or may not actually contain wood/fibre from the certified sustainably managed source. Certifications accepted by The Trust are those which will ensure that wood from sustainably managed forests, as required in criteria 5.2.1 and 5.2.2, will be actually present in the final ECNZ-licensed product. These are set out below.

Types of FSC claims which can be used to demonstrate compliance with the above requirements:

- FSC 100 %
- FSC Mix X % - provided the % meets the requirements
- FSC Mix Credit – only if the manufacturer can demonstrate that actual FSC material is used for the ECNZ products.
- FSC Recycled provided it contains 100% recycled material
- FSC Controlled Wood cannot be used to meet the FSC certified requirements

Types of PEFC claims which can be used to demonstrate compliance with the above requirements:

- PEFC Certified – Physical Separation method.
- X % PEFC Certified – Average Percentage method, provided the % meets the requirements
- X % PEFC Certified – Volume Credit method – only if the manufacturer can demonstrate that actual PEFC certified material is used for the ECNZ products.

PEFC Controlled Sources material cannot be used to meet the PEFC certified requirements

The following certification schemes will be accepted as equivalent to FSC or PEFC certification of SFM:

- Pengelolaan Hutan Produksi Lestari – Sustainable Production Forest Management certified (PHPL) (<http://liu.dephut.go.id/>).
- Sustainable Forest Management Plans, supported with Annual Logging Plans that have been prepared and approved under the New Zealand Forests Act 1949 (amended in 1993). These Plans must be prepared in accordance with Standards and Guidelines for the Sustainable Management of Indigenous Forests and guidance for preparing Sustainable Management

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Plans and Annual Logging Plans. Wood sourced from New Zealand indigenous forests covered by approved plans will be accepted as equivalent to FSC sustainably managed forest certification provided compliance with the approved plans is demonstrated through independent on-site assessment.

For any other schemes to be considered, the applicant will be required to provide detailed information that demonstrates the certification scheme is credible and equivalent. For examples of the type of information required, refer to the UK Central Point of Expertise on Timber Procurement (CPET) assessments of certification schemes available on www.CPET.org.uk.

Part B:

Legal harvesting:

The following certification schemes will be accepted as sources of information to demonstrate legal harvesting, where certificates and chain of custody evidence is available for virgin fibre sources:

- Forest Stewardship Council – “Certified” or “Controlled Wood” (www.fsc.org).
- Programme for the Endorsement of Forest Certification (PEFC) - “Certified” or “Controlled Sources” (www.pefc.org).
- SGS Timber Legality & Traceability Verifications service (TLTV) Verification of Legal Compliance certification (TVTL-VLC) (<http://www.sgs.com/en/Public-Sector/Monitoring-Services/Timber-Traceability-and-Legality.aspx>).
- Rainforest Alliance SmartWood Verification of Legal Compliance (VLC) certification (<http://www.rainforest-alliance.org/forestry/verification/legal>).
- System Verifikasi Legalitas Kayu - Timber Legality Verification System (SVLK) certified, or SVLK/PHPL (Pengelolaan Hutan Produksi Lestari – Sustainable Production Forest Management) certified (<http://liu.dephut.go.id/>).
- Sustainable Forest Management Plans (supported with Annual Logging Plans) that have been prepared and approved under the New Zealand Forests Act 1949 (amended in 1993).

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