



The New Zealand Ecolabelling Trust

Licence criteria for Detergents and cleaning products

EC-58-19

The New Zealand Ecolabelling Trust
PO Box 56533
Dominion Road
Mt Eden
Auckland
New Zealand

Ph: +64 9 845 3330
Fax: +64 9 845 3331
Email: info@enviro-choice.org.nz
Website: www.enviro-choice.org.nz

Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in July 2019.

Date	Version	Change
01/08/2019	EC-58-19 July 2019	Update Clause 4 Category Definition. Align definition between the response to submissions draft and final published specification for sub-category 4.7 Clarification for labelling requirements in Clause 5.14.1. Water hardness only required for sub-categories 4.2 and 4.8 laundry products.
05/11/2019	EC-58-19 July 2019	Update Clause 5.15 Packaging Requirements. Technical clarification on the weight utility ratio calculation for sub-categories 4.1 hand dishwash detergents, 4.2 and 4.8 laundry detergents, 4.4 and 4.7 general purpose cleaners and 4.6 floor cleaners.

Table of contents

1	Introduction	4
2	Background	5
3	Interpretation	6
4	Category definition	10
5	Environmental criteria	12
5.1	Legal requirements	12
5.2	Formulation requirements	13
5.2.1	Hazardous substances	13
5.2.2	Banned substances	14
5.3	Complexing agents	15
5.4	Solvents	17
5.5	Surfactants	17
5.6	Biocides and preservatives	18
5.7	Enzymes added to detergent or cleaning products	19
5.8	Micro-organisms added to detergent or cleaning products	19
5.9	Fragrance	21
5.10	Colourants	22
5.11	Palm oil and palm kernel oil	22
5.12	Waste management	23
5.13	Energy management	24
5.14	Consumer information	24
5.14.1	Product labels	24
5.14.2	Product information	27
5.14.3	Product claims	28
5.15	Packaging requirements	28
6	Product characteristics	30
6.1	Product performance	30
6.2	Hazardous properties of the product	31
6.3	Suitability for receiving wastewater system	32
6.4	Product form	32
7	Requirements and notes for Licence holders	34
Appendix A:	Test methods	
Appendix B:	Explanatory notes for 5.15c	
Appendix C:	Hazardous Substances Classifications	
Appendix D:	Explanatory notes for 6.4e	
Appendix E:	Information tables	

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.

This specification sets out the requirements that detergent and cleaning products 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.

2 Background

This specification includes requirements for detergent and cleaning products used in household, commercial (office, warehouse etc) or institutional (school, university, church etc) environments. The primary function of the detergents and cleaning products covered by this specification is to aid soil removal from hard surfaces, clothing and fabric or kitchen utensils.

Detergent and cleaning products can place a significant burden on the environment throughout their lifecycle through:

- Sourcing of raw materials such as palm and palm kernel oil;
- Discharge of waste water and emissions to air from the production process; and
- Release of detergent or cleaning products to the environment during or after use.

The major active components in detergents and cleaning products are chemicals such as surfactants, solvents, builders, and complexing agents. Each component presents an environmental and/or health concern during production or product use, for example:

- Surfactants, which aid soil removal, may not be readily biodegradable or anaerobically degradable and may accumulate and be toxic in the environment. Additionally, surfactants place an extra burden on the wastewater treatment systems;
- Solvents are used either to assist in the cleaning action or to provide solvency for other ingredients. Volatile organic compounds (VOC) can be found in cleaning products and can contribute to indoor air pollution, which can affect human health;
- Builders, used in laundry detergents and general purpose cleaning products, serve to overcome water hardness and improve surfactant performance. Some builders are alkaline ingredients, such as sodium metasilicate, which contribute to soil removal but are also highly corrosive if accidentally swallowed;
- Complexing agents are also used to soften hard water. Complexing agents are often poorly biodegradable and have the ability to remobilise toxic metals bound in sediment in aquatic environments. Phosphates and phosphonates are commonly-used complexing agents. They can be a limiting nutrient in some aquatic environments. Increasing phosphates in those environments can lead to increased plant growth and oxygen starvation (eutrophication) of lakes and waterways;
- Small quantities of biocides are used to preserve detergent and cleaning products, and reduce the potential for the product to spoil and become waste. Biocides are intended to kill living organisms including beneficial organisms. The use of biocides for purposes beyond preserving the product, such as use as disinfectants, can pose significant risk to the environment and human health; and
- Other components of detergents and cleaning products include bleaches, dyes, fillers, corrosion inhibitors, perfumes, enzymes, plasticisers, waxes, stabilisers, whitening agents, opacifiers and defoamers. Some of these ingredients contribute to the performance of the detergent (e.g. enzymes) or have other purposes (e.g. preventing corrosion in washing machines), however, others are included purely for cosmetic purposes. A desirable goal is to reduce or eliminate components that do not aid the removal of soil, so reducing stress on sewage systems, the environment, and human health (e.g. from respiratory and contact sensitizers). To maintain a balance between consumer acceptability and environmental concerns, the advantages and disadvantages must be weighed for each component.

To reduce environmental and health impacts, components of the detergent and cleaning products should either be environmentally innocuous or should be readily biodegradable, and the products of degradation should not pose an increased risk to the environment. Limitations on hazardous

substances during the production process such as carcinogens, mutagens, reproductive toxins and ecotoxins ultimately reduces the final product hazardous classification, and provides an environmental and human health benefit to both the end user and workers during production. The specification criteria aim to reduce, restrict, replace and minimise harmful or environmentally unfavourable substances in the above list of components.

During the latest revision of this specification, new criteria were added for microbial or biological cleaners. These are emerging products in the cleaning industry. Microbial cleaners include a surfactant for initial cleaning, however, micro-organisms are included in the product for long term breakdown of dirt and organic material. Micro-organisms release extracellular enzymes, outside the cell membrane, which break down complex compounds. The broken down compounds then become a food source for the micro-organisms. Additionally, the micro-organisms used are designed to release endospores onto the surface, in periods of environmental stress (lack of food source, lack of building blocks for cell formation), which reactivate when sufficient food (dirt and organic material) is present. The microbial cleaners are designed to keep the surfaces cleaner for longer as initial application introduces the microbes to the surface for initial breakdown and the production of endospores and reactivation of microbes continue to work after the initial application.

Packaging of cleaning products 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 to encourage reuse, recycling and reduction and/or conservation of primary resources. 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, reducing the burden on wastewater treatment systems, 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



(Social Responsibility) means a criterion or sub-clause within the ECNZ specification which addresses a social concern.



(Environmental Responsibility) means a criterion or sub-clause within the ECNZ specification which addresses an environmental concern.

Antibiotics means chemical substances that kill, destroy or inhibit the growth of micro-organisms.

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.

Bathroom Cleaning Product means a product used to clean a variety of hard surfaces found in the bathroom, including tubs, tiles, fixtures, showers, urinals and toilet bowls. Tablet toilet bowl cleaning products and urinal blocks are not covered by these criteria.

Builder means any substance intended to maintain alkalinity, and/or bind calcium and magnesium ions (soften the water), and/or keep the soil in suspension, increasing the effectiveness of the cleaner. It includes substances such as phosphates, NTA, EDTA, zeolites, sodium citrate, sodium silicate and sodium carbonate.

Colony Forming Unit (CFU) is a count of viable micro-organisms (single cell bacterium or a cell cluster of bacteria) in a sample, expressed in a concentration of CFU per mL.

Colourant means a substance that is added primarily for aesthetic purposes to give colour to the product. Colouring may also be used in some products to reduce overdosing.

Complexing Agent means a substance intended to improve cleaning efficiency by softening hard water. Common complexing agents include phosphates and phosphonates.

DID means Detergent Ingredient Database, developed by the EU and Nordic Swan ecolabelling authorities. Available from the Trust.

Degreaser means any product designed to remove grease, oil, fats and other similar soil from hard surfaces, including tools, drains, countertops, floors and kitchen surfaces.

Deodoriser means a product designed to break down or eliminate malodorous molecules. This does not include air fresheners used to mask malodour.

Drying Agent means additives, which help to speed up the drying time of items washed in commercial and institutional dishwashers.

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.

Enzyme means a biological catalyst, which accelerates chemical reactions. Enzymes are by products of micro-organisms (single cell bacterium or a cell cluster bacteria) and are added to detergent and cleaning products as an active ingredient.

Floor Stripper means any product designed to remove floor finish through the breakdown of the finish polymers, or by dissolving or emulsifying the finish, polish, or wax.

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 means organic substances that are added primarily for aesthetic reasons to give smell and can also be included to conceal smells from other ingredients.

GEN means Global Ecolabelling Network.

Glass and Window Cleaner means a product designed to clean glass or other highly polished surfaces, including window, mirrors and metallic surfaces.

GMO means genetically modified organism. A genetically modified organism is an organism in which the genes or other genetic material have been modified by *in vitro* techniques, or are inherited or otherwise derived, through any number of replications from genes or other genetic material which has been modified by *in vitro* techniques¹.

HSNO means the Hazardous Substances and New Organisms Act.

IANZ means International Accreditation New Zealand from the accredited body of Testing Laboratory Registration Council New Zealand.

Immunocompromised means having an impaired immune system.

¹ New Zealand Government, *Hazardous Substances and New Organisms Act 1996*, date of assent 1996, re-printed 30 December 2018.

ISO means International Organisation for Standardisation.

Institutional Facility means a large public organisation such as a hospital, school, college, etc.

Label means the Environmental Choice New Zealand Label.

Large-scale consumers means commercial, industrial or institutional users.

Levelling agents are surfactants which help the polish to spread.

MAF means Ministry of Agriculture and Forestry (New Zealand).

Micro-organisms means a microscopic organism consisting of a single cell bacterium or a cell cluster of bacteria. In this EC-58-19 specification, micro-organisms does not include fungi or viruses.

Microbial or biological cleaner means a detergent or cleaning product which contains dormant or living micro-organisms which break down or degrade dirt, food residues, grease, oil, and other objectionable material.

MPI means Ministry of Primary Industries (New Zealand).

Multi-Component System is a detergent system based on components used to build up a complete detergent, stock solution or a laundering programme for automatic dosing. This system may incorporate a number of products such as pre-wash agents, basic detergents, washing strengtheners, bleaching agents, rinsing agents and special detergents for laundering delicates.

NTA means nitrilotriacetic acid or any of its salts.

OECD means Organisation for Economic Co-operation and Development.

Pathogen means a disease causing micro-organism.

RSPO PalmTrace means the RSPO traceability system for certified oil palm products. PalmTrace allows manufacturers and retailers to buy RSPO credits from RSPO-certified growers, crushers and independent smallholders (Book & Claim). www.rspo.org.

PPE means personal protective equipment.

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.

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.

Risk Group means a grouping of micro-organisms based on the human and animal risk potential. Risk Group 1 organisms means non-pathogenic for humans, animals, fungi and plants (New Zealand Definition). Risk Groups 2 to 4, include known pathogenic and unwanted micro-organisms which pose a risk to human, animal and environmental health, from moderate to very high risk.

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

16s Ribosomal DNA Sequencing means a method of bacterial DNA sequencing for strain identification.

4 Category definition

This category includes all detergent and cleaning products as further defined in the sub-categories below:

Sub-Category	Product sub-category	Sub-category inclusions	Previous ECNZ spec
4.1	Hand dishwashing detergents	All liquid hand dishwashing detergent in which the main function is washing up by hand.	EC-01-16
4.2	Laundry detergents	All laundry detergents, soaps, bleaches; in powder, liquid or any other form; for washing textiles; which are intended to be used principally in household machines, but not excluding the use in launderettes and common laundries.	EC-02-16
4.3	Machine dishwashing detergents	All detergents intended for use exclusively in automatic domestic dishwashers and all detergents intended for use in automatic dishwashers operated by professional users but similar to automatic domestic dishwashers in terms of machine size and usage.	EC-03-16
4.4	General purpose cleaning products	All general purpose and spray and wipe cleaning products for household use. It includes: <ul style="list-style-type: none"> • Glass/window cleaning products, floor cleaning products, carpet cleaning products, bathroom cleaning products and degreasers. • Deodorisers for eliminating malodour, this does not include air fresheners that work by masking malodour. 	EC-22-16
4.5	Commercial and institutional dishwashing detergents	Automatically dosed dishwasher detergents, drying agents and pre-soaking liquid for professional use within institutional and catering facilities.	EC-35-16
4.6	Floor care products	Products that apply (or remove) a film of polymers or wax to floors to ease maintenance and protect the floor. It includes base coat polish, floor polish, wash polish, wash-and-wax care products, polish removers and wax removers.	EC-36-16
4.7	Commercial and institutional cleaning products	Any cleaning product sold for use by the commercial cleaning and property maintenance industry during the routine cleaning of offices, institutions, warehouses and industrial facilities. It includes: <ul style="list-style-type: none"> • Glass/window cleaning products, floor cleaning products, carpet cleaning products, bathroom cleaning products and degreasers. • Deodorisers for eliminating malodour, this does not include air fresheners that work by masking malodour. • Microbial and biological cleaners for floors, drains and hard to reach areas, and not intended for human contact surfaces. 	EC-37-16

4.8	Commercial and institutional laundry detergents.	Products intended for laundering textiles in water by professional or commercial users like institutional/industrial users and other large-scale consumers. The product group covers complete powders and complete liquid detergents as well as a multi-component system. Softeners, rinsing agents and stain removers are also covered by these criteria.	EC-38-16
-----	--	--	----------

The following are excluded from this product category:

- Products with the purpose of disinfecting or limiting growth of micro-organisms (e.g. bacteria). This includes deodorisers intended to kill microbes, and act as a disinfectant.
- Products for specialised equipment (e.g. used in food production, dairies, or medical facilities), and products used to clean industrial or production equipment.
- Tablet toilet bowl cleaning products and urinal blocks.
- Floor sealers, spray buffing products, or products designed to remove floor wax solely through abrasion.
- Special impregnating agents for textiles, with a water-repelling or flame retarding function.

To be licensed to use the Label, detergent and cleaning products must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

5 Environmental criteria

5.1 Legal requirements

Criteria

- a The licence applicant/holder must demonstrate how applicable legal requirements are met, including that all necessary consents and permits are in place.
- b Where the licence holder is not the manufacturer of the detergent or cleaning product(s), the licence holder must have a documented requirement for the manufacturer to manage its compliance with applicable environmental regulatory requirements (example supply contracts conditions).



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;
- Demonstrating how compliance is monitored and maintained; and
- Copies of wording from supply contract conditions or other documented requirements for contract manufacturers (if applicable).

Verification of continued compliance with legal requirements will form part of the Licence Supervision Plan. This will include requirements, if any, for ongoing supervision assessment of downstream warehousing or other distribution activities.

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, handling and storing 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;
- 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);

- 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 regulatory audits); and
- 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 Products shall not be formulated or manufactured with substances (active content only) that are:
 - Classified as Category 1 or Category 2 under the European Commission priority list developed under the *Community Strategy for Endocrine Disruptors*.
 - Classified under the Hazardous Substances and New Organisms Act (HSNO) as:
 - o 6.6 (mutagens);
 - o 6.7 (carcinogens);
 - o 6.8 (reproductive/ developmental toxic substances); and
 - o 9.1B (aquatic ecotoxic substance).
- b Additionally, any raw ingredient that is classified as 9.1A (aquatic ecotoxic substance) 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;
- 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; and
- A completed table of information (Table E1 in Appendix E).

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.

Relevant test methods are listed in Appendix A.

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 K_{ow} (log of the octanol/water partition coefficient) ≥ 3.0 (unless the experimentally determined BCF ≤ 100); and
- The list of Category 1 and 2 substances under the European Commission's *Community Strategy for Endocrine Disruptors* can be requested from the Trust.

5.2.2 Banned substances

Criteria

- a Products shall not be formulated or manufactured with the following compounds or substances:
- Ethylenediaminetetraacetic acid or ethylene dinitrilotetraacetic acid (EDTA) or any of its salts;
 - Nitrilotriacetic acid or any of its salts (NTA);
 - Diethylenetriaminepentaacetic acid (DTPA) or any of its salts;
 - Alkylphenol ethoxylates (APEOs) or their derivatives;
 - Halogen or halogenated compounds including reactive chlorine compounds such as sodium hypochlorite, and organic compounds of chlorine;
 - Quaternary ammonium salts that are not readily biodegradable; and
 - Compounds or substances that contain toxic metals, including arsenic (As), cadmium (Cd), chromium (Cr), lead (Pb), or mercury (Hg).
- b Additionally, products listed below shall not be formulated or manufactured with the following compounds or substances:

Product Category	Banned Substances
Laundry detergents (sub-categories 4.2 and 4.8)	Opacifiers Optical brighteners/whiteners
Machine dishwashing detergents (sub-categories 4.3 and 4.5)	Opacifiers

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;
- 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; and
- A completed table of information (Table E1 in Appendix E).

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:

Heavy Metals: 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 5.2.2.

Inclusion of plastic microbeads in wash-off detergent and cleaning products is banned by New Zealand law.

5.3 Complexing agents

Criteria

The product must meet the criterion specific to its sub-category.

Sub-category	Complexing Agent Criteria	
Hand dishwashing detergents (sub-category 4.1) Machine dishwashing detergents (sub-category 4.3) General purpose cleaners (sub-category 4.4)	Products shall not be formulated or manufactured with phosphorus including phosphates and phosphonates.	
Laundry detergents (sub-category 4.2)	<p>Products shall not be formulated or manufactured with phosphorus including phosphates and phosphonates.</p> <p>The maximum concentration of complexing agents (e.g silicate, polycarboxylate, polyacrylate, zeolite and iminodisuccinate) in the product must not exceed 10 g/kg laundry (dry wt.). Citrate shall not be included in this amount.</p>	
Commercial and institutional dishwashing detergents (sub-category 4.5)	Total phosphorus used in commercial and institutional cleaners must not exceed the following quantities;	
	% Maximum permitted by weight (g/L solution, in soft-moderately soft water mg CaO/L)	Total phosphorus
	Dishwashing detergent and Pre-soaking liquid	0.4
	Drying agent	0.04

Floor care products (sub-category 4.6)	<p>Base coat polish, floor polish, wash polish and wash and wax care products shall not be manufactured or formulated with complexing agents; and</p> <p>Phosphorus may be included in polish and wax removers but must not exceed the following;</p> <table border="1"> <tr> <th></th><th>Total phosphorus</th></tr> <tr> <td>% Maximum permitted by weight</td><td>1.0</td></tr> </table>		Total phosphorus	% Maximum permitted by weight	1.0				
	Total phosphorus								
% Maximum permitted by weight	1.0								
Commercial and institutional cleaning products (sub-category 4.7)	<p>Phosphorus may be included but must not exceed the following;</p> <table border="1"> <tr> <th></th><th>Total phosphorus</th></tr> <tr> <td>% Maximum permitted by weight</td><td>0.5</td></tr> </table>		Total phosphorus	% Maximum permitted by weight	0.5				
	Total phosphorus								
% Maximum permitted by weight	0.5								
Commercial and institutional laundry detergents (sub-category 4.8)	<p>The maximum concentration of complexing agents (e.g silicate, polycarboxylate, polyacrylate, zeolite and iminodisuccinate) in the product must not exceed 10 g/kg laundry (dry wt.). Citrate shall not be included in this amount.</p> <p>The products shall not contain more than the following concentrations of phosphorus, counted as Total P;</p> <table border="1"> <tr> <th>Level of Soiling</th><th>Phosphorus/kg laundry (dry weight)</th></tr> <tr> <td>Light</td><td>0.5g</td></tr> <tr> <td>Medium</td><td>1.0g</td></tr> <tr> <td>Heavy</td><td>1.5g</td></tr> </table>	Level of Soiling	Phosphorus/kg laundry (dry weight)	Light	0.5g	Medium	1.0g	Heavy	1.5g
Level of Soiling	Phosphorus/kg laundry (dry weight)								
Light	0.5g								
Medium	1.0g								
Heavy	1.5g								

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:

- Information on the complexing agents in the product;
- Copies of calculations to show that the above limits are met; and
- A completed table of information (Table E1 in Appendix E).

Explanatory notes:

The total quantity of elementary phosphorus P, regardless of whether it occurs as phosphate-phosphorus, phosphonate compounds or other compounds where phosphorus may occur, should be reported as the total phosphorus content.

5.4 Solvents

Criteria

- a General purpose cleaning products (sub-category 4.4) and commercial and institutional cleaning products (sub-category 4.7) must not contain:
 - Volatile organic compounds in excess of 10% by weight.
- b Floor care products (sub-category 4.6) shall be manufactured or formulated with the following criteria;
 - Floor finishes/polishes (as used) shall not contain more than 7% (by weight) of volatile organic compounds;
 - Light to medium build-up, floor strippers (as used) shall not contain more than 3% (by weight) of volatile organic compounds, measured at the greatest recommended amount of dilution;
 - Heavy build-up, floor strippers (as used) shall not contain more than 7% (by weight) or volatile organic compounds, measured at the least recommended amount of dilution; and
 - The product's total concentration of aromatic solvents must not exceed 0.01% (by weight).
- c All other detergent and cleaning products (sub-categories 4.1, 4.2, 4.3, 4.5 and 4.8) must not contain solvents.

Verification required

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

- Formulation and ingredient information including formulation specifications, product Safety Data Sheets (meeting the requirements of the NZCIC Approved Code of Practice for Safety Data Sheets), ingredient lists and ingredient Safety Data Sheets;
- Test reports and/or calculations sheets to demonstrate each product meets the VOC limit; and
- A completed table of information (Table E1 in Appendix E).

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.

Relevant test methods are listed in Appendix A.

5.5 Surfactants

Criteria

All surfactants must be readily biodegradable and anaerobically degradable.

Exemptions for base coat polish and floor polish (sub-category 4.6 Floor care products):

- i Ingredient emulsifiers and levelling agents may be present up to 10 mg/g product (active content).
- ii Fluorinated surfactants with a carbon chain of less than or equal to 5 C atoms may be present up to 0.025% (by weight).
- iii If the product contains no fluorinated surfactants, silicone surfactants may be present up to 0.25% (by weight).

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;
- A completed table of information (Table E1 in Appendix E);
- Whether each surfactant is readily biodegradable as determined using one of the following methods;
 - The DID list (Surfactants with an entry “I” or “P” in the relevant column are not readily biodegradable and shall not be used);
OR
 - Results of relevant tests (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 one of the following methods;
 - The DID list (Surfactants with an entry “N” in the relevant column are not anaerobically biodegradable and shall not be used);
OR
 - Results of relevant tests (if test reports are provided they must be from a laboratory competent to carry out the relevant test methods).
OR
 - Where documentation is lacking in accordance with the above testing requirements, the substance may be exempted from the requirement of anaerobic biodegradability if any of the three alternatives are satisfied:
 - o Readily biodegradable and low adsorption ($A < 25\%$);
OR
 - o Readily biodegradable and high desorption ($D > 75\%$);
OR
 - o Readily biodegradable and not bioaccumulative.
 - The surfactant is not considered to be bioaccumulative if the $BCF < 100$ or if $\text{Log } K_{ow} < 3.0$; and
 - Where there is information on both BCF and $\text{Log } K_{ow}$, the values for BCF must be used.

Relevant test methods are listed in Appendix A.

The DID list can be obtained on request from the Trust.

5.6 Biocides and preservatives

Criteria

Products 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 (e.g. quaternary ammonium salts) added for other functions but which may also have biocidal properties.





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:

- 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; and
- A completed table of information (Table E1 in Appendix E).

5.7 Enzymes added to detergent or cleaning products

Criteria

- a Enzymes must not be added to any aerosol products. 
- b For all other detergent and cleaning products: 
 - The enzyme production micro-organism shall be absent from the final enzyme preparation; and
 - 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;
- Formulation specifications for aerosol products, if applicable; and
- A completed table of information (Table E1 in Appendix E).

Explanatory notes

Clause 5.7 applies to enzymes extracted from a solution and included in a product as an active ingredient. The enzymes are added to the product without the enzyme producing micro-organisms. Micro-organisms added to products are covered by clause 5.8, below.

5.8 Micro-organisms added to detergent or cleaning products

- a Micro-organisms may only be used in commercial and institutional cleaning products (sub-category 4.7). 
- b The micro-organisms used must be non-pathogenic (Risk Group 1) and must not be identified as Risk Group 2, 3 or 4. In particular, the following pathogenic micro-organisms shall not be present in the raw ingredient, final product or present at the end of the product shelf life: 
 - E.Coli
 - Streptococcus (Enterococcus)
 - Staphylococcus aureus
 - Bacillus cereus
 - Salmonella
- c The micro-organisms DNA strain must be identified; 
- d Micro-organisms used must not be resistant to the following types of antibiotics; 
 - Aminoglycosides

- Macrolides
 - Beta lactams (including Penicillins and Cephalosporins)
 - Tetracyclines
 - Fluoroquinolones or other quinolones
- e Micro-organisms must not be Genetically Modified Organisms (GMO);
- f Laboratory test information must be provided for the final product which states;
- The colony forming units (CFU) for the product, stated in micro-organisms per mL in-use solution,
AND
 - Documentation which demonstrates a minimum of 1.0×10^5 CFU of micro-organisms per mL of in-use solution.



Verification required

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

- Conformance with criterion (a) shall be supported by a declaration from the manufacturer that the product is intended as a commercial and institutional cleaner (sub-category 4.7);
- Conformance with criterion (b) shall be supported by documentation that may include copies of an SDS, test report from the laboratory conducting the testing or a signed declaration from the supplier;
- Conformance with criterion (b) shall be supported by documentation from an accredited IANZ laboratory to confirm of the absence of pathogenic micro-organisms in the product;
- Conformance with criterion (c) shall be supported by documentation from an accredited IANZ laboratory and/or manufacturer's SDS which detail micro-organism strain identification and taxonomy method used. Strain identification must be by 16S ribosomal DNA sequencing or other recognised laboratory taxonomy method;
- Conformance with criterion (d) shall be supported by a declaration from the manufacturer/supplier or by relevant laboratory testing that the micro-organisms present are not resistant to the antibiotics;
- Conformance with criterion (e) shall be supported by a declaration from the manufacturer that the micro-organisms present are not considered genetically modified organisms (GMO) as defined by *New Zealand Hazardous Substances and New organisms Act 1996*;
- Conformance with criterion (f) shall be supported by documentation from an accredited IANZ laboratory that states the concentration of micro-organisms (Colony Forming Units (CFU)/mL) of the in use solution;
- During supervision verifications for clause 5.8, evidence shall be provided for quality control and assurance procedures (QA/QC) and/or in-house testing to provide assurance that is the criteria in clause 5.8 are being consistently met; and
- A completed table of information (Table E1 in Appendix E).

Explanatory Notes

- Risk Group 1 micro-organisms are defined in the *New Zealand Hazardous Substances and new Organisms (Low-Risk Genetic Modification) Regulations 2003* and must be identified as New Zealand Risk Group 1 by laboratory testing.

- Any micro-organisms that have not been risk assessed or have been determined to not be included in Risk Groups 2-4 must not be assumed to be Risk Group 1. Micro-organisms must be risk assessed as Risk Group 1 by a competent accredited organisation.
- Appropriate laboratory testing for pathogenic micro-organisms:

Pathogenic Micro-organism	Appropriate Test Method*
E.Coli	ISO 16649-3:2015 or equivalent**
Streptococcus (Enterococcus)	ISO 21528-1:2004 or equivalent**
Staphylococcus aureus	ISO 6888-1 or equivalent**
Bacillus cereus	ISO 7932:2005, ISO 21871:2006 or equivalent**
Salmonella	ISO 6579:2002, ISO 19250 or equivalent**



*All testing must be undertaken by a laboratory accredited to perform that test.

** If equivalent tests are to be used, the Trust may require details of the methods and validation of equivalence

- Any micro-organisms imported by suppliers and/or licence holders are required to meet applicable Ministry for Primary Industries (MPI) biosecurity requirements and are required to have correct permits in place.
- Organisms not present in New Zealand before 29 July 1998 are considered New Organisms, and will require approval from the Environmental Protection Agency (EPA) before use or importing into New Zealand.
- Independent laboratory testing for pathogens, strain identification and Risk Group status is required when a product is initially assessed, and for any formulation changes to microbial blends.

5.9 Fragrance

Criteria

- a Fragrance ingredients must not be added to commercial and institutional dishwashing detergents (sub-category 4.5) or floor care products (sub-category 4.6). 
- b For all other detergents and cleaning products: 
 - 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.
 - 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;
- Formulation and ingredient information including details of fragrance ingredient contents, identifying fragrances used and their CAS numbers; and
- A completed table of information (Table E1 in Appendix E).

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.

5.10 Colourants

Criteria

- a Colouring agents must not be added to any powdered products or floor care products in sub-category 4.6. 
- b All other products may include colouring agents, 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 Log K_{ow} < 3.0; and
 - Where there is information on both BCF and 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; and
- A completed table of information (Table E1 in Appendix E).

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.

Relevant test methods are listed in Appendix A.

5.11 Palm oil and palm kernel oil

Criteria

- a The Licence applicant/holder or product manufacturer 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: 
 - Purchasing raw materials from suppliers which contain RSPO-certified sustainable palm oil or palm kernel oil;
 - 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 RSPO PalmTrace and aim to increase the percentage over time; and

- Where suppliers of raw materials do not have policies around sustainable palm oil and palm kernel oil available, directly purchasing and redeeming RSPO credits through PalmTrace 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:
 - Quantities of raw materials from suppliers whose products contain RSPO-certified sustainable palm oil and palm kernel oil;
 - Quantities of raw materials from suppliers who support sustainable palm oil production through PalmTrace and the percentage of palm oil and/or palm kernel oil used in the production of the raw materials procured with RSPO PalmTrace credits ; and
 - Quantities of any RSPO PalmTrace credits procured and redeemed by the Licence holder.



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 or product manufacturer. 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 RSPO PalmTrace credits redeemed in relation to the raw material ingredients;
- Copies of any RSPO PalmTrace credits 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; and
- A completed table of information (Table E1 in Appendix E).

5.12 Waste management

Criteria

- a The licence applicant/holder 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.

Where a Licence applicant/holder is a wholesale or retail supplier of the detergent and cleaning product, evidence that the manufacturer holds a current ECNZ Licence covering the relevant products will be sufficient to demonstrate compliance with these requirements.

5.13 Energy management

Criteria

- a The licence applicant/holder 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 to the Trust on energy use and management.







Where a Licence applicant/holder is a wholesale or retail supplier of the detergent and cleaning product, evidence that the manufacturer holds a current ECNZ Licence covering the relevant products will be sufficient to demonstrate compliance with these requirements.

5.14 Consumer information

5.14.1 Product labels

- a All detergent and cleaning product labels must include the following;

Criteria Product Label	Content required to be on the label
Instructions	All Products Instructions on proper use so as to maximise product performance and minimise waste.

	<p>Information on reuse, recycle and/or correct disposal of packaging.</p> <p>For products intended for commercial and institutional use:</p> <p>Labels must include English and a graphical representation or icons to assist illiterate/Non-English speaking people:</p> <ul style="list-style-type: none"> Icons shall explain dilution, use and appropriate PPE. <p>Appropriate hazard symbols must also be included on the label, where necessary. The label, or accompanying documents must specify that the product is intended for use by professional and commercial users and where relevant commercial and institutional machinery (e.g. automatic dosing dishwashers).</p>	
Dilution (if relevant)	<p>Instructions for dilution will be provided.</p> <p>Dilution by cold tap shall be recommended.</p>	
Recommended Dosage	<p>The label, or an accompanying technical data sheet, must include details of the recommended dosage at normal level of soiling/normal use, and a recommendation on application and removal (if relevant).</p> <p>The dosage must be given in:</p> <ul style="list-style-type: none"> Millilitres, grams or commonly used metric Where possible a second well known metric shall be provided – capful, squirt, teaspoon etc. <p>The capacity of any measure device, if provided, shall indicate dosage in millilitres, grams or provide a relevant marking indication (half load, 1 scoop = 60mL etc).</p>	 
<p>Recommended Dosage (Water Hardness)</p> <p>sub-categories 4.2 and 4.8 only</p>	<p>The dosing instructions may be stated for various water hardnesses (for where the product is marketed) and for various levels of soiling.</p> <p>A recommendation shall appear on the packaging for the consumer to contact their water supplier or local authority in order to find out the degree of hardness of their tap water.</p>	
Ingredients	<p>All cleaning products 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.</p>	 

Legal requirements	All labelling shall comply with the requirements of the WorkSafe Hazardous Substances legislation or the appropriate hazardous substance legislation for the country where the product is sold.
Product Data Sheet or SDS	All packaging shall include a website reference where a copy of the product data sheet can be obtained.
Antimicrobial Claims	No claim or suggestion, on the packaging or by any other means, shall be made that the product has an antimicrobial action.
Environmental Choice Label Requirements	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 detergent and cleaning products have an effect on the environment. Always use the correct dose for maximum efficiency and minimum environmental impact."

- b Additionally, products containing micro-organisms must including the following on the product label:
- A statement that the product includes micro-organisms;
 - That the product is intended for use by commercial cleaners only in commercial and institutional settings and must not be used in household applications;
 - A warning not to use the product in places where immunocompromised people are present;
 - That the product must not be used on surfaces intended for frequent human contact (e.g. desks, tables, or food preparation surfaces);
 - Spray application must not be used.

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 label;
- Confirmation of the method used to meet the requirements (including providing copies of any relevant legislation or requirement); and
- A completed table of information (Table E2 in Appendix E).

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 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.

5.14.2 Product information

Criteria

- a Products intended for commercial and institutional use (sub-categories 4.5, 4.7 and 4.8): 
- The product manufacturer, its distributor, or a third party must offer training or training materials on the proper use of the product. This shall include step-by-step instructions for the proper dilution, use, disposal of the product, and the use of equipment, as well as recommended personal protection equipment for each stage of the product's use; and
 - Product manufacturers must make the appropriate product and/or equipment training information, including Safety Data Sheets, available electronically as well as in hard copy.
- b 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: 
- The product name;
 - Contact details of the New Zealand importer, supplier or manufacturer including a phone number;
 - Listing of all hazardous ingredients added to the product;
 - Identification of any hazards associated with the product as sold and used;
 - Directions for use, including relevant dilution rates and dose rates; and
 - 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

- Samples of training materials;
- Technical product data sheets;
- Safety Data Sheets; and
- A completed table of information (Table E2 in Appendix E).

Under the HSNO legislation, copies of the Safety Data Sheet shall be provided to commercial and institutional users. The Licence holder shall ensure copies are provided and available for all customers.

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

For product data sheets, 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.

5.14.3 Product claims

Criteria

- a 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:
- The definition used by the Licence holder to support the “natural” or “plant based” claim;
 - The source of all ingredients including whether they are synthetic versions of the chemicals; and
 - Evidence of chain of custody where synthetic versions exist and the ingredients are non-synthetic versions.
- b For any other environmental claims included on the product label, the licence holder must provide sufficient evidence to substantiate the claim.



This criterion does not apply to palm oil or palm kernel oil (see Clause 5.12 for relevant requirements).

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.

For part (a), this statement shall be supported with:

- Information on the definition used;
- The source of ingredients;
- Evidence of chain of custody; and
- A completed table of information (Table E1 and E2 in Appendix E).

For part (b) this statement shall be supported by evidence sufficient to substantiate the claim being made.

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.

5.15 Packaging requirements

Criteria

Products shall ensure the following packaging requirements are followed;

- a All plastic packaging must be made of plastics that are able to be recycled in the country where the product is sold.
- b Primary packaging must not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent recycling (i.e. PVC sleeves, metallic labels).
- c Primary 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 B for details of acceptable certifications for certified sustainable forest management and legally harvested wood.

- d Products shall ensure primary packaging meets the following weight utility ratio for its product type;



Product Type	Weight Utility Ratio (WUR) Primary Packaging			
Hand dishwashing detergents* (sub-category 4.1)	Less than or equal to 1.2 g/L			
Laundry detergents** (sub-categories 4.2 and 4.8)	Primary product packaging shall have a WUR of less than or equal to:			
	Product Type	Soft Water	Medium Water	Hard Water
	Powders	1.5	2.0	2.5
	Liquids	2.0	2.5	3.0
Machine dishwashing detergents (sub-category 4.3)	The primary packaging shall not exceed 2.0 grams per wash.			
General purpose cleaning and floor care products*** (sub-categories 4.4, 4.7 and 4.6)	Less than or equal to 150 g/L in use solution.			
Commercial and institutional dishwashing detergents (sub-category 4.5)	Primary product packaging shall have a WUR of less than or equal to:			
	Product Type	Soft Water	Medium Water	Hard Water
	Powders	0.8	1.4	2.0
	Liquids	1.0	1.8	2.5
<p>*For dishwashing detergents (sub-category 4.1), the WUR is calculated for the primary packaging (including caps, stoppers bottles and hand pumps/ spraying devices) using the following formula:</p> $\text{WUR} = \text{weight of primary packaging} / \text{number of doses}$ <p>(a dose is grams of product required per 1 litre washing solution)</p> <p>**For laundry detergents (sub-category 4.2 and 4.8), the WUR shall be calculated using the highest recommended dosage for each water hardness, using the following formula:</p> $\text{WUR} = \text{weight of primary packaging} / \text{number of doses (in g/kg)}$				

***For general purpose cleaners (sub-categories 4.4 and 4.7) and floor care products (sub-category 4.6), the WUR is calculated for the primary packaging (including caps, stoppers bottles and hand pumps/ spraying devices) using the following formula:

$$\text{WUR} = \text{weight of primary packaging/litre of in use solution}$$

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 criterion (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; and
- A completed table of information (Table E2 in Appendix E).

6 Product characteristics

6.1 Product performance

Criteria

- a The product must be fit for its intended use and conform, as appropriate, to relevant product performance standards. 
- b For products containing micro-organisms, documentation must be provided on product performance and fitness of purpose which includes; 
 - Information or testing which shows the microbial cleaner can break down the protein, starch, fat vegetable oil and/or other residue which it is designed to target; and 
 - The shelf-life of the product by a relevant test or standard.

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.

Conformance with criterion a) shall be supported by a statement and/or the following documentation:

- Identifying the applicable standards, specifications and or consumer/customer requirements e.g this may include standards for cleaning ability (ability to remove soil) and cleaning performance (the total amount of soil removed per wash);
- Demonstrating how compliance is monitored and maintained (including quality control and assurance procedures);
- Records of customer feedback and complaints; and

- A completed table of information (Table E2 in Appendix E).

Conformance with criterion part b) shall be supported by the following documentation:

- Fitness for purpose testing shall include the information should include collection of data from use of product, in house testing, or appropriate laboratory testing (e.g. ISO 4833-1:2014 Horizontal method for the enumeration of micro-organisms); and
- Shelf life shall include test reports and/or appropriate in house testing;

6.2 Hazardous properties of the product

Criteria

- a Detergent and cleaning products must not be classified under the HSNO regulations as:
 - Class 1 (explosive);
 - Subclass 3.1A, 3.1B, 3.1C, or 3.2 (flammable);
 - Subclasses 6.1A or 6.1B (acutely toxic);
 - 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); and
 - Subclasses 9.1A or 9.1B (ecotoxic).
- b Detergent and cleaning products marketed as sensitive, allergen free or baby care products must not be classified under the HSNO regulations as:
 - Subclass 6.5 (sensitisers).
- c General purpose cleaners (4.4), floor care products (4.6) and hand dishwashing detergents (4.1) must meet the criteria specified in sub-clause 6.1a and must not be classified under the HSNO regulations as:
 - Class 8.3A (corrosive to eyes).



Products intended for use solely for cleaning toilets are exempt from the requirement on corrosivity (Class 8.2A), if the classification is set because of pH.

Products identified as commercial and institutional dishwashing detergents (4.5) and commercial and institutional laundry detergents (4.8) are exempt from the requirement on corrosivity (Class 8.2A) if sold solely for commercial and institutional use.

For a full list of restricted substances see Table 1 in Appendix C.

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; and
- A completed table of information (Table E2 in Appendix E).

Explanatory notes


6.3 Suitability for receiving wastewater system

Criteria

For products intended for use in laundry machines either:

- The total sodium load per wash shall be less than 21g/150 litre (0.14g/L) 

OR







- The product label must state the use of the product may make the greywater unsuitable for re-use and may affect the performance of septic tanks. 

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 calculations showing the sodium load per wash or a copy of the product label, and a completed table of information (Table E2 in Appendix E).

6.4 Product form

Criteria

- a If the licence holder uses refillable containers for its ECNZ-licensed products, they shall provide information to The Trust including: 
 - Consumer demand for refillable containers;
 - Volume of product sold in refillable containers; and
 - Difference in the WUR between refillable containers and non-refillable containers.
- b Hard surface cleaners must meet the following product form criteria: 
 - Suitable for use with re-usable cleaning applicators, such as sponges, cloths or other re-usable applicator;OR
 - Single use applicators (wipes) must meet the criteria in the *“International Wastewater Services Flushability Group (IWSFG) (PAS) 1:2018 Criteria for recognition as a flushable product”* Specification.
- c Sprays containing propellants may not be used. 
- d Commercial and institutional dishwashing products (sub-category 4.5) must meet the following product form criteria; 
 - Corrosive pre-soaking liquid must be sold with dosage pumps or be automatically dosed and mixed with water;
 - The pump should be designed to give the right amount of the product and minimise the risk of exposure; and
 - For packages of 1L or less, the product can be sold without the pump if the packaging has a child protective seal.
- e Laundry detergent pods or single use liquid products in soluble packaging must meet the product form criteria in *EU amendment 1297/2014 in Part 3 of Annex II of 5 December 2014 on Liquid consumer laundry detergents in soluble packaging for single use* (Detailed in Appendix D). 

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 the following documentation and evidence:

- Conformance with criterion (a) shall be supported by documentation on the use of refillable containers;
- Conformance with criterion (b) shall be supported by test results, or other information, demonstrating that the wipes are manufactured in line with the international flushability standard;
- Conformance with criterion (c) shall be supported by information demonstrating that sprays containing propellants are not used;
- Conformance with criterion (d) shall be supported by documentation on product packaging. This may be supported by photographs;
- Conformance with criterion (e) shall be supported by test results, or other, information, demonstrating that the liquid laundry pods are manufactured in line with the *EU amendment 1297/2014 in Part 3 of Annex II of 5 December 2014 on Liquid consumer laundry detergents in soluble packaging for single use*; and
- A completed table of information (Table E2 in Appendix E).

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 type of products covered by the Licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. The plan will also reflect the nature of the Licence holder (whether a manufacturer and supplier, a wholesale/retail supplier with contract manufacturing, or involved in other arrangements with contract manufacturing and brand ownership). It will specifically provide for supervision of the Licence holder's contractual or other explicit arrangements with suppliers, customers or other agents/parties to ensure all relevant requirements of this specification and Licence Conditions are met (including those related to legal requirements, packaging and labelling, information about products, product claims and use of the Label). 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 non-compliance 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 'detergent and cleaning products' 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.

Appendix A: Test methods

Any test reports submitted shall be from a laboratory competent to carry out the relevant 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).
- **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.
- **VOC content:** For product for which the label specifies dilution with water prior to use, the VOC limit shall apply only after the minimum specified dilution has taken place. The minimum specified dilution shall not include recommendations for the incidental use of a concentrated product to deal with limited special applications, such as hard to remove soils and stains.
 - Shall be measured by EPA Method 24-24A, 40 C.F.R., Part 60, Appendix A (1991), or Method 18, 48 Federal Register 48, no. 202, October 18, 1983 or Method 1400 NIOSH Manual of Analytical Methods, Volume 1, February 1984, or EPA Method 8240 GC/MS Method for Volatile Organics, September 1986 or as demonstrated through calculation from records of the amounts of constituents used to make the product;
OR
 - Calculation Method VOC content for each raw materials, or individual ingredients in any intermediate raw material, should be calculated using data from the raw material supplier. The total VOC content of the product shall be determined by adding the proportional contribution of VOCs from each of the raw materials.
 - Constituents added in quantities less than 0.5 % (by volume) of the total volume of the batch need not be taken into account in calculating the VOC content of the product unless they are known to be essentially volatile materials.

Appendix B: Explanatory notes for 5.15c

Legal harvesting – for fibre from plantations, and waste wood from all virgin fibre sources:

The following will be accepted as sources of information to demonstrate legal harvesting, where 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).
- Evidence of legal harvesting from the Global Forest Registry (www.globalforestregister.org).

Sustainable Forest Management (SFM) – for fibre from native forests:

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 for fibre from native sources accepted by The Trust are those which will ensure that fibre from sustainably managed native forests will be actually present in the final packaging used for ECNZ licensed products. These are set out below.

Types of FSC claims² on invoices or packing slips which can be used to demonstrate compliance with the SFM requirements:

- FSC 100%; and
- FSC Mix Credit – only if the manufacturer can demonstrate that fibre from SFM is actually present in the ECNZ products.

FSC Controlled Wood does not demonstrate SFM.

Types of PEFC claims³ which can be used to demonstrate compliance with the SFM requirements:

- PEFC Certified – Physical Separation method; and
- X% PEFC Certified – Volume Credit method – only if the manufacturer can demonstrate that fibre from SFM is actually present in the ECNZ products.

PEFC Controlled Sources does not demonstrate SFM.

² FSC Chain of Custody Certification – factsheet. FSC UK, 14 January 2013.

³ PEFC Chain of Custody Certifications – The Key to Selling Certified Products. PEFC, 2012.

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); and
- Sustainable Forest Management Plans, supported with Annual Logging Plans, which 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 Forests⁴ and guidance for preparing Sustainable Management Plans and Annual Logging Plans⁵. 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.

⁴ *Standards and Guidelines for the Sustainable Management of Indigenous Forests*, Fourth Edition. Ministry of Agriculture and Forestry 2009 (or any more recent edition applicable at the time of application for an ECNZ licence).

⁵ *Indigenous Forestry Sustainable Management: A Guide to Preparing Draft Sustainable Forest Management Plans, Sustainable Forest Management Permit Applications and Annual Logging Plans*. Sustainable Programmes, Ministry of Agriculture and Forestry Policy 2009.

Appendix C: Hazardous Substances Classifications

Table 1 – Hazardous Substances Classifications⁶

New Zealand HSNO	Globally Harmonised System
Explosive	
1.1	Division 1.1, H201 - Mass explosion hazard
1.2	Division 1.2, H202 - Serious projection hazard
1.3	Division 1.3, H203 - Fire, blast or projection hazard
1.4	Division 1.4, H204 - Fire or projection hazard
1.5	Division 1.5, H205 - May mass explode in fire
1.6	Division 1.6, H206 - No Hazard phrase
Flammable Liquid (or vapour)	
3.1A	Category 1, H224 – Extremely Flammable Extremely flammable liquid or vapour
3.1B	Category 2, H225 – Highly Flammable Highly flammable liquid or vapour
3.1C	Category 3, H226 - Flammable
3.2 Liquid desensitised explosives	No GHS Category
Toxicological hazards	
6.1A (Oral)	Acute Tox.1, H300 – Fatal if swallowed
6.1A (Dermal)	Acute Tox. 1, H310 – Fatal in contact with skin
6.1A (Inhalation)	Acute Tox. 1 and 2, H330 - Inhalation Vapours, Dust or Mists
6.1B (Oral)	Acute Tox. 2, H300 -Toxic if swallowed
6.1B (Dermal)	Acute Tox. 2, H310 – Toxic in contact with skin
6.1B (Inhalation)	Acute Tox. 2, H330 - Inhalation Vapours, Dust or Mists
Sensitisers	
6.5A	Category 1/1A/1B, H334 – Respiratory Sensitizer may cause allergy, Asthmatic symptoms or difficulty breathing if inhaled
6.5B	Category 1/1A/1B, H317 – Skin Sensitizer may cause allergic skin reaction
Carcinogens, mutagens and reproductive toxins	
6.6A	Category 1A/1B, H340 - Mutagen
6.6B	Category 2, H341 - Mutagen
6.7A	Category 1A/1B, H350 - Carcinogen
6.7B	Category 2, H351 - Carcinogen
6.8A	Category 1A/1B, H360 – Reproductive Toxicity

⁶ Environmental Protection Authority (New Zealand Government), January 2012, Labelling and hazardous substances – hazard and precautionary information technical guide, <https://www.epa.govt.nz/industry-areas/hazardous-substances/guidance-for-importers-and-manufacturers/labelling-and-safety-data-sheets/>

6.8B	Category 2, H361 – Reproductive Toxicity
6.9A (Single Exposure)	Category 1, H370 – Causes damage to organs
6.9A (Repeated Exposure)	Category 1, H372 – Causes damage to organs
Corrosives	
8.2A Corrosive to dermal tissue UN PGI	Category 1A, H314 – Causes severe skin burns and eye damage
8.2B Corrosive to dermal tissue UN PGII	Category 1B, H314 – Causes severe skin burns and eye damage
8.2C Corrosive to dermal tissue UN PGIII	Category 1C, H314 – Causes severe skin burns and eye damage
8.3A Corrosive to ocular tissue	Category 1, H318 – Causes serious eye damage
Ecotoxic substances	
9.1A	Category 1, H400 – Very toxic to aquatic life (Acute)
9.1A	Category 1, H410 – Very toxic to aquatic life with long lasting effects (Chronic)
9.1B	Category 2, H411 – Very toxic to aquatic life with long lasting effects (Chronic)

NOTE: The United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS) aims to provide a single, international hazardous property classification system. The table above shows the (broadly) equivalent New Zealand HSNO Classifications and the United Nations' Globally Harmonised System (GHS) classification.

It is important to note that the HSNO Classifications and GHS are classification frameworks and the particular classifications applied to a substance may vary between jurisdictions (for example Europe, the United States and New Zealand each have their own agency with responsibility for assessing and classifying hazardous substances). Differences between classifications can be due to the weight placed on particular toxicity studies (i.e. a jurisdiction may consider that a study is flawed) or in the event that new information becomes available (i.e. differences in the timing of the classification or re-classification of a substance). Where there is a discrepancy between the classifications applied to specific substances in the different schemes, The Trust's appointed technical advisors will review supporting information regarding the classifications on a case-by-case basis to determine and recommend to The Trust how these discrepancies should be managed within the life cycle context of the relevant product category. Where appropriate, technical clarifications and changes, with accompanying explanation, will be included in the relevant specification.

Appendix D: Explanatory notes for 6.4e

Laundry detergent pods or single use liquid products in soluble packaging shall be contained in an outer packaging which meets the following requirements;

- Outer packaging shall be opaque to impede visibility of the product or single dosage pods;
- A precautionary statement shall be included which states “Keep out of reach of children” in a visible location and in a format that attracts attention;
- The container must be easily re-closable and self-standing;
- A closure mechanism will be fitted that;
 - Impedes the ability of young children to open the packaging by requiring coordinated action of both hands with a strength that makes it difficult for young children to open it;
 - Maintains functionality under conditions of repeated opening and closing for the life of the product packaging.

Laundry detergent pods or single use liquid products in soluble packaging shall be contained in soluble packaging which meets the following requirements;

- Contains a bittering agent, which is safe and elicits oral repulsive behaviour within a maximum time of 6 seconds , in case of accidental oral exposure;
- Retain its liquid content for at least 30 seconds when the soluble packaging is placed in water at 20 °C;
- Resist mechanical compressive strength of at least 300 N under standard test conditions.

Appendix E: Information tables

E1: Formulation information table

[illegible]

E2: Product information table

Licensed Product (Name)	Is the following information from 5.14.1 on the product labels? (✓/✗)						Can you substantiate any product claims made? (✓/✗)	Does the product packaging meet the requirements in 5.15? (✓/✗)	What is the weight utility ratio of the product packaging?	What are the HSNO classifications of the final product?	What is the total sodium load per wash (laundry only, (g/L))?
	Instructions for use (including dosage and dilution)	List of ingredients?*	Legal requirements (HSNO/Group Standard)?	Website address for product SDS?	The required ECNZ statement?	No antimicrobial claims?					
<i>e.g. Delicate laundry detergent</i>	✓	✗ (professional use)	✓	✓	✓	✓	✓	✓	1.8	<i>e.g. 9.1D</i>	<i>0.12g/L</i>

* Products intended for use by the general public and/or sold to the general public require a list of ingredien

