

Nordic Ecolabelling for  
**Laundry detergents for professional use**



Consultation proposal  
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## Addresses

In 1989, the Nordic Council of Ministers decided to introduce a voluntary official ecolabel, the Nordic Swan Ecolabel. These organisations/companies operate the Nordic Ecolabelling system on behalf of their own country's government. For more information, see the websites:

### Denmark

Ecolabelling Denmark  
Fonden Dansk Standard  
Göteborg Plads 1, DK-2150 Nordhavn  
Fischersgade 56, DK-9670 Løgstør  
Tel: +45 72 300 450  
info@ecolabel.dk  
www.ecolabel.dk

### Iceland

Ecolabelling Iceland  
Norræn Umhverfismerking  
á Íslandi  
Suðurlandsbraut 24  
IS-108 Reykjavík  
Tel: +354 591 20 00  
ust@ust.is  
www.svanurinn.is

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### Finland

Ecolabelling Finland  
Urho Kekkosen katu 4-6 E  
FI-00100 Helsingfors  
Tel: +358 9 61 22 50 00  
joutsen@ecolabel.fi  
www.ecolabel.fi

### Norway

Ecolabelling Norway  
Henrik Ibsens gate 20  
NO-0255 Oslo  
Tel: +47 24 14 46 00  
info@svanemarket.no  
www.svanemarket.no

### Sweden

Ecolabelling Sweden  
Box 38114  
SE-100 64 Stockholm  
Tel: +46 8 55 55 24 00  
info@svanen.se  
www.svanen.se

## What is a Nordic Swan Ecolabelled Laundry detergent for professional use?

Tough requirements concerning chemicals and packaging ensure that Nordic Swan Ecolabelled laundry detergents for professional use reduce the impact on our environment. Nordic Swan Ecolabelled laundry detergents for professional use:

- Meet ambitious requirements regarding environmentally hazardous chemicals, including requirements on ecotoxicity and biodegradability.
- Comply with tough requirements relating to chemicals that are harmful to health, including a ban on substances that are classified as carcinogenic, toxic to reproduction, can damage genetic material or are allergenic/sensitising. And various specifically problematic substances such as identified and potential endocrine disruptors on up-to-date lists from EU and national authorities.
- Promote increased use of sustainable renewable raw materials.
- Do not contain fragrances and optical brighteners.
- Are effective from 40 °C or lower for light and medium soiling and 60°C or lower for heavy soiling.
- Have packaging that contributes to a circular economy, not least through its design and material choices, with larger packaging being reused.

## Why choose the Nordic Swan Ecolabel?

- The licensee may use the Nordic Swan Ecolabel trademark for marketing. The Nordic Swan Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Swan Ecolabel is a simple way of communicating environmental work and commitment to customers.
- The Nordic Swan Ecolabel clarifies the most important environmental impacts and thus shows how a company can cut emissions, resource consumption and waste management.
- Environmentally suitable operations prepare the licensee for future environmental legislation.
- Nordic Ecolabelling can be seen as providing a business with guidance on the work of environmental improvements.
- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements since the environment and quality often go hand in

hand. This means that a Nordic Swan Ecolabel licence can also be seen as a mark of quality.

## What can carry the Nordic Swan Ecolabel?

Products that, together with water, are intended to wash textiles clean for professional users and/or large-scale consumers who use washing machines with automatic dosing systems can be Nordic Swan Ecolabelled. Stain removers on spray may be dosed manually.

The criteria include both complete powder and liquid laundry detergents and multi-component systems. A multi-component system is a detergent system where different components build up a complete detergent, a stock solution, or a washing program for automatic dosing.

Fabric softeners and stain removers can only be Nordic Swan Ecolabelled if they are part of a multi-component system.

Only products that are effective from 40°C or lower for light and medium soiling and 60°C or lower for heavy soiling and that are primarily intended for washing in soft water (0-6 °dH) can be Nordic Swan Ecolabelled.

The criteria include all products that come into contact with the textiles during washing. However, special impregnating agents with, for example, water-repellent or flame-retardant functions, colours for dyeing textiles and products where microorganisms have been deliberately added are not included in the product group definition.

Products that, wholly or partly, are intended for consumers and sold in grocery stores, cannot be Nordic Swan Ecolabelled in line with these criteria. For these products, the criteria for Nordic Ecolabelling of laundry detergents and stain removers applies.

## How to apply

### **Application and costs**

For information about the application process and fees for this product group, please refer to the respective national web site. For addresses see page 3.

### **What is required?**

The application consists of a web form and documentation showing that the requirements are fulfilled.

Each requirement is marked with the letter O (obligatory requirement) and a number. All requirements must be fulfilled to be awarded a licence.

The text describes how the applicant shall demonstrate fulfillment of each requirement. There are also icons in the text to make this clearer. These icons are:

- Enclose
- Requirement checked on site

All information submitted to Nordic Ecolabelling is treated confidentially. Suppliers can send documentation directly to Nordic Ecolabelling, and this will also be treated confidentially.

### **Licence validity**

The Nordic Swan Ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended, and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

### **On-site inspection**

In connection with handling of the application, Nordic Ecolabelling normally performs an on-site inspection to ensure adherence to the requirements. For such an inspection, data used for calculations, original copies of submitted certificates, test records, purchase statistics, and similar documents that support the application must be available for examination.

### **Queries**

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 3 or addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

## **1 Environmental requirements**

The environmental requirements are divided into two parts:

**1.1 General requirements** that must be fulfilled by all products and all components in a multi-component system

**1.2 Total content of environmentally harmful substances** that apply to the total environmental impact of a complete laundry detergent or a multi-component system.

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled laundry detergent for professional use. Impurities are not regarded as ingoing substances and are exempt from the requirements.

Ingoing substances and impurities are defined below, unless stated otherwise in the requirements.

- Ingoing substances: all substances in the Nordic Swan Ecolabelled product, including additives (e.g., preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g., formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.
- Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100 ppm (0,0100 w-%, 100 mg/kg) in the Nordic Swan Ecolabelled product.
- Impurities in the raw materials exceeding concentrations of 1,0% are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and detergents for production equipment and carry-over from other or previous production lines.

## 1.1 General requirements

### O1 Description of the product

The applicant must provide the following information about the laundry detergent or the multi-component system:

- Description of the product's area of use.
- Description of the ingoing components if it is a multi-component system.
- Recommended dosing for light, medium and heavy soiling in ml or grams per kg laundry. For multi-component systems, the dosing must be stated for each component.
- The recommended washing temperature\* for the different degrees of soiling. The product must fulfill the efficiency test in requirement O20 at the recommended washing temperature.
- The product's volume or weight.
- All trade names if the product is sold in multiple countries.
- Whether the product has a chemothermal disinfecting function.

*\* Note that only products that are effective from 40°C or lower for light and medium soiling and 60°C or lower for heavy soiling can be Nordic Swan Ecolabelled.*

- Description of the product in line with Appendix 1.
- Copy of label and/or product sheet can be sent in as part of the documentation.

### O2 Formulation

The applicant must provide a complete formulation for the laundry detergent or the multi-component system. For multicomponent systems, the formulation must be given for all the separate components. The formulation must contain the information below for each ingoing raw material. If a raw material contains two or more substances, each substance must be declared.

- Trade name

- Chemical name of main component and any additives (e.g., preservatives and stabilisers)
- Amount (both with and without solvents, e.g., water)
- CAS no. / EC no.
- Function
- DID no.\* for substances that may be placed on the DID list

\* *The DID number is an ingredient's number on the DID list, version 2016 or later, which is used when calculating chemical requirements. The DID list can be obtained from Nordic Ecolabelling's websites, see addresses on page 3.*

- ☒ The complete formulation of the laundry detergent or the multi-component system as set out in the requirement. Nordic Ecolabelling's calculation sheet must be used. It is available from Nordic Ecolabelling's websites.
- ☒ Safety data sheet for each raw material that is compiled in accordance with current European legislation (Annex II to REACH, Regulation (EC) No 1907/2006).

### O3 Classification of the product

The product must not be classified in accordance with hazard classes described in the table below.

**Table 1 Classification of the product**

Classification of chemical products CLP Regulation 1272/2008:		
Hazard statement	Hazard class and category	Hazard code
Hazardous to the aquatic* environment	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410
	Aquatic Chronic 2	H411
	Aquatic Chronic 3	H412
	Aquatic Chronic 4	H413
Hazardous to the ozone layer	Ozone	H420
Carcinogenicity**	Carc. 1A or 1B	H350
	Carc. 2	H351
Germ cell mutagenicity**	Muta. 1A or 1B	H340
	Muta. 2	H341
Reproductive toxicity**	Repr. 1A or 1B	H360
	Repr. 2	H361
	Lact	H362
Acute toxicity***	Acute Tox 1 or 2	H300
	Acute Tox 1 or 2	H310
	Acute Tox 1 or 2	H330
	Acute Tox 3	H301
	Acute Tox 3	H311
	Acute Tox 3	H331
	Acute Tox 4	H312
	Acute Tox 4	H332
Specific target organ toxicity, single or repeated exposure***	STOT SE 1	H370
	STOT SE 2	H371
	STOT RE 1	H372
	STOT RE 2	H373
Skin corrosion/irritation	Skin Corr. 1A, 1B or 1C	H314
Aspiration hazard***	Asp. Tox. 1	H304
Respiratory or skin sensitisation****	Resp. Sens. 1, 1A or 1B	H334
	Skin Sens. 1, 1A or 1B	H317

\* Products containing peracetic acid and hydrogen peroxide used as bleaching agent may be classified and labelled as hazardous to the aquatic environment H410, H411 or H412, if the classification is triggered by the presence of these substances.

\*\* The classifications concern all classification variants. For example, H350 also covers classification H350i.

\*\*\* Exemptions apply to products that are classified H304, H312, H332, H371 or H373, where the classification is triggered by the content of oxalic acid, peracetic acid or hydrogen peroxide.

\*\*\*\* Exemptions apply to products that are classified H317 or H334 if the classification is triggered by enzyme content. However, this assumes that the enzymes are encapsulated or in a slurry. Products labelled with EUH208 (“Contains <name of sensitising substance>. May produce an allergic reaction.”) can be Nordic Swan Ecolabelled only if the sensitising substance is an enzyme. Please note the additional requirement for enzymes in O6

*Please note that the producer/supplier is responsible for the classification.*

- Product label or safety data sheet for the product in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/EC).

#### O4 Classification of ingoing substances

Ingoing substances in product must not be classified in accordance with hazard classes described in the table below.

**Table 2 Classification of ingoing substances**

Classification of chemical products CLP Regulation 1272/2008:		
Hazard statement	Hazard class and category	Hazard code
Carcinogenicity*	Carc. 1A or 1B Carc. 2	H350 H351
Germ cell mutagenicity*	Muta. 1A or 1B Muta. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact	H360 H361 H362
Respiratory or skin sensitisation**	Resp. Sens. 1, 1A or 1B Skin Sens. 1, 1A or 1B	H334 H317

\* Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.

\* Complexing agents of the MGDA and GLDA type may contain NTA impurities in the raw material in concentrations of less than 0.2% if the concentration of NTA in the product is below 0.1%.

\*\* Exemptions apply to enzymes that are encapsulated or in a slurry (including stabilisers in the enzyme raw material) and preservatives. Please note that MI (methylisothiazolinone), CAS no. 2682-20-4 must not be present in the product according to requirement O7.

- Safety data sheet for all ingoing substances (in all products) in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/EC).
- Completed and signed declaration from the manufacturer of the product (Appendix 2).
- Completed and signed declaration from the raw material supplier (Appendix 3).

## O5 Surfactants

All surfactants must be readily biodegradable according to test method No 301 A–F or No 310 in OECD guidelines for testing of chemicals or other equivalent test methods evaluated by an independent body and controlled by Nordic Ecolabelling.

All surfactants must be anaerobically biodegradable in accordance with ISO 11734, ECETOC No 28, OECD 311 or equivalent testing methods evaluated by an independent body and controlled by Nordic Ecolabelling.

- Reference to the DID list dated 2016 or later versions. For substances not on the DID list, or where data on the DID list is missing, the associated documentation must be submitted. See Appendix 4 for test requirements.

## O6 Enzymes

Enzymes may only be present in the product in liquid form or as granulate capsules.

Enzymes in spray products must comply with safe limit for exposure. The exposure limit should be below the Derived No Effect Level, DNEL for consumers and professionals, 15 ng/m<sup>3</sup>.<sup>1</sup>

- Declaration from the enzyme manufacturer or information on safety data sheet/product data sheet.
- For enzyme-containing spray products: Risk assessment according to AISE:s "Exposure measurements of enzymes for risk assessment of household cleaning spray products (AISE, July 2020)".

## O7 Prohibited substances

The following substances are excluded from use in products:

- Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)
- Benzalkonium chloride, CAS-no. 8001-54-5
- 34 bisphenols<sup>2</sup> that have been identified by ECHA for further EU regulatory risk management that are known or potential endocrine disruptors for the environment or for human health, or that can be identified as toxic for reproduction.
- Boric acid, borates and perborates
- Colourants
- DADMAC (dialkyldimethylammonium chloride), CAS-no. 68424-95-3
- DTPA (diethylenetriamine pentaacetate), CAS-no. 67-43-6
- EDTA (ethylenediaminetetraacetic acid), CAS-no. 13235-36-4, and its salts
- Fragrances
- Halogenated flame retardants

<sup>1</sup> [https://www.aise.eu/documents/document/20210401175430-aise\\_enzyme\\_spray\\_protocol\\_revision\\_july\\_2020.pdf](https://www.aise.eu/documents/document/20210401175430-aise_enzyme_spray_protocol_revision_july_2020.pdf)

<sup>2</sup> EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylidenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS, 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA).

- LAS (linear alkylbenzene sulphonates)
- MI (methylisothiazolinone), CAS no. 2682-20-4
- Microplastics

*Microplastics are defined here as particles of insoluble macromolecular plastic less than 5 mm in size, achieved through one of the following processes:*

  - a) *Polymerization, such as polyaddition or polycondensation, or a similar process that uses monomers or other precursors.*
  - b) *Chemical change of natural or synthetic macromolecules.*
  - c) *Microbial fermentation.*

*Note that Nordic Ecolabelling follows development of ECHA's restriction proposal and its definition, and we reserve the right to change the definition above once the definition in the restriction proposal has been fixed. An appropriate transition period will be granted.*
- Nanomaterials/-particles

*Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01): 'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions:*

  - (a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;*
  - (b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm;*
  - (c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.*
- NTA (nitritotriacetic acid), CAS-no. 139-13-9 and its salts

*Exemption: Complexing agents of the MGDA and GLDA type may contain NTA impurities in the raw material in concentrations of less than 0.2% if the concentration of NTA in the product is below 0.1%.*
- Optical brighteners
- Organic chlorine compounds, hypochlorites and hypochlorous acid

*Exemption: Preservatives may contain organic chlorine compounds.*
- PFAS (per- and polyfluoroalkyl substances)
- Phosphates
- Phtalates
- Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists" List I; II; and III.
  - o <https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu>
  - o <https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption>
  - o <https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities>

*A substance which is transferred to one of the corresponding sublists called “Substances no longer on list”, and no longer appears on any of List I-III, is no longer excluded. The exception is those substances on sublist II which were evaluated under a regulation or directive which doesn’t have provisions for identifying EDs (e.g., the Cosmetics Regulation, etc.). For those substances, ED properties may still have been confirmed or suspected. Nordic Ecolabelling will evaluate the circumstances case-by-case, based on the background information indicated on sublist II.*

- Quaternary ammonium compounds, which are not aerobic or anaerobic biodegradable  
*According to test method 301 (A-F) or 310 in OECD guidelines for testing of chemicals or other equivalent methods evaluated by an independent body and controlled by Nordic Ecolabelling.*
- Siloxanes D4, D5, D6 and HMDS
- Substances categorized as Substances of Very High Concern (SVHC) and included on the Candidate List: <https://echa.europa.eu/candidate-list-table>.
- Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH, plus substances that have not yet been investigated but that meet these criteria.
- Triclosan

Appendix 2 for the product and Appendix 3 for all raw materials or equivalent certification duly completed and signed.

## O8 Sustainable raw materials

1. The licence holder must document that they are working to increase their purchasing of sustainable and renewable raw materials and/or that they require their manufacturer to work on increasing their purchasing of sustainable renewable raw materials for Nordic Swan Ecolabelled laundry detergents for professional use. This can for example be done by promoting certified raw materials, by avoiding problematic raw materials, by changing from fossil based raw materials to sustainable raw materials, or by increasing the share of segregated or identity preserved RSPO (Round Table for Sustainable Palm Oil) palm oil. The targets must be quantitative and time-based, and they must be set by the company’s management.

*Renewable raw materials are defined as raw materials from biological material which are continuously renewed in nature within a short time span, for example grain and wood (European standard EN16575:2014).*

2. The following data is required for each ingoing raw material (ingredient) that is included > 1% in the Nordic Swan Ecolabelled product:
  - a) The proportion of the raw material/constituent part of the raw material/ingredient that comprises renewable raw material or originates from renewable raw material, calculated on an annual basis.

The calculation of the proportion of the renewable material can be done using the following formula:

*Used amount renewable material / (used amount renewable material + used amount non-renewable material) x 100%*

Amounts in kg, molar weight or carbon atoms can be used in the calculation. Average carbon chain lengths can be used.

- b) What does the renewable raw material consist of (e.g. palm oil, coconut oil, grape seed oil, beeswax)?

- c) Does the renewable raw material have any sustainability certification?  
If yes, state which and at what level of traceability (No Traceability, Identity Preserved, Segregated, Mass Balance, Book & Claim)?

- Policy or equivalent documentation of the licence holders work for renewable and sustainable materials in Nordic Swan Ecolabelled products, including quantitative, time-based targets set by management.
- A calculation according to part 2 of the requirement for each ingoing raw material (ingredient) that is included > 1% in the Nordic Swan Ecolabelled product.
- Appendix 3 from the raw material manufacturer/supplier completed and signed.

## 09 Certified raw materials

Palm oil, palm kernel oil and derivatives of palm oil or palm kernel oil must have RSPO certification. The approved traceability systems are Mass Balance, Segregated or Identity Preserved.

Sugarcane must be certified to Bonsucro standard (EU REDII approved), version 5.1 or later version.

The requirement does not apply to raw materials that make up less than 1% of the product.

- Declaration from the raw material producer that no palm oil, palm kernel oil, palm oil/palm kernel oil derivatives or sugarcane are present in the raw material. Appendix 3 can be used.
- A valid RSPO Supply Chain certificate from the raw material's producer or supplier.
- Invoices or delivery notes from the raw material supplier showing with which traceability system the purchased palm oil is certified.
- Valid Bonsucro EU-RED Chain of Custody certificate from the supplier/or link to valid certificate on Bonsucro certificate database covering all sugar cane used in the Nordic Swan Ecolabelled product.
- Documentation showing that the quantity of Bonsucro EU-RED certified sugar cane is met. This should be specified in e.g. invoices or delivery notes according to Bonsucro EU-RED requirements for Chain of Custody.

## 1.2 Total content of environmentally harmful substances

The requirements in this chapter apply to complete laundry detergents or the total quantity of wash chemicals in multi-component systems that are used to wash 1 kg of laundry (g/kg laundry). The requirements are based on the highest recommended dosing per degree of soiling stated on the product label or accompanying product sheet. The table below shows a common division of laundry categories according to degree of soiling.

**Table 3 Examples of laundry categories according to degree of soiling**

Light soiling	Medium soiling	Heavy soiling
Bedlinen and towels from hotels and other overnight accommodation establishments Duvets and pillows Mats and mops Cloth hand towel rolls	Work clothes Institution/trade/service Laundry from hospitals and nursing homes and similar institutions, e.g. bedding, mattress covers, operation sheets, barrier sheets, and patient clothing. Microfibre mops	Work clothes Industry/kitchen/ butchering and equivalent use Kitchen equipment Clothes and towels Industry clothing Restaurant Cloths/napkins and similar for use in restaurants, industrial kitchens, etc.

### O10 CDV

The critical dilution volume (CDV) of the laundry detergent or the multi-component system may not exceed the following limit values.

**Table 4 Threshold values for CDV<sub>chronic</sub>**

Degree of soiling	CDV <sub>chronic</sub> (litres/kg laundry)
Light	5000
Medium	10000
Heavy	15000

*The calculation of the CDV-value must be based on the highest recommended dosing stated on the product label or accompanying product sheet per degree of soiling.*

CDV is calculated using the following formula for all substances in the product:

$$CDV_{\text{chronic}} = \sum CDV_i = \sum (\text{dose}_i \times DF_i \times 1000 / TF_i \text{ chronic}), \text{ where}$$

$\text{dose}_i$  = the input quantity of the individual substance in g/kg laundry

$DF_i$  = biodegradation factor for substance “i”, in accordance with the DID list

$TF_i \text{ chronic}$  = chronic toxicity factor for substance “i”, in accordance with the DID list

If  $TF_i \text{ chronic}$  is lacking,  $TF_i \text{ acute}$  can be used.

Because of the degradation of the substances in the wash process, separate rules apply for the following two substances:

- Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) is not to be included in calculation of CDV.
- Peracetic acid (CH<sub>3</sub>CO<sub>3</sub>H) is to be included in the calculation as acetic acid.

☒ Reference to the DID list, version 2016 or later. For substances not on the DID list, the parameters must be calculated based on the guidance in part B of the DID list, and the related documentation must be submitted.

- ☒ Calculation of product's  $CDV_{\text{chronic}}$ . Nordic Ecolabelling's calculation sheet must be used. It is available from Nordic Ecolabelling's websites.
- ☒ Appendix 3 for all raw materials or equivalent certification duly completed and signed.

### O11 Biodegradability – aerobic and anaerobic (aNBO and anNBO)

The total content of organic substances that are either not aerobically or anaerobically biodegradable in the laundry detergent or the multi-component system must not exceed the following threshold values stated.

**Table 5 Threshold values for aNBO and anNBO**

Degree of soiling	aNBO (g/kg Laundry)	anNBO (g/kg laundry)
Light	0,25	0,25
Medium	0,50	0,50
Heavy	0,75	0,75

*The calculation must be based on the highest recommended dosing stated on the product label or accompanying product sheet per degree of soiling.*

Iminodisuccinate (DID No. 2555) and cumene sulfonates (DID No. 2540) are excluded from the calculation of anNBO.

Polycarboxylates (DID No. 2507 and 2508) are excluded from the calculation of aNBO and anNBO.

*Note that all surfactants must be aerobically and anaerobically biodegradable under requirement O5.*

*See also the exemption from the requirement of anaerobic biodegradability for substances which are not surfactants (Appendix 4, item 7, Anaerobic biodegradability).*

- ☒ Reference to the DID list, version 2016 or later. For substances not on the DID list, the parameters must be calculated based on the guidance in part B of the DID list, and the related documentation must be submitted.
- ☒ Calculation of the product's content of organic substances that are either not aerobically or anaerobically biodegradable. Nordic Ecolabelling's calculation sheet must be used. It is available from Nordic Ecolabelling's websites.

### O12 Phosphonates/phosphonic acid

Total phosphonates/phosphonic acid in the laundry detergent or the multi-component system may not exceed the following threshold values.

**Table 6 Threshold values for content of phosphonates/phosphonic acids**

Degree of soiling	Phosphonates/phosphonic acids (g/kg laundry)
Light	0,075
Medium	0,10
Heavy	0,15

- ☒ Calculation of total quantity of phosphonates/phosphonic acids, expressed as g/kg laundry.

### O13 Long-term environmental effects

The weighted content of environmental hazards in the laundry detergent or the multi-component system, must not exceed the following threshold values.

**Table 7 Threshold values for weighted content of environmental hazards**

Degree of soiling	Weighted content of environmental hazards (g/kg laundry)
Light	0,7
Medium	1,0
Heavy	1,3

The weighted content of environmental hazards is calculated from the content of substances which are classified\* with hazard code H410, H411 or H412 using the following formula.

$$M \cdot 100 \cdot C_{H410} + 10 \cdot C_{H411} + C_{H412} \leq 0.40 \text{ grams / litre water, where}$$

$C_{H410}$  = concentration of substances with H410 in grams / litre of water

$C_{H411}$  = concentration of substances with H411 in grams / litre of water

$C_{H412}$  = concentration of substances with H412 in grams / litre of water

M = the multiplying factor for H410 classified substances linked to the substance's LC50, EC50 or NOEC value and biodegradable read in accordance with the CLP classification rules.

*The calculation must be based on the highest recommended dosing stated on the product label or accompanying product sheet per degree of soiling.*

- Peracetic acid is exempt from the requirement.
- Hydrogen peroxide classified as H411 or H412 is exempted from the requirement.
- Subtilisin classified as H411 is exempt from the requirement.

*If information about the substance being hazardous to the environment (in the form of data concerning toxicity and biodegradability, or toxicity and bioaccumulability) is not available, the substance is treated as an environmentally hazardous with H410 classification and M=100.*

\* To assess the classification, all the available data must have been evaluated, including data in ECHA databases.

- Calculation of the product's weighted content of substances which are classified with hazard code H410, H411 or H412. Nordic Ecolabelling's calculation sheet must be used. It is available from Nordic Ecolabelling's websites.
- Appendix 2 for the product and Appendix 3 and Safety data sheet for all raw materials or equivalent certification duly completed and signed.

## 1.3 Packaging and user information

Nordic Ecolabelling sets strict requirements on packaging to ensure good possibilities for material recovery and circular economy.

The packaging requirements target the primary packaging\* (e.g. container, closure and label). Only the packaging types described in requirement O14-O17 can currently be used. Bag-in-box packaging must meet the requirements for

flexible plastic bags (O16) and rigid plastic packaging (O14) or paper-based packaging (O17) depending on the material of the box.

*\* In accordance with EU Directive 94/62/EC on packaging and packaging waste, the term "primary packaging" is defined as packaging conceived so as to constitute a sales unit to the final user or consumer at the point of sale.*

#### O14 Rigid plastic packaging: Design for recycling

Primary packaging smaller than 200 litres must have a design that enables material recovery.

*Container means bottle, box, can etc.*

*Closure means cap, lid, pump, spout, oblate, seal, membrane etc.*

*Label means "traditional label", shrink film label/sleeve, direct print etc. (see O15 for details on label requirements).*

- The packaging must contain at least 90% plastic (polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET)).
- The individual components of the container and closure must be made from monomaterial of either polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET).

*Exemption: Membranes, oblates and seals may be made of thermoplastic elastomer (TPE) based on styrene-ethylene-butylene-styrene thermoplastic elastomer (SEBS), expanded polyethylene (EPE), aluminium, paper and plastic of non-monomaterial (but it must be PE, PP and/or PET).*

- It is not allowed to add pigments to PET.

*Exemptions:*

- *Coloured, recycled PET-granulate where the pigment originates from the recycled material is allowed.*
- *Pigments that are added to UV blockers and that do not make up more than 10 ppm of the container.*
- Carbon black pigments must not be added to container or closure.
- Fillers (such as CaCO<sub>3</sub>) must not be included in PE or PP containers or closures at a level that the density of the plastic exceeds 0.995g/cm<sup>3</sup>.
- Barriers are not allowed in plastic packaging.
- Metal must not be part of the container or closure.

*Exemptions:*

- *Metal springs.*
- *Metal mesh in lids.*
- Silicone is not allowed in closures.

*Exemption: Lubricant in spray bottle triggers.*

- ☒ Packaging specifications (including all components as container and closure, label etc.) or certificate showing the materials used, component weights, density of PE or PP components, whether components contain PCR material and which pigments have been added. Appendix 5 can be used as part of the documentation.

## O15 Labels for rigid plastic packaging: Design for recycling

Labels on packages smaller than 200 litres must have a design that enables material recovery.

*Label means "traditional label", shrink film label/sleeve, direct print etc.*

- Containers in polyethene (PE) and polypropene (PP): The following label materials are permitted:
  - Polyolefin plastic labels (PE and PP) as well as PET or PET-G labels with density > 1.0 g/cm<sup>3</sup>. For labels of different material than the packaging, the suitability must be substantiated in accordance with Recyclclass' Washing quick test procedure. For film labels applied on HDPE & PP containers, version 1.0<sup>3</sup>.
  - Paper labels without fibre loss. The suitability must be substantiated in accordance with Recyclclass' Washing quick test procedure: For paper labels applied on HDPE & PP containers, standard laboratory practice, version 1.0<sup>4</sup>.
- Containers in polyethylene terephthalate (PET) must have a label of a different plastic material, with a density < 1.0 g/cm<sup>3</sup>, or a paper label without fibre loss.
  - Paper labels without fibre loss: The suitability must be substantiated in accordance with Recyclclass' Washing quick test procedure: For paper labels applied on HDPE & PP containers, standard laboratory practice, version 1.0,<sup>5</sup>.

*Note: PET-G is not allowed in labels on PET containers. For the time being, cPET labels are also not permitted. Nordic Ecolabelling will consider allowing cPET-labels with the appropriate specifications, if cPET labels become endorsed by EPBP (The European PET Bottle Platform) for PET bottles and/or by RecyClass ([www.recyclclass.eu](http://www.recyclclass.eu)).*

- Polyvinyl chloride (PVC) and other halogenated plastics must not be used in labels.
- Metallized labels/shrink film labels are not permitted.

*Exception: Metal foil in RFID labels.*

- For labels of different material than the packaging: Labels must not cover more than 60% of the container. The calculation of the percentage shall be based on the two-dimensional profile of the container i.e., the area of the top and bottom of the packaging and the sides of a box/container/bottle/can shall not be included in the calculation. If the label on the front of pack and back of pack are of different size, the maximum percentage of 60% shall be fulfilled for each side separately. For a cylindrical bottle, the calculation can also be based on the three-dimensional profile exclusive bottom and top of the bottle.
- Direct print on the container is not permitted except for date codes, batch codes and UFI (Unique Formula Identifier).

- ☒ Label specifications showing the material used and density. Appendix 5 can be used as part of the documentation.

<sup>3</sup> <https://recyclclass.eu/wp-content/uploads/2022/04/RecyClass-Washing-QT-Procedure-for-Film-Labels-applied-on-HDPE-and-PP-Containers-v1.1.pdf> (Accessed on 2021-06-23).

<sup>4</sup> <https://recyclclass.eu/wp-content/uploads/2022/04/RecyClass-Washing-QT-Procedure-for-Film-Labels-applied-on-HDPE-and-PP-Containers-v1.1.pdf> (Accessed on 2021-06-11).

<sup>5</sup> <https://recyclclass.eu/wp-content/uploads/2022/04/RecyClass-Washing-QT-Procedure-for-Film-Labels-applied-on-HDPE-and-PP-Containers-v1.1.pdf> (Accessed on 2021-06-11).

- ☒ If plastic labels of different material than the container is used on PE or PP containers. Test report from a laboratory fulfilling the conditions in Appendix 4, showing that the label is approved.
- ☒ If paper labels are used: Test report from a laboratory fulfilling the conditions in Appendix 4, showing that the label is approved.
- ☒ Declarations that PVC and other halogenated plastics, aluminum and other metals have not been used. Appendix 5 can be used.
- ☒ For labels of different material than the packaging: Calculation of label size compared to the surface of the container.
- ☒ Declaration from the applicant that direct print is not used except for date codes, batch codes and UFI. Appendix 2 can be used.

#### O16 Flexible plastic pouches: Design for recycling

Flexible plastic pouches must have a design that enables material recovery.  
*Container means flexible plastic pouches, inclusive spout fixed to the plastic pouch.*

*Closure means e.g. cap, lid, pump, spout, oblate, seal. Please note that a spout that is fixed to the container, counts as part of the container.*

- The packaging must contain at least 90% plastic (polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET)).
- The individual components of the container and closure must be made from either PE (polyethylene), PP (polypropylene) or PET (polyethylene terephthalate).

*Exceptions:*

- *O-ring of EPDM or other elastomers is allowed in valves.*
- *Membranes, oblates and seals may be made of thermoplastic elastomer (TPE) based on styrene-ethylene-butylene-styrene thermoplastic elastomer (SEBS), aluminium, paper and plastic of non-monomaterial (but it must be PE, PP and/or PET).*

- The container must be made of monomaterial, i.e., not laminated with layers of different materials. Barrier coatings can only be of EVOH (ethylene vinyl alcohol) and constitute max 5% of the total weight.

*Exception: Flexible plastic pouches intended for products covered by the ADR Regulation may contain multimaterials of PE, PP, PET and/or PA for a transitional period until 31 December 2023.*

- Carbon black pigments must not be added to container or closure.
- Fillers (such as CaCO<sub>3</sub>) must not be included in PE or PP containers or closures at a level that the density of the plastic exceeds 0.995g/cm<sup>3</sup>.
- Metal must not be part of the container or closure.

*Exception: Metal springs.*

- Silicone is not allowed in closures.

- ☒ Packaging specifications (including all components as container and closure, label etc.) or certificate showing the materials used, density of PE or PP components and whether carbon black has been added. Appendix 5 can be used as part of the documentation.

## O17 Paper-based packaging: Design for recycling

### Cardboard packaging

- Cardboard packaging must contain at least 90% paper/paperboard.
  - A minimum of 90% by weight of the wood raw material that is used in the paper/cardboard must be made of recycled material\*.
  - The remaining proportion of wood raw material (that is not recycled material) must be covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources).
  - Two-sided plastic laminate is not permitted.
  - Polyvinyl chloride (PVC) and other halogenated plastics must not be used in the packaging (container and / or closure).
  - Aluminium and other metals must not be used in the packaging (container and/or closure).
- Exception: Metal rivets for attaching plastic handles to heavier cardboard packaging (> 4.5 kg) for powder detergents.*
- Paper labels are permitted. Other types of labels are not permitted. The label glue must be water soluble.
  - Solid coloured cardboard is not permitted

*Exception: White solid coloured cardboard.*

### 2. Corrugated board packaging

- Corrugated board packaging must contain at least 90% paper/paperboard.
- A minimum of 70% by weight of the wood raw material that is used in the paper/cardboard must be made of recycled material\*.
- The remaining proportion of wood raw material (that is not recycled material) must be covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources).
- Two-sided plastic laminate is not permitted.
- Polyvinyl chloride (PVC) and other halogenated plastics must not be used in the packaging (container and / or closure).
- Aluminium and other metals must not be used in the packaging (container and/or closure).
- Paper labels are permitted. Other types of labels are not permitted. The label glue must be water soluble.
- Solid coloured cardboard is not permitted.

*Exception: White solid coloured cardboard.*

\* Recycled material is defined in accordance with ISO 14021 in the following two categories:

*Material in the pre-consumer phase. Material that has been taken from the waste flow during the manufacturing process. The exception is the re-use of material that is generated in a process, e.g. waste that can be recycled within the same process that generated it.*

*Material in the post-consumer phase. Material generated by households or by trade, industry or institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes the return of materials from the distribution chain. Description of the packaging from the packaging producer showing:*

- ☒ Description of the packaging from the packaging producer showing:
  - percentage (by weight) of paper/paperboard material, and percentage of recycled material in wood raw material
  - percentage (by weight) of any barrier material; material type and description showing whether the barrier is one- or two-sided
  - percentage (by weight) of other materials that might be present in elements such as closure, handles etc. and material type.Appendix 5 can be used.
- ☒ Declaration that any non-recycled wood raw material is covered by the FSC/PEFC control schemes.
- ☒ Declarations that polyvinyl chloride (PVC) and other halogenated plastics have not been used. Appendix 5 can be used.
- ☒ Declarations that aluminum and other metals have not been used. Appendix 5 can be used.
- ☒ If labels are used: Specification from the manufacturer showing that the label is of paper.
- ☒ If labels are used: Specification from the manufacturer showing that the adhesive is water soluble.

#### O18 Reuse of packaging

The licensee must either offer to take back primary packaging that is 200 litres or larger or inform the customer that reuse of the packaging is possible via local reuse companies.

- ☒ If the licensee offers to take back the packaging from the customer: Copy of the offer and a description of how the packaging is taken back and reused.
- ☒ If the customer is informed about that reuse of the packaging is possible via local reuse companies: Copy of how the information is communicated.

#### O19 User information

The product's label or accompanying product sheet must include the information below.

- That the product only is intended for professional users and/or large-scale consumers who use washing machines with automatic dosing systems.
- The product's area of use.
- Washing temperature and dosing in accordance with the information stated in requirement O1.
- If the final product contains peracetic acid and hydrogen peroxide as a bleaching agent and is classified and labelled as hazardous to the aquatic environment: That the classification and labelling is due to peracetic acid and hydrogen peroxide which degrade into non-classified substances during the washing process. For more information, see requirement O3.
- For plastic packaging smaller than 200 litres: How the packaging should be sorted for recycling in each Nordic country in which it is sold. The Nordic-wide pictogram system from 2020 can be used\*.

\* The pictograms can be found at: <https://danskaffaldsforening.dk/the-danish-pictograms-waste-sorting> <https://sortere.no/avfallssymboler>

*<https://www.avfallsverige.se/gemensamtskyltsystem/> \* Copy of label and/or product sheet.*

- Copy of label and/or product sheet.

## 1.4 Performance

### O20 Washing efficiency

The laundry detergent or the multi-component system must be satisfactory efficient at the recommended washing temperature and dosage in soft water.

The efficiency of the laundry detergent or the multi-component system must be documented in the form of a user test that meets the requirements below:

1. If the application relates to a multi-component system, all the components must be included in the test.
2. At least five independent professional users must test the product for at least four weeks under relevant conditions.
3. The product must be tested at the recommended washing temperature\* and dosage on the packaging label or accompanying product sheet. If the dosing is stated in intervals for each separate degree of soiling, the worst-case dosing, i.e. the lowest dosing or lower, must be used.
4. At least four of the users must judge the product to be adequately effective or very effective for all parameters.
5. The user must fill in Appendix 6. All appendices are to be submitted to Nordic Ecolabelling.
6. A test report must be drawn up, describing the user test and including a summary of the results.

*\* Note that only products that are effective from 40°C or lower for light and medium soiling and 60°C or lower for heavy soiling can be Nordic Swan Ecolabelled.*

- Appendix 6 from all users who have tested the product.
- Test report describing the user test, including summary of the results

### O21 Efficiency of chemical disinfection

Products intended for chemothermal disinfection must be tested through a controlled washing process using cotton samples contaminated with indicator bacteria.

The fabric samples must be produced according to DGHM/VAH standard method number 17: Chemothermal washing disinfection – one bath procedure according to DIN 11905 with disinfection before the first dumping of the washing liquid (practical essay).

Each fabric sample must contain the following indicator bacteria:

- *Enterococcus faecium* (ATCC 6057)
- *Staphylococcus aureus* (ATCC 6538)

Disinfection is achieved when all indicator bacteria have been killed.

The wash temperature and dosing stated in O1 are to be used in the washing process.

Alternatively, a corresponding test may be carried out in accordance with the Biocidal Products Regulation (BPR, Regulation (EU) 528/2012).

- For chemothermal disinfection, the wash temperature and dosing (stated in O1) are to be given by the manufacturer.

- ☒ A confirmation/declaration from a quality control carried out by an external and independent party, stating that:
  - The washing process has been controlled by using cotton samples contaminated with the indicator bacteria *Enterococcus faecium* (ATCC 6057) and *Staphylococcus aureus* (ATCC 6538).
  - The fabric samples are produced according to the DGHM/VAH standard method number 17: Chemothermal washing disinfection – one bath procedure according to DIN 11905 with disinfection before the first dumping of the washing liquid (practical essay).
  - Chemothermal disinfection has been achieved by killing all indicator bacteria.
- ☒ A confirmation/declaration from a quality control carried out by an external and independent party, stating that:
  - The test is carried out in accordance with the Biocidal Products Regulation (BPR, Regulation (EU) 528/2012).
  - Chemothermal disinfection has been achieved by killing all indicator bacteria.

## 1.5 Licence maintenance

The purpose of the licence maintenance is to ensure that fundamental quality assurance is dealt with appropriately.

### O22 Customer complaints

The licensee must guarantee that the quality of the Nordic Swan Ecolabelled product or service does not deteriorate during the validity period of the licence. Therefore, the licensee must keep an archive over customer complaints.

Note that the original routine must be in one Nordic language or in English.

- ☒ Upload your company's routine for handling and archiving customer complaints.

### O23 Traceability

The licensee must be able to trace the Nordic Swan Ecolabelled products in the production. A manufactured / sold product should be able to trace back to the occasion (time and date) and the location (specific factory) and, in relevant cases, also which machine / production line where it was produced. In addition, it should be possible to connect the product with the actual raw material used.

You can upload your company's routine or a description of the actions to ensure traceability in your company.

- ☒ Please upload your routine or a description.

## Regulations for the Nordic Ecolabelling of products

When the Nordic Swan Ecolabel is used on 093 Laundry detergents for professional use the licence number and a descriptive subtext shall be included as follows:

- For laundry detergents: **Laundry detergent for professional use**
- For sub-components in a multi-component system: **Part of a multi-component system**

More information on graphical guidelines, regulations and fees can be found at [www.nordic-ecolabel.org/regulations/](http://www.nordic-ecolabel.org/regulations/)

### Note!

Sub-components which – due to legislation – are classified as hazardous to the aquatic environment and subject to show a warning symbol / CLP Pictogram is not allowed to show the Nordic Swan Ecolabel on the packaging – but only use the following text: Part of an ecolabelled multi-component system.

## Follow-up inspections

Nordic Ecolabelling may decide to check whether the product fulfills Nordic Ecolabelling requirements during the licence period. This may involve a site visit, random sampling or similar test.

The licence may be revoked if it is evident that the product does not meet the requirements.

Random samples may also be taken in-store and analysed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licensee.

## Appendix 1 Description of the laundry detergent / multi-component system

The declaration relates to the following laundry detergent / multi-component system:

Laundry detergent
Multi-component system
Manufacturer
Supplier / importer

Describe the product's area of use:

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If it is a multi-component system, describe the ingoing components\*:

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*\* In case of extension with a component in a multi-component system, please state which multi-component system the component is a part of.*

Please fill in the recommended washing temperature and dosing in the table below.

Degree of soiling	Washing temperature	Dosing*
Light		
Medium		
Heavy		

*\* For multi-component systems, the dosing must be stated for each component.*

State the product's volume or weight:

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State all trade names if the product is sold in multiple countries.

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Has the product a chemothermal disinfecting function?

Yes  No

Place and date	Company name / stamp
Person responsible	Signature of responsible individual
Phone	E-mail

## Appendix 2 Declaration from the manufacturer of the product

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabelling of laundry detergents for professional use. To complete the following declaration, you will need declarations for all raw materials (Appendix 3 or equivalent declaration).

This declaration is based on the knowledge we have at the time of the application, based on tests and / or declarations from raw material manufacturers, with reservations for new advances and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

Product name: \_\_\_\_\_

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled laundry detergents for professional use. Impurities are not regarded as ingoing substances and are exempt from the requirements.

Ingoing substances and impurities are defined below, unless stated otherwise in the requirements.

**Ingoing substances:** all substances in the Nordic Swan Ecolabelled product, including additives (e.g., preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g., formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.

**Impurities:** residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100 ppm (0,0100 w-%, 100 mg/kg) in the Nordic Swan Ecolabelled product.

Impurities in the raw materials exceeding concentrations of 1,0% are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and detergents for production equipment and carry-over from other or previous production lines.

<b>O3 Classification of the product</b>		
Is the product classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.	Yes	No
H400 – Toxic to aquatic life, hazard category 1	<input type="checkbox"/>	<input type="checkbox"/>
H410 – Toxic to aquatic life	<input type="checkbox"/>	<input type="checkbox"/>
H411 – Toxic to aquatic life	<input type="checkbox"/>	<input type="checkbox"/>
H412 – Toxic to aquatic life	<input type="checkbox"/>	<input type="checkbox"/>
H413 – Toxic to aquatic life	<input type="checkbox"/>	<input type="checkbox"/>
H420 – Hazardous to the ozone layer	<input type="checkbox"/>	<input type="checkbox"/>
H350 – May cause cancer, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H351 – Suspected of causing cancer, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H340 – May cause genetic defects, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H341 – May cause genetic defects, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H360 – Toxic for reproduction, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H361 – Toxic for reproduction, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H362 – Toxic for reproduction, effects on or through breastfeeding (supplementary category)	<input type="checkbox"/>	<input type="checkbox"/>
H300 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H310 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H330 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H301 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H311 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H331 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H302 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H312 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H332 – Acute toxicity	<input type="checkbox"/>	<input type="checkbox"/>
H370 – Specific target organ toxicity: single exposure and repeated exposure	<input type="checkbox"/>	<input type="checkbox"/>
H371 – Specific target organ toxicity: single exposure and repeated exposure	<input type="checkbox"/>	<input type="checkbox"/>
H372 – Specific target organ toxicity: single exposure and repeated exposure	<input type="checkbox"/>	<input type="checkbox"/>
H373 – Specific target organ toxicity: single exposure and repeated exposure	<input type="checkbox"/>	<input type="checkbox"/>
H314 – Skin corrosion/irritation	<input type="checkbox"/>	<input type="checkbox"/>
H304 – Aspiration hazard	<input type="checkbox"/>	<input type="checkbox"/>
H334 – Respiratory or skin sensitising	<input type="checkbox"/>	<input type="checkbox"/>
H317 – Respiratory or skin sensitising	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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<b>O4 Classification of ingoing substances</b>		
Does the product contain substances classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.	Yes	No
H350 – May cause cancer, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H351 – Suspected of causing cancer, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H340 – May cause genetic defects, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H341 – May cause genetic defects, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H360 – Toxic for reproduction, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H361 – Toxic for reproduction, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H362 – Toxic for reproduction, effects on or through breastfeeding (supplementary category)	<input type="checkbox"/>	<input type="checkbox"/>
H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled 1 / 1A / 1B	<input type="checkbox"/>	<input type="checkbox"/>
H317 – Skin sensitising category 1 / 1A / 1B	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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<b>O7 Substances prohibited from products</b>		
Does the product contain any of the following substances?	Yes	No
Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)	<input type="checkbox"/>	<input type="checkbox"/>
Benzalkonium chloride, CAS-no. 8001-54-5	<input type="checkbox"/>	<input type="checkbox"/>
Bisphenols and bisphenol derivatives: <i>EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS), 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA).</i>	<input type="checkbox"/>	<input type="checkbox"/>
Borates and perborates	<input type="checkbox"/>	<input type="checkbox"/>
DADMAC (dialkyldimethylammonium chloride), CAS-no. 68424-95-3	<input type="checkbox"/>	<input type="checkbox"/>
DTPA (diethylenetriamine pentaacetate), CAS-no. 67-43-6	<input type="checkbox"/>	<input type="checkbox"/>
EDTA (ethylenediaminetetraacetic acid), CAS-no. 13235-36-4, and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Phosphates	<input type="checkbox"/>	<input type="checkbox"/>
Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists" List I; II; and/or III <ul style="list-style-type: none"> <li><a href="https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu">https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu</a></li> <li><a href="https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption">https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption</a></li> <li><a href="https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities">https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities</a></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

Substances on the List II sublist "Substances no longer on list"? <a href="https://edlists.org/the-ed-lists/substances-no-longer-on-list-ii">https://edlists.org/the-ed-lists/substances-no-longer-on-list-ii</a>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, please write chemical name and CAS-no. below. Nordic Ecolabelling will evaluate the circumstances on a case-by-case basis, through the background information indicated for the substance on the sublist.  _____		
LAS (linear alkylbenzene sulphonates)	<input type="checkbox"/>	<input type="checkbox"/>
MI (methylisothiazolinone acid), CAS-no. 2682-20-4	<input type="checkbox"/>	<input type="checkbox"/>
Halogenated flame retardants	<input type="checkbox"/>	<input type="checkbox"/>
Microplastics <i>Microplastics are defined here as particles of insoluble macromolecular plastic less than 5 mm in size, achieved through one of the following processes:</i> a) <i>Polymerisation, such as polyaddition or polycondensation, or a similar process that uses monomers or other precursors.</i> b) <i>Chemical change of natural or synthetic macromolecules.</i> c) <i>Microbial fermentation.</i> <i>Note that Nordic Ecolabelling follows the ECHA's restriction proposal and its definition, and we reserve the right to change the definition above once the definition in the restriction proposal has been fixed. An appropriate transition period will be granted.</i>	<input type="checkbox"/>	<input type="checkbox"/>
Nanomaterials/particles <i>Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01):</i> <i>'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions:</i> <i>(a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;</i> <i>(b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm;</i> <i>(c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.</i>	<input type="checkbox"/>	<input type="checkbox"/>
NTA (nitrilotriacetic acid), CAS-no. 139-13-9, and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Organic chlorine compounds, hypochlorites and hypochlorous acid	<input type="checkbox"/>	<input type="checkbox"/>
Optical brighteners	<input type="checkbox"/>	<input type="checkbox"/>
Colourants	<input type="checkbox"/>	<input type="checkbox"/>
Fragrances	<input type="checkbox"/>	<input type="checkbox"/>
PFAS (per- and polyfluoroalkyl substances)	<input type="checkbox"/>	<input type="checkbox"/>
Organic chlorine compounds and hypochlorites	<input type="checkbox"/>	<input type="checkbox"/>
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH, plus substances that have not yet been investigated but that meet these criteria.	<input type="checkbox"/>	<input type="checkbox"/>
Substances categorised as Substances of Very High Concern (SVHC) and included on the Candidate List: <a href="https://echa.europa.eu/candidate-list-table">https://echa.europa.eu/candidate-list-table</a> .	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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<b>O15 Labels for rigid plastic packaging: Design for recycling</b>	<b>Yes</b>	<b>No</b>
Is there any direct print on the container except for date codes, batch codes and UFI (Unique Formula Identifier)?	<input type="checkbox"/>	<input type="checkbox"/>

In the event of any change to the composition of the product, a new declaration of fulfilment of the requirements is to be submitted to Nordic Ecolabelling.

Place and date	Company name / stamp
Person responsible	Signature of responsible individual
Phone	E-mail

## Appendix 3 Declaration from the manufacturer of the raw material to laundry detergents for professional use

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabelling of laundry detergents for professional use.

This declaration is based on the knowledge we have at the time of the application, based on tests and / or declarations from raw material manufacturers, with reservations for new advances and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

Name of raw material: \_\_\_\_\_

Function of raw material: \_\_\_\_\_

Please note that the information in this declaration is internally shared with certification personnel in Nordic Ecolabelling to be used in evaluation of applications of chemical technical products.

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled dishwasher detergents for professional use. Impurities are not regarded as ingoing substances and are exempt from the requirements.

Ingoing substances and impurities are defined below, unless stated otherwise in the requirements.

**Ingoing substances:** all substances in the Nordic Swan Ecolabelled product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.

**Impurities:** residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100 ppm (0,0100 w-%, 100 mg/kg) in the Nordic Swan Ecolabelled product.

Impurities in the raw materials exceeding concentrations of 1,0% are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and detergents for production equipment and carry-over from other or previous production lines.

Ingoing substances in the raw material/ingredient (chemical name, CAS-number, amount in weight-%):

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Function of the raw material/ingredient(s), including all ingoing substances:

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*Please note that substances that are defined as surfactants according to Detergent Regulation (EC) No 648/2004, must always be reported with the function “surfactant”.*

Suggested DID-numbers for the raw material/ingredient(s), including all declared ingoing substances (The DID list can be obtained from <http://www.nordic-ecolabel.org/product-groups/group/?productGroupCode=017>):

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<b>O4 Classification of ingoing substances</b>		
Does the raw material contain substances classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.	Yes	No
H350 – May cause cancer, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H351 – Suspected of causing cancer, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H340 – May cause genetic defects, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H341 – May cause genetic defects, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H360 – Toxic for reproduction, hazard category 1A and 1B	<input type="checkbox"/>	<input type="checkbox"/>
H361 – Toxic for reproduction, hazard category 2	<input type="checkbox"/>	<input type="checkbox"/>
H362 – Toxic for reproduction, effects on or through breastfeeding (supplementary category)	<input type="checkbox"/>	<input type="checkbox"/>
H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled 1 / 1A / 1B	<input type="checkbox"/>	<input type="checkbox"/>
H317 – Skin sensitising category 1 / 1A / 1B	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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<b>O7 Substances prohibited from products</b>		
Does the raw material contain any of the following substances?	Yes	No
Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)	<input type="checkbox"/>	<input type="checkbox"/>
Benzalkonium chloride, CAS-no. 8001-54-5	<input type="checkbox"/>	<input type="checkbox"/>
Bisphenols and bisphenol derivatives: <i>EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylidenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS), 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA).</i>	<input type="checkbox"/>	<input type="checkbox"/>
Borates and perborates	<input type="checkbox"/>	<input type="checkbox"/>
DADMAC (dialkyldimethylammonium chloride), CAS-no. 68424-95-3	<input type="checkbox"/>	<input type="checkbox"/>
DTPA (diethylenetriamine pentaacetate), CAS-no. 67-43-6	<input type="checkbox"/>	<input type="checkbox"/>
EDTA (ethylenediaminetetraacetic acid), CAS-no. 13235-36-4, and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Phosphates	<input type="checkbox"/>	<input type="checkbox"/>
Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists" List I; II; and/or III <ul style="list-style-type: none"> <li><a href="https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu">https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu</a></li> <li><a href="https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption">https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption</a></li> <li><a href="https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities">https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities</a></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Substances on the List II sublist "Substances no longer on list"? <a href="https://edlists.org/the-ed-lists/substances-no-longer-on-list-ii">https://edlists.org/the-ed-lists/substances-no-longer-on-list-ii</a>  If Yes, please write chemical name and CAS-no. below. Nordic Ecolabelling will evaluate the circumstances on a case-by-case basis, through the background information indicated for the substance on the sublist.  <hr/>	<input type="checkbox"/>	<input type="checkbox"/>
LAS (linear alkylbenzene sulphonates)	<input type="checkbox"/>	<input type="checkbox"/>
MI (methylisothiazolinone acid), CAS-no. 2682-20-4	<input type="checkbox"/>	<input type="checkbox"/>
Halogenated flame retardants	<input type="checkbox"/>	<input type="checkbox"/>

<p>Microplastics <i>Microplastics are defined here as particles of insoluble macromolecular plastic less than 5 mm in size, achieved through one of the following processes:</i></p> <p>a) <i>Polymerisation, such as polyaddition or polycondensation, or a similar process that uses monomers or other precursors.</i></p> <p>b) <i>Chemical change of natural or synthetic macromolecules.</i></p> <p>c) <i>Microbial fermentation.</i></p> <p><i>Note that Nordic Ecolabelling follows the ECHA's restriction proposal and its definition, and we reserve the right to change the definition above once the definition in the restriction proposal has been fixed. An appropriate transition period will be granted.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Nanomaterials/particles <i>Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01):</i></p> <p><i>'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions:</i></p> <p><i>(a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;</i></p> <p><i>(b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm;</i></p> <p><i>(c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
NTA (nitrilotriacetic acid), CAS-no. 139-13-9, and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Organic chlorine compounds, hypochlorites and hypochlorous acid	<input type="checkbox"/>	<input type="checkbox"/>
Optical brighteners	<input type="checkbox"/>	<input type="checkbox"/>
Colourants	<input type="checkbox"/>	<input type="checkbox"/>
Fragrances	<input type="checkbox"/>	<input type="checkbox"/>
PFAS (per- and polyfluoroalkyl substances)	<input type="checkbox"/>	<input type="checkbox"/>
Organic chlorine compounds and hypochlorites	<input type="checkbox"/>	<input type="checkbox"/>
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH, plus substances that have not yet been investigated but that meet these criteria.	<input type="checkbox"/>	<input type="checkbox"/>
Substances categorised as Substances of Very High Concern (SVHC) and included on the Candidate List: <a href="https://echa.europa.eu/candidate-list-table">https://echa.europa.eu/candidate-list-table</a> .	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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O9 Certified raw materials	Yes	No
Are palm oil, palm kernel oil, derivatives of these or sugarcane used in the raw material/ingredient?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is the renewable raw material sustainability certified?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please state the raw material sustainability certification system:		

*For palm oil, palm kernel oil or derivatives of these: If a raw material sustainability certification system is used, state the level of traceability (shown in a Chain of Custody certificate where applicable).*

No traceability	<input type="checkbox"/>
Identity preserved	<input type="checkbox"/>
Segregated	<input type="checkbox"/>
Mass balance	<input type="checkbox"/>
Book & Claim	<input type="checkbox"/>

<b>O13 Long-term environmental effects</b>	<b>Yes</b>	<b>No</b>
Does the raw material contain any substances classified as harmful to the environment with the risk code H410, H411 or H412? Note that in order to assess the classification, all the available data must have been evaluated, including data in ECHA databases.	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above questions is Yes, state the CAS no. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance.

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In the event of any change to the composition of the product, a new declaration of fulfillment of the requirements is to be submitted to Nordic Ecolabelling.

Place and date	Company name / stamp
Person responsible	Signature of responsible individual
Phone	E-mail

## Appendix 4 Test methods and analysis laboratories

### 1 Requirement for analysis laboratory

The following applies to tests regarding ecotoxic effects and performance tests.

The analysis laboratory must fulfill the general requirements of standard ISO 17025 or have official GLP status.

### 2 Exotoxological test methods

International test methods (OECD Guidelines for Testing of Chemicals, ISBN 92-64-1222144) or equivalent methods must be used for documentation. If equivalent methods are used, these must be assessed by an independent body to ensure that the results are also equivalent. The relevant test methods that must be used are stated below.

### 3 Acute aquatic toxicity

For acute aquatic toxicity, test methods nos. 201, 202, 203 or 229 in the OECD Guideline for the Testing of Chemicals (ISBN 92-64-1222144) or DIN 38412-33 are to be used. Other scientifically accepted test methods may be used if the test results are assessed by an independent body and checked by Nordic Ecolabelling.

### 4 Chronic aquatic toxicity

For chronic aquatic toxicity, test method no. 211 (*Daphnia magna*) and 210, 215 or 229 (fish) in the OECD Guideline for the Testing of Chemicals is to be used. Other scientifically accepted test methods may be used if the test results are assessed by an independent body and checked by Nordic Ecolabelling.

OECD 201 (algae) may be used as a chronic test for algae, if chronic endpoints are chosen.

### 5 Bioaccumulation

If the bioaccumulative properties of a substance can be tested on fish in line with OECD test 305 A-E and its bioconcentration factor (BCF) is  $> 500$ , the substance is considered to be bioaccumulative. If the BCF value is not available, a substance is considered to be bioaccumulative if its  $\log K_{ow} \geq 4.0$  according to 107, 117 or 123 in the OECD Guidelines for the Testing of Chemicals (ISBN 92-64-1222144) or equivalent, unless proven to be otherwise. If the highest measured  $BCF \leq 500$ , the substance is not considered to be bioaccumulative even if its  $\log K_{ow} \geq 4.0$ .

The OECD's test 107 cannot be applied to surfactants which have both fat and water-soluble properties. Based on what is known today, for such substances it must be demonstrated with a high degree of certainty that they and their degradation products do not pose any risk to aquatic organisms over a longer time perspective.

Data models (such as BioWin) are accepted, but if the results of the model calculations are close to the limit values or Nordic Ecolabelling has contradictory data, more certain information may be required.

## **6 Aerobic degradability**

For ready biological degradability, test method no. 301 (A-F) or no. 310 in OECD guidelines for testing of chemicals shall be used.

Other scientifically accepted test methods may be used if the test results are assessed by an independent body and checked by Nordic Ecolabelling.

## **7 Anaerobic degradability**

For anaerobic degradability, ISO 11734, ECETOC no. 28 or OECD 311 shall be used.

Other scientifically accepted test methods may be used if the test results are assessed by an independent body and checked by Nordic Ecolabelling.

For a substance to be considered anaerobic, > 60% mineralisation is required after max 60 days (equates to > 60% ThOD / ThCO<sub>2</sub> or > 70% DOC reduction).

Substances that are not surfactants and are not on the DID list, or for which data on the DID list is lacking, may be exempted from the anaerobic degradability requirement if they are aerobically biodegradable and not toxic to aquatic life (lowest chronic median NOEC / EC<sub>x</sub> > 0.1 mg / l or acute IC<sub>50</sub> / EC<sub>50</sub> / LC<sub>50</sub> > 10 mg / l), and if one of the following criteria is also met:

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

To determine adsorption / desorption, use method 106 in the OECD Guidelines or ISO CD 18749 “Water quality – Adsorption of substance activated sludge”.

## **8 DID list**

The DID list is a common list for the EU Ecolabel and Nordic Ecolabelling. The list is drawn up in collaboration with stakeholders both from consumer and environmental organisations and from industry. It contains information on toxicity and biodegradability for a number of substances that might be used for products in the chemical technical field. The substances on the DID list are not an expression of the substances that are contained in ecolabelled products.

The DID list cannot be used to document the toxicity of the individual substances in connection with the classification rules. Here, information from safety data sheets, literature or the raw materials producer must be used.

The separate DID list can be requested from the ecolabelling organisation or via the website for the respective country, see page 3 of the criteria document.

For these criteria, the DID list issued in 2016 or later versions apply.

Calculation sheets can be used to calculate the critical dilution volume (CDV) in requirement O11. These are available from Nordic Ecolabelling and can be downloaded from all the Nordic secretariats' websites.

If data for chronic toxicity is not available, acute data and the associated safety factor may be used to estimate the chronic toxicity factor. If a substance is not included on the DID list, or if data is lacking on the DID list, the method in part B of the DID list must be used.

## Appendix 5 Declaration from the manufacturer of the primary packaging component

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of laundry detergents for professional use.

This declaration is based on the knowledge we have at the time of the application, based on tests and/or declarations from raw material manufacturers, with reservations for new advances and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

Producer/distributor
Part of the packaging (container, closure, label)
Packaging material (type of plastic, cardboard etc.) List all materials included in the packaging component and the percentage of each material.

<b>O15 Rigid plastic packaging: Design for recycling</b>	<b>Yes</b>	<b>No</b>
<b>Is the component made of monomaterial?</b> <b>If no, please state material:</b>	<input type="checkbox"/>	<input type="checkbox"/>
If made of polyethylene terephthalate (PET): Have any pigments/colours been added?	<input type="checkbox"/>	<input type="checkbox"/>
Has carbon black been added to the component?	<input type="checkbox"/>	<input type="checkbox"/>
Are any barriers used in the component?	<input type="checkbox"/>	<input type="checkbox"/>
Are fillers used in the components? <b>If yes, please state the density of the packaging component [g/cm<sup>3</sup>]:</b>	<input type="checkbox"/>	<input type="checkbox"/>
Does the component contain metal parts? If yes, please specify the type of metal part:	<input type="checkbox"/>	<input type="checkbox"/>
For closures: Does the component contain silicone?	<input type="checkbox"/>	<input type="checkbox"/>

<b>O16 Labels for rigid plastic packaging: Design for recycling</b>	<b>Yes</b>	<b>No</b>
For non-polyolefin plastic labels applied to PE or PP containers: Please state the density of the label:  Note: Density in g/cm <sup>3</sup> .		
For labels applied to PET containers: Please state the density of the label:  Note: Density in g/cm <sup>3</sup> .		
Is there polyvinyl chloride (PVC) or other halogenated plastics present in the labels?	<input type="checkbox"/>	<input type="checkbox"/>
Does the label contain metal? If yes, please specify the type of metal part:	<input type="checkbox"/>	<input type="checkbox"/>

<b>O17 Flexible plastic pouches: Design for recycling</b>	<b>Yes</b>	<b>No</b>
Is the component made of monomaterial?	<input type="checkbox"/>	<input type="checkbox"/>
Are any barriers used in the component?	<input type="checkbox"/>	<input type="checkbox"/>
<b>If yes</b> , please state barrier type and percentage (weight %):		
Has carbon black been added to the component?	<input type="checkbox"/>	<input type="checkbox"/>
Are fillers used in the components?	<input type="checkbox"/>	<input type="checkbox"/>
<b>If yes</b> , please state the density of the packaging component [g/cm <sup>3</sup> ]:		
Does the component contain metal seals or other metal parts?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please specify the type of metal part:		
For closures: Does the component contain silicone?	<input type="checkbox"/>	<input type="checkbox"/>

<b>O18 Paper-based packaging: Design for recycling</b>	<b>Yes</b>	<b>No</b>
Does the packaging contain recycled material*?	<input type="checkbox"/>	<input type="checkbox"/>
* Recycled material is defined in accordance with ISO 14021 in the following two categories. Material in the pre-consumer phase. Material that has been taken from the waste flow during the manufacturing process. The exception is the re-use of material that is generated in a process, e.g. waste that can be recycled within the same process that generated it. Material in the post-consumer phase. Material generated by households or by trade, industry or institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes the return of materials from the distribution chain.		
If yes, please state the percentage recycled in the wood raw material that is used in the paper/board:		
With reference to the percentage PCR in the wood raw material above: Is the remaining proportion of wood raw material covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the packaging a cardboard packaging?	<input type="checkbox"/>	<input type="checkbox"/>
Is the packaging a corrugated board packaging?	<input type="checkbox"/>	<input type="checkbox"/>
Is the packaging laminated with any barrier material?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please state the barrier material type:		
If yes, is the laminate on one side only?		
Is there polyvinyl chloride (PVC) or other halogenated plastics present in the labels?	<input type="checkbox"/>	<input type="checkbox"/>
Does the packaging contain metal parts?	<input type="checkbox"/>	<input type="checkbox"/>
Is the packaging material solid coloured?	<input type="checkbox"/>	<input type="checkbox"/>

Place and date	Company name/stamp
Responsible person	Signature of responsible person
Telephone	Email

## Appendix 6 Form for user test

This appendix must be filled in by the user.

The declaration relates to the following laundry detergent / multi-component system:

Name of the laundry detergent or the multi-component system
Manufacturer

### Washing temperature och dosing

Please fill in the washing temperature and dosing in the table below.

Degree of soiling	Washing temperature	Dosing*
Light		
Medium		
Heavy		

*\* For multi-component systems, the equivalent dosage is stated for each component.*

### Test period

Start date: \_\_\_\_\_

End date: \_\_\_\_\_

### Information about test site

Brief description of the test site where the washing test was carried out (type of machine, wash temperature, other information of relevance for the wash result):

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### Evaluation of the laundry detergent / multicomponent system

Please fill in the table below.

Parameter	Not effective / not satisfactory	Adequately effective / adequately satisfactory	Very effective / very satisfactory
Dosability			
Chemical wear			
Ability to be rinsed out			
Solubility			
Ability to wash clean light soiled laundry			
Ability to wash clean medium soiled laundry			
Ability to wash clean heavily soiled laundry			
Ability to remove stains			
Ability to bleach (if relevant)			
Greying of white laundry (if relevant)			
Colour-fastness			
Colouring			
Effect of fabric conditioner on drying, ironing and mangling			

Place and date	Company name / stamp
User's name	User's signature
Phone	E-mail