Nordic Ecolabelling for

Dishwasher detergents and rinse aids

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Nordic Ecolabelling

Content

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Contact information

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
www.svanemaerket.dk

Iceland
Ecolabelling Iceland
www.svanurinn.is

Finland
Ecolabelling Finland
https://joutsenmerkki.fi/

Norway
Ecolabelling Norway
www.svanemerket.no

Sweden
Ecolabelling Sweden
www.svanen.se

What is a Nordic Swan Ecolabelled dishwasher detergent or rinse aid?

The Nordic Swan Ecolabel provides a guarantee that the product fulfils strict environmental and health requirements, and that satisfactory performance is documented through standardized testing. Ecolabelled dishwasher detergents and rinse aids are amongst the products with the least impact on the environment within their category. They are effective, the selection of chemicals and the packaging are environmentally adapted, and sustainable sourcing of renewable raw materials is also emphasized in the requirements.

The environmental requirements include restrictions on the quantity of environmentally harmful substances and on the quantity of substances that are not readily degradable in aquatic environments, and on the dosage.

Health related requirements are set in areas such as fragrances, preservatives and substances classified as sensitizing. There is also a complete ban on CMR classified substances and various specifically problematic substances such as SVHCs and identified and potential endocrine disruptors on up-to-date lists from EU and national authorities.

The performance requirements imply that the products must perform satisfactorily. Dishwasher detergents must be tested at 45ºC, ensuring that the energy consumption in the use stage is minimized if used correctly.

Consumer guidance for sustainable use of the products is mandatory on the packaging of the products.

The packaging requirements ensure a high filling degree and stimulate resource efficiency and circular economy by limiting the use of packaging materials and by requiring use of recycled materials. Requirements on packaging design ensure packaging that is recyclable.

Sustainable extraction of renewable raw materials is a vital global issue with a major environmental impact. The Nordic Swan Ecolabel raises awareness of this issue via the requirement for sustainably produced palm oil, which contributes to the production of more sustainable raw materials.

Dishwasher detergents and rinse aids carrying the Nordic Swan Ecolabel:

- Meet strict requirements concerning environmentally hazardous chemicals, including requirements on ecotoxicity and biodegradability
- Meet strict health related requirements concerning chemicals that pose a health hazard, including complete ban on CMR classified substances and various specifically problematic substances such as identified and potential endocrine disruptors on up-to-date lists from EU and National authorities
- Are efficient at 45ºC (dishwasher detergents)
- Have optimised and well-filled packaging that is designed for circular economy
- Do not contain microplastics and do not generate any microplastic waste

- Have documented the biodegradability of the water soluble film, if used.

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 regarded 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 regarded as a mark of quality.

What can carry the Nordic Swan Ecolabel?

The product group Dishwasher detergents and rinse aids relates to dishwasher detergents and rinse aids for household machines. The rinse aid may be integrated into the product or it may be a separate product.

Dishwasher detergents for professional use in institutional and large-scale kitchens or for instrument cleaning in healthcare cannot be labelled under these criteria. See the requirements for dishwasher detergents for professional use instead. Cleaning agents for dishwashers cannot be labelled under these criteria.

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 contact information see first in this document.

What is required?

The application is created in Nordic Ecolabelling portal. The application must consist of an application form/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 fulfilment 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 contact info first in this document. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit https://www.nordic-swan-ecolabel.org or the relevant national website for further information.

1 General requirements

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled product. Impurities are not regarded as ingoing substances and are exempted 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 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.

Note: Any component of the product that enter the dishwasher machine and eventually goes down the drain, is considered as part of the formulation/recipe (eg. water-soluble film, print on film etc.).

O1 Description of the product

The applicant must give detailed information on the dishwasher detergent or rinse aid to which the application relates. The following information is required:

- Description of the product
- A complete formulation for the product. The formulation must for each ingoing raw material include:
  a) Trade name
  b) Chemical name for the main component, and, if relevant, additives (e.g. colourants, preservatives and stabilizers)
  c) Amount (both with and without solvents, e.g. water)
  d) CAS No / EC No
  e) Function
  f) DID No for substances that can be placed in the DID list
- A safety data sheet for each ingoing raw material

The DID number is an ingredient's number on the DID list, which is used in calculating chemical requirements. The DID list can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites, see addresses first in this document.

✉ Description of the product, e.g. label and product data sheet (if available). The information on labels and/or product data sheets must be in the languages in which the product is marketed.

✉ A complete formulation/recipe of the product with information as set out in the requirement. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

✉ Safety data sheets for each raw material in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/EC).

O2 Classification of the product

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

Table Classification of the product

CLP Regulation 1272/2008		
Classification	**Hazard Class and Category Code**	**Hazard statement**
Hazardous to the aquatic environment	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Aquatic Chronic 4	H400 H410 H411 H412 H413
Hazardous to the ozone layer	Ozone	H420
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
Acute toxicity	Acute Tox 1 or 2 Acute Tox 1 or 2 Acute Tox 1 or 2 Acute Tox 3 Acute Tox 3 Acute Tox 3 Acute Tox 4 Acute Tox 4 Acute Tox 4	H300 H310 H330 H301 H311 H331 H302 H312 H332
Aspiration toxicity	Asp Tox 1	H304
Specific target organ toxicity, single or repeated exposure	STOT SE 1 STOT SE 2 STOT RE 1 STOT RE 2	H370 H371 H372 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 Skin Sens. 1, 1A or 1B	H334 H317

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

** 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. Ref exemption of H317- and H334-

classifications for enzymes in requirement O4 Classification of ingoing substances.

Please note the additional requirement for enzymes in O8.

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).

2 Requirements for ingoing substances

O3 Certified raw materials from oil palms

Palm oil, palm kernel oil and palm oil/palm kernel oil derivatives must be certified according to RSPO. Mass Balance, Segregated or Identity Preserved are accepted as traceability systems.

The requirement does not include raw materials < 1.0% in the final product.

✉ Information from the raw material producer whether palm oil, palm kernel oil or derivatives of these are included in the raw material. Appendix 3 can be used.

✉ A valid RSPO Supply Chain certificate from raw material manufacturer/ supplier.

✉ The manufacturer of the Nordic Swan Ecolabelled product must be able to show by raw material supplier's invoices/delivery notes that the palm oil purchased is certified and information about traceability system (Mass Balance, Segregated or Identity Preserved accepted). The documentation must be shown when requested by Nordic Ecolabelling, e.g. during licence application, on-site inspections or other follow-up inspections.

O4 Classification of ingoing substances

Ingoing substances in the product must not be classified with any of the hazard classes stated in Table O4.

Table O4 Classification of ingoing substances

CLP Regulation 1272/2008:		
Classification	**Hazard Class and Category Code**	**Hazard statement**
Carcinogenic*	Carc. 1A or 1B Carc. 2	H350 H351**
Mutagenic*	Muta. 1A or 1B Muta. 2	H340 H341
Toxic for reproduction*	Repr. 1A or 1B Repr. 2 Lact	H360 H361 H362
Respiratory or skin sensitisation***	Resp. Sens. 1 Skin Sens. 1	H334 H317

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

** MGDA (methylglycinediacetic acid) and GLDA (N,N-dicarboxymethyl glutamic acid) type complexing agents may contain NTA (nitrilotriacetic acid)

impurities in the raw material in concentrations of less than 0.2%, if the concentration of NTA in the end product is below 0.1%.

*** The following substances are exempt:

- Enzymes, including stabilisers in the enzyme raw material.

Please note the additional requirement for enzymes in O8.

- Stabilisers and preservatives in colours.
- Fragrances.

Please note the additional requirement for fragrances in O7.

✉ Safety data sheet for each raw material in line with European legislation (Annex II to REACH, Regulation (EC) No 1907/2006).

✉ Appendix 2 and 3 or equivalent certification completed and signed.

O5 Prohibited substances

The following substances must not be present in the product:

- Alkylphenol ethoxylates (APEO) and otheralkylphenol derivatives (APD)
- EDTA (Ethylene diamine tetraacetate and its salts) and DTPA (Diethylenetriamine pentaacetate)
- Linear alkylbenzene sulphonates (LAS)
- Nitro musks and polycyclic musk compounds
- Per- and polyfluoroalkyl substances (PFAS)
- Phosphates
- Antimicrobial or disinfecting ingredients added for other purposes than preservation
- Organochlorine compounds and hypochlorite. The prohibition of organochlorine compounds does not encompass preservatives.
- Methylisothiazolinone (MI, CAS 26823-20-4)
- Microplastics

Nordic Ecolabelling has updated the definition of microplastics by adopting the EU definition in the REACH restriction on synthetic polymer microparticles, which entered into force on 17 October 2023. Either the new or old definition shall be used.

New definition: Microplastics are synthetic polymer microparticles as defined in REACH Regulation ((EC) No 1907/2006), Annex XVII, Entry no. 78: Synthetic polymer microparticles: polymers that are solid, and which fulfil both of the following conditions:

> *a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles.*
>
> *b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:*
>
> > *(i) all dimensions of the particles are equal to or less than 5 mm.*
> >
> > *(ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.*

The following polymers are excluded from this designation:

> *a) polymers that are the result of a polymerisation process that has taken place in nature, independently of the process through which they have been extracted, which are not chemically modified substances.*

b) polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006].

c) polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006].

d) polymers that do not contain carbon atoms in their chemical structure.

N.B. The following "Conditions of restriction" paragraphs apply: 1 (concentration limit in mixtures), 2 (definitions), 3 (particle size limits). The remaining points do not apply, e.g. 4 (Paragraph 1 shall not apply to the placing on the market of:), e.g. 4(a) "synthetic polymer microparticles, as substances on their own or in mixtures, for use at industrial sites", 5 (derogations), e.g. 5 (b) "synthetic polymer microparticles the physical properties of which are permanently modified during intended end use in such a way that the polymer no longer falls within the scope of this entry".

Old definition: Microplastic means particles with a size of below 5 mm of insoluble macromolecular plastic, obtained through one of the following processes:

(a) a polymerisation process such as polyaddition or polycondensation or a similar process using monomers or other starting substances;
(b) chemical modification of natural or synthetic macromolecules;
(c) microbial fermentation.

Please note that Nordic Ecolabelling is following the development of ECHA's restriction proposal and its definition and reserve the right to change the definition above when the definition used in the restriction proposal is finalized. An appropriate transition period would be granted.

- Nanomaterials

Nanomaterials/-particles are defined according to EU commission recommendation on the definition of nanomaterial (2011/696/EU):
"A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50% or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm."
Examples include ZnO, TiO_2, SiO_2 and Ag. Polymer emulsions are not considered nanomaterials.

- Substances judged to be "Substances of very high concern", which are included on the Candidate List: http://echa.europa.eu/candidate-list-table.
- Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists" List I; II; and III.

  https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu

  https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption

  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 the Cosmetics Regulation. Nordic Ecolabelling will evaluate the circumstances on a case-by-case basis."

- Substances evaluated by 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 and substances that have not yet been investigated, but which meet these criteria.

✉ Appendix 2 and 3 or equivalent certification completed and signed.

O6 Phosphorous

The total amount of phosphorous must not exceed the following:

Dishwasher detergents ≤ 0.20 g P/wash.

Rinse aids ≤ 0.030 g P/wash

Note the national legislation concerning phosphorous in Sweden, regulation 2010:267.

✉ Documentation of the content of phosphorous in the product: Appendix 2 and 3 or equivalent certification completed and signed.

✉ Calculation showing that the requirement is fulfilled. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

O7 Fragrances

a) Fragrances must be added in line with IFRA's guidelines. The guidelines of IFRA (International Fragrance Association) can be found at www.ifraorg.org/

b) A fragrance substance which is judged to be sensitising with the hazard statement H317 and/or H334, or which is subject to declaration according to EC No 648/2004 and subsequent amendments, may be present at a maximum of 0.0100% (100 ppm) in the detergent. If the packaging contains fragrance, the 100 ppm limit applies to the packaging fragrance as is.

c) The fragrance substances in Table O7 may be present in the detergent at a maximum of 0.0100% (100 ppm) per substance. If the packaging contains fragrance, the 100 ppm limit applies to the packaging fragrance as is.

d) HICC (CAS 31906-04-4), Chloroatranol (CAS 57074-21-2), Atranol (CAS 526-37-4), Lilial (CAS 80-54-6) and Benzyl salicylate (CAS 118-58-1) are not permitted in the detergent or packaging.

e) Fragrance is not permitted in rinse aid. This also applies to the packaging.

The requirement includes fragrance in plant extracts. The requirement also includes fragrance added to the packaging.

Table O7 Other fragrance substances that may be present to a maximum of 100 ppm

INCI name (or, of none exists, perfuming name according to CosIng)	CAS number
Cananga Odorata and Ylang-ylang oil	83863-30-3; 8006-81-3
Eugenia Caryophyllus Leaf / Flower oil	8000-34-8
Jasminum Grandiflorum / Officinale	84776-64-7; 90045-94-6; 8022-96-6

Myroxylon Pereirae	8007-00-9;
Santalum Album	84787-70-2; 8006-87-9
Turpentine oil	8006-64-2; 9005-90-7; 8052-14-0
Verbena absolute Cinnamomum cassia leaf oil/Cinnamomum zeylanicum, ext.	8024-12-02 8007-80-5/84649-98-9

✉ Appendix 2 and 3 or equivalent certification completed and signed.

✉ Fragrance specifications.

✉ Calculation of the amount of the 26 allergens, substances classified as H334 and/or H317 and substances listed in table O7 present in the detergent and/or the packaging.

O8 Enzymes

Enzymes must be in liquid form or granulate capsules.

✉ Declaration from the enzyme manufacturer or information on safety data sheet/product data sheet.

O9 Colourants

Colourants, in the final product or in constituent substances regardless of function, must not be bioaccumulative or must be approved for use in food with an E-number.

Colourants are judged not to be bioaccumulative if BCF < 500 or logKow < 4. If both values are available, the value for the highest measured BCF is to be used, see appendix 1.

✉ Appendix 2 and 3 or equivalent certification completed and signed.

✉ Statement of the E-number (number allocated as part of approval for use in food), or documentation of logKow value (octanol/water partition coefficient) or BCF value (bioconcentration factor).

3 Dosing, ecotoxicity and biodegradability

For dishwasher detergents: The requirements in this chapter are based on the highest recommended dosage stated on the packaging, regardless of water hardness and degree of soiling.

If the product is dosed as a unit containing a water-soluble foil intended not to be removed before washing, the foil must be included as part of the product formulation in the calculations.

For rinse aid: The requirements in this chapter are based on a dosage of 3 ml per dish.

O10 Maximum dosage

The maximum dose per wash must not exceed the limit values in the table below, regardless of water hardness and degree of soiling.

Table: Limit values for dosing

Dishwasher detergents	dose g/wash
Single function products	18.0
Multifunctional products	20.0

Rinse aid is exempted from this requirement.

✉ Product label including dosage recommendations.

O11 Long-term environmental effects

The use of ingoing substances that are classified with any of the hazard statements H410, H411 or H412 is limited as follows.

Dishwasher detergents:

$100*C_{H410} + 10*C_{H411} + C_{H412} \leq 0.060$ grams/ wash

Rinse aids:

$100*C_{H410} + 10*C_{H411} + C_{H412} \leq 0.0050$ grams/ wash

C_{H410} = concentration of substances with H410 in grams/ wash

C_{H411} = concentration of substances with H411 in grams/ wash

C_{H412} = concentration of substances with H412 in grams/ wash

Exemptions (Note that all products need to fulfil the requirement O2 "classification of the product"):

- Surfactants classified with H411 and H412 are exempted from the requirement, provided that they are readily degradable* and anaerobically degradable**.
- Subtilisin classified with Aquatic Chronic 2 (H411) is exempted from the requirement.
- Hydrogen peroxide classified with Aquatic Chronic 3 (H412) is exempted from the requirement.

* *In accordance with the DID-list version 2016 or later or 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.*

** *In accordance with the DID-list version 2016 or later or ISO 11734, ECETOC No 28 (June 1988), OECD 311 or other equivalent test methods evaluated by an independent body and controlled by Nordic Ecolabelling.*

If information about the substance being hazardous to the environment (in the form of data concerning toxicity and biodegradability, or toxicity and bioaccumulation) is not available, the substance is treated as a "worst case", i.e. as environmentally hazardous, H410. If data on biodegradability or bioaccumulation is required to decide on the classification, and such data is missing, the substance is treated as a "worst case", H410.

✉ Calculation according to the formula above showing that the requirement is fulfilled. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

✉ Appendix 2 and 3 or equivalent certification completed and signed.

✉ An overview on surfactants that are to be exempted from the requirement (quantity, classification, biodegradability). See Appendix 1 for test requirements.

O12 Critical dilution volume (CDV)

The product's critical dilution volume (CDV) shall not exceed the limit values for $CDV_{chronic}$ in table O12.

Table O12. CDV limits

	CDVchronic [litres/wash]
Dishwasher detergents (multifunction)	25 500
Dishwasher detergents (single function)	22 500
Rinse aids	5 000

$CDVchronic = \sum CDVi = \sum (dose(i) \times DFi \times 1000 / TFchronic)$

where

dose(i) = dose of component i, expressed in g/wash

DFi = degradation factor for substance i

TF_i chronic = chronic toxicity factor for substance "i", in accordance with the DID list.

If TF_i chronic is lacking, TF_i acute can be used.

✉ Calculations of CDVchronic for the dishwasher detergent and/or rinse aid. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

Documentation of each substance shall refer to the DID list version 2016 or later. If substances are not on the DID list, or data on the DID list is lacking, the parameters must be calculated based on the guidance in part B of the DID list, and the related documentation must be submitted.

O13 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.
- Surfactants classified as hazardous to the aquatic environment, chronic*, 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.

**Classified with H410, H411, H412, H413.*

✉ Reference to the DID list dated 2016 or later versions.

If the DID list lacks the relevant data for surfactants, data may be taken from the safety data sheet on the condition that the data is reliable and that the test methods are in agreement with Appendix 1. Section B of the DID list shows how to make the calculations of the various factors. It is also permitted to refer to read across conducted by an independent third party. Nordic Ecolabelling will evaluate the quality of read across and decide whether it can be accepted.

O14 Water-soluble film

- All water-soluble films (e.g., PVA films) for dishwasher detergents must be readily biodegradable according to test method No. 301 A–F or No 310 in OECD guidelines for testing of chemicals. Enhanced biodegradation[1] screening test performed as a modification of OECD 301B or OECD 301F with longer incubation and continued biodegradation measurements up to 60 days is accepted.
- The test should be conducted on the total composition of the film. This can either be by testing on the actual water-soluble film or individually on each of the substances in the film.
- Existing data for the biodegradability of individual substances and existing data for actual water-soluble films can be used to predict the biodegradation properties of another water-soluble film. This is accepted only if either of the following data is available:

  a) Case 1 – Substance-based approach:
  When all the substances in the water-soluble film have been tested individually in a biodegradation test, and all the substances comply with the requirements to biodegradability in the criteria, then the water-soluble film can be considered to fulfil requirement O14. Data must be provided for all ingoing substances in the water-soluble film, that are present above 0.1 % in the water-soluble film.

  OR

  Case 2 – Water-soluble film-based approach:
  If two water-soluble films (film 1 and film 2) with a known composition of substances have been confirmed biodegradable according to the above mentioned test guidelines, the same biodegradability can be assumed for a third product (film 3), if both of the following two conditions are met:

  - The concentrations of the substances in film 3 are within the concentration range covered by film 1 and film 2.

  - Any other substances in film 3, that are not present in film 1 and film 2, have been confirmed biodegradable according to the above mentioned test guidelines.

✉ Test report(s) documenting the biodegradability of the film, conducted by a certified test laboratory according to Appendix 1.

O15 Anaerobic biodegradability

The content of organic non-anaerobically degradable substances (anNBO) in the dishwasher detergent (multifunction and single function products) and rinse aid must not exceed:

Dishwasher detergent ≤ 1.2 g/wash

Rinse aid ≤ 0.30 g/wash

Note the certain substances, that are not surfactants, can be exempted from this requirement. See the conditions in "Appendix 1, item 6, Anaerobic biodegradability".

[1] See ECHAs Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.7b: Endpoint specific guidance. Version 4.0. June 2017, page 213: https://echa.europa.eu/documents/10162/13632/information_requirements_r7b_en.pdf/1a551efc-bd6a-4d1f-b719-16e0d3a01919 (accessed on 2021-06-15).

✉ Calculation of the concentration of anNBO for the product. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

✉ Reference to the DID list, 2016 or later versions. If substances are not on the DID list, or data on the DID list is lacking, the related documentation must be submitted (cf. DID list 2016 part B).

4 Performance

O16 Performance of the dishwasher detergent

The dishwasher detergent must perform as well or better than the reference detergent IEC-D*, when tested and evaluated in accordance with point a) below.

If 7 soils are tested: The dishwasher detergent must perform as good as or better than the reference detergent IEC-D in all soil classes, meaning that the results for the average (arithmetic mean) of soil types within each soil class must be at least as good as or better than the reference detergent. Alternatively, the overall mean for all soil types must be 20% higher than that of the reference.

If only 4 soils are tested: The dishwasher detergent must perform as good as or better than the reference detergent for all 4 soils. Alternatively, the overall mean for all soil types must be 20% higher than that of the reference.

A minimum of 3 wash cycles must be run. Statistical treatment with 95% confidence must be performed (example: Analysis of Variance (ANOVA) according to the HSD Tukey's test).

a) The cleaning performance of the dishwasher detergent must be tested according to the IKW test method "Recommendations for the Quality Assessment of the Cleaning Performance of Dishwasher Detergents (Part B, Update 2015)", with the following specifications/modifications:

- Test temperature of test product and reference 45ºC, holding time after reaching the main wash temperature: 8 minutes.
- Reference detergent IEC-D must be used with a dose of 20 g. Test detergent must be dosed according to the recommended dosage at 6º dH. Rinse aid formula III (IEC 60436), 3 ml, may be used with classic products and with the reference.
- Water hardness: 6ºdH.
  The test product can be run at water hardness higher than 6º dH. The dosage of the test product must, nevertheless, be as recommended at 6º dH (cf. above). The reference detergent IEC-D must be run at 6ºdH (cf. above).

b) Other claims concerning the performance of the product (e.g., short cycles, lower temperatures, specific stains etc.) must also be tested (with relevant test methods) and documented. Rinse aid function of multifunctional products must be proved according to the separate requirement O17 "performance of the rinse aid".

The tests in a) and b) must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 1.

** Nordic Ecolabelling may extend the requirement with an additional reference detergent during the validity period of the criteria.*

✉ Complete test report including test temperature, water hardness, dosage, description of how the test was carried out, test results and conclusion.

✉ Tests documenting any other claims made on the packaging.

✉ Documentation on the test laboratory, in accordance with Appendix 1.

O17 Performance of the rinse aid

The rinse aid must perform as good as or better than rinse aid formula III (IEC 60436). This means that parity or better is achieved on at least 6 of the 8 criteria (spotting and filming across at least four different kind of objects that are tested). Statistical treatment with 95% confidence must be performed (example: Analysis of Variance (ANOVA) according to the HSD Tukey's test).

The test design must be in line with the following framework:

- Water hardness: At least 9°dH for classic products (with or without rinse aid function). At least 18°dH for multifunctional products (with rinse aid and salt function). The water hardness shall be the same for the test and reference product.
- Wash temperature 50ºC, rinsing temperature 65ºC.
- Dosage
    - Reference: Rinse aid formula III: 3 ml. In addition, 20 grams of IEC-D reference detergent must be used.
    - If test product is a rinse aid liquid: 3 ml test product. In addition, 20 grams of IEC-D reference detergent must be used.
    - If test product is a classic product (with rinse aid function): One standard dose as recommended at 6ºdH.
    - If test product is a multifunctional product with rinse aid function: One standard dose as recommended at 18ºdH.
- 50 grams of ballast soil must be used in each wash cycle. The ballast soil must be based on starch, protein and fat. Additionally, other constituents from food ingredients may also be present.
- The commercial ion exchanger must be disabled.
- At least 3 wash cycles must be carried out, cumulative, before assessment.
- The products must be assessed on spotting and filming across at least 4 different kinds of objects including objects made of plastic, glass, ceramic/porcelain and stainless steel.

The tests must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 1B.

✉ Complete test report including test temperature, water hardness, dosage, description of how the test was carried out, test results and conclusion.

✉ Documentation on the test laboratory, in accordance with Appendix 1B.

5 Packaging

Packaging, plastic, and recycling of plastic is a focus area in society today. Nordic Ecolabelling wants to set strict requirements on packaging to reduce the material consumption and transport of packaging and air, and to ensure good possibilities for recycling, in order to support material recovery and circular economy.

The packaging requirements target the primary packaging* (e.g. container, closure, label). In addition, any part that is not consumed and rinsed down the drain during the washing process, such as a container for autodose/multidose products, must meet the packaging requirements. Only the packaging types described in criterion O19-O23 can currently be used. If you are interested in another packaging type (or e.g. another label type), please contact Nordic Ecolabelling to find out whether the criteria can be extended to include your format.

If the product is dosed as a unit containing a water-soluble foil intended not to be removed before washing, the foil must be included as part of the product formulation and not as packaging.

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

O18 Recycling of all packaging

It must be possible to recycle the main materials in the primary packaging in today's existing material recirculation systems in the Nordic countries. Incineration with energy recovery is not considered to be material recovery. The main materials are defined as the plastic or paper/paperboard making up 90% or more of the individual components (ref. requirement O19, O20, O22), and 60% or more in the case of paper-based packaging for liquid products (ref. requirement O23).

In case of doubt about the actual recyclability in the current Nordic systems, Nordic Ecolabelling may request the applicant to obtain additional substantiation about the recyclability from one of the Nordic Producer Responsibility organisations.

Note: Separate recycling of the label is not required.

✉ Documentation showing that the primary packaging is recyclable: List the used materials in Appendix 4 or 5 and define how the component should be recycled.

✉ Statement from one of the Nordic Producer Responsibility organisations, if specifically requested by Nordic Ecolabelling.

O19 Rigid plastic packaging: Recycled material and Design for recycling

1. Recycled material

- All hard/rigid plastic packaging must contain a minimum 50% (by weight, calculated on the total mass of the container, closure and label) post-consumer/commercial recycled material (PCR)*.

2. Design for recycling

The primary packaging must have a design that enables material recovery. This means that:

- 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).

Exemptions:

Coloured packaging components made from PP are allowed to have up to 5% PE if it comes from the masterbatch.

PE- or PP-closures that are used in squeeze bottles: The closures can contain a TPE (thermoplastic elastomer)-membrane of the type TPE-PE (based on polyethylene), TPE-PP (based on polypropylene) or SEBS (Styrene-Ethylene-Butylene-Styrene thermoplastic elastomer). If the closure is to be used on a PET-bottle, the membrane must have a density below 1.0 g/ml.

- It is not allowed to add pigments to PET. Coloured, recycled PET-granulate where the pigment originates from the recycled material is allowed.
- Carbon black pigments must not be added to container or closure.
- Fillers (such as $CaCO_3$) must not be included in PE or PP containers or closures at a level that the density of the plastic exceeds 0.995 g / cm^3.
- Barriers are not allowed in plastic packaging.
- Metal must not be part of the container or closure.
- Silicone is not allowed in closures.

** Post-consumer/commercial recycled material is defined in the requirement according to ISO 14021:2016:*
"Post-consumer/commercial" is defined as material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

*** Recycled plastic, which is bought as one type of polymer, e.g. PP, is considered monomaterial.*

Note: We recommend our applicants not to use PCR qualities that are intended for food.

Container means e.g. bottle, box, can etc.

Closure means e.g. cap, lid, pump, spout, dosing device, oblate, seal.

Label means "traditional label", shrink film label/sleeve, direct print etc. (see O21 for details on label requirements).

✉ 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 4 Declaration from the manufacturer(s) of the packaging can be used as part of the documentation. Nordic Ecolabelling's calculation sheet can be used to summarize the used materials.

O20 Flexible plastic pouches: Design for recycling

The primary packaging must have a design that facilitates material recovery. This means that:

- 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).
- 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.
- Carbon black pigments must not be added to container or closure.
- Fillers (such as $CaCO_3$) must not be included in PE or PP containers or closures at a level that the density of the plastic exceeds 0.995 g / cm^3.
- Metal must not be part of the container or closure with exemption for aluminium-layers and printing inks if the packaging is proven to be recyclable according to:
    - the guidelines developed by RecyClass. The packaging must get a minimum score of B (as stated on a recyclability rate certificate provided by RecyClass),

      or
    - must pass a sorting test made at a sorting facility demonstrating that the packaging is recyclable. Swedish FTI's or any other equivalent test method relevant for other Nordic countries can be used.
- Silicone is not allowed in closures.

Container means flexible plastic pouches, inclusive spout fixed to the plastic pouch.

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

✉ 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 4 Declaration from the manufacturer(s) of the packaging can be used. Nordic Ecolabelling's calculation sheet can be used to summarize the used materials.

✉ In case of metal content in the packaging because of the use of aluminium-layer or printing inks either; a recyclability rate certificate showing a minimum score of B and a letter of approval from RecyClass must be provided or; a test report and the corresponding protocol for the method used demonstrating the packaging passed the sorting test and is recyclable.

O21 Labels for rigid plastic packaging: Design for recycling of packaging

- 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^3. For labels of different material than the packaging, the suitability must be substantiated in accordance with Recyclass' Recyclability Evaluation Protocol for labels and adhesives on HDPE containers, version 1.0[2].

[2] https://recyclass.eu/wp-content/uploads/2024/07/REP-HDPE-02.pdf (Accessed on 2024-12-19).

- Paper labels without fibre loss. The suitability must be substantiated in accordance with Recyclass' Washing quick test procedure: For paper labels applied on HDPE & PP containers, standard laboratory practice, version 1.0[3].

- Containers in polyethylene terephthalate (PET) must have a label of a different plastic material, with a density < 1.0 g/cm^3, or a paper label without fibre loss.

  - Paper labels without fibre loss: The suitability must be substantiated in accordance with Recyclass' Washing quick test procedure: For paper labels applied on HDPE & PP containers, standard laboratory practice, version 1.0[3].

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.recyclass.eu).

- Polyvinyl chloride (PVC) and other halogenated plastics must not be used in labels.
- Metallized labels/shrink film labels are not permitted.
- 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 means "traditional label", shrink film label/sleeve, direct print etc.

Please note: During 2024, RecyClass replaced the Washing quick test procedure for film labels applied on HDPE & PP containers with Recyclability Evaluation Protocol for labels and adhesives on HDPE containers. A corresponding evaluation protocol for PP is expected to be published in 2025, whereby the criteria will be updated with a reference to this protocol.

In the next revision of the label requirement, it is expected that PE and PP packaging must have a label made of the same material, and that paper labels will no longer be permitted.

☒ Label specifications showing the material used and density. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used as part of the documentation.

☒ 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 1, showing that the label is approved.

☒ If paper labels are used: Test report from a laboratory fulfilling the conditions in Appendix 1, showing that the label is approved.

[3] https://recyclass.eu/wp-content/uploads/2021/05/RecyClass-Washing-QT-Procedure-for-Paper-Labels-applied-on-HDPE-and-PP-Containers_FINAL.pdf (Accessed on 2021-06-11).

✉ Declarations that PVC and other halogenated plastics, aluminium and other metals have not been used. Appendix 4 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.

O22 Paper-based packaging for solid products: Recycled material and Design for recycling

1. Cardboard packaging

- Cardboard packaging for solid products 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.
- PVC or plastic based on other types of halogenated plastics must not be used in the packaging (container and closure).
- Aluminium and other metals must not be used in the packaging (container and 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, except from white solid coloured cardboard, which is permitted

2. Corrugated board packaging

- Corrugated board packaging for solid products 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.
- PVC or plastic based on other types of halogenated plastics must not be used in the packaging (container and closure).
- Aluminium and other metals must not be used in the packaging (container or closure).
- Paper labels are permitted. Other types of labels are not permitted. The label adhesive must be water soluble
- Solid coloured corrugated board is not permitted, except from white solid coloured board, which is permitted.

** 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:

- 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 4 can be used.

✉ Declaration that any non-recycled wood raw material is covered by the FSC/PEFC control schemes.

✉ Declarations that PVC and other plastic based on other types of halogenated plastics has not been used. Appendix 4 can be used.

✉ Declarations that aluminium and other metals has not been used. Appendix 4 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.

O23 Cardboard packaging for liquid products: Sustainable material and Design for recycling

- Cardboard packaging for liquid products must contain at least 60% paper/paperboard.
- At least 90% by weight of the primary packaging must be made of bio-based material** or post-consumer/commercial recycled material (PCR)* or a combination of these. A mass balance approach is permitted.
- Paper/paperboard:
    - A minimum of 70% of the wood raw material that is used in the paper/cardboard must originate from forestry certified under the FSC or PEFC schemes, or the raw material can be recycled (PCR)*, or a combination of the two.
    - The remaining proportion of wood raw material must be covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources).
- For bio-based** plastic:
    - Palm oil and soy cannot be used as a raw material.

    - Sugar cane raw material must be certified according to a standard that meets Nordic Ecolabelling's requirements for raw material standards. This requirement does not apply for secondary raw materials***.
- PVC or plastic based on other types of halogenated plastics must not be used.
- Aluminium and other metals must not be used.
- Labels are not permitted.
- Direct printing on the cardboard in the packaging must only be done with water-based inks.

Beverage carton packaging that is Nordic Swan Ecolabelled according to the criteria for Nordic Ecolabelling for Packaging for Liquid Foods can be used without further documentation of requirement O23.

** Post-consumer/commercial recycled material is defined in the requirement according to ISO 14021:2016:*
"Post-consumer/commercial" is defined as material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

*** Bio-based means that the material consists of biomass that may have undergone physical, chemical, or biological treatment(s). Biomass has a biological origin but excludes material that is found embedded in geological and/or fossil formations. Examples of biomass are: (all or parts of) plants, trees, algae, marine organisms, microorganisms, animals, etc.*

****Secondary raw materials are defined here as residual products from other production processes, such as waste products from the food industry, by-products such as straw from grain production, by-products from maize and dried palm leaves. PFAD from palm oil is not counted as a residual/waste product.*

✉ Description of the packaging from the packaging producer showing percentage (by weight) of paperboard material, barrier material (material type, whether it is bio-based or PCR and percentage) and other elements such as closure (material type, whether it is bio-based or PCR and percentage). Appendix 5 can be used.

✉ The producer of the packaging shall document, for instance based on invoice or delivery note, that the requirement of minimum 70% certified paper/paperboard is purchased on a yearly basis, and that the remaining proportion is covered by the FSC/PEFC control schemes.

✉ Calculation showing that the requirement for the proportion of bio-based or recycled material in the primary packaging is fulfilled. Appendix 5 can be used.

✉ Declaration that palm oil and soy has not been used. Appendix 5 can be used.

✉ For sugar cane: Copy of valid CoC certificate or certification number. The CoC certificate holder shall declare that all sugar cane used in the plastic for the cardboard packaging that is used for the Nordic Swan Ecolabelled product is certified according to a specified standard. The standard must meet Nordic Ecolabelling's requirements for raw material standards. A mass balance approach is permitted.

☒ Declarations that PVC and other plastic based on other types of halogenated plastics has not been used. Appendix 5 can be used.

☒ Declarations that aluminium and other metals has not been used. Appendix 5 can be used.

☒ Declaration that direct printing on cardboard in the packaging is done with water-based inks. Appendix 5 can be used.

☒ For packaging that is Nordic Swan Ecolabelled according to the criteria for Nordic Ecolabelling for Packaging for Liquid Foods: Please state the Nordic Swan Ecolabel licence number.

O24 Weight-Utility Ratio (WUR)

The product's weight-utility ratio (WUR) must not exceed the limit values in the table below.

Limit values for WUR

Product type	WUR [g/wash]
Dishwasher detergents in rigid plastic-based packaging	1.8
Dishwasher detergents in flexible plastic pouches	1.0
Solid dishwasher detergents in cardboard and corrugated board packaging	2.1
Liquid dishwasher detergents in cardboard packaging	1.8
Rinse aids	0.35*

* *Rinse aid is calculated at a dose of 3 ml.*

Packaging with both plastic and carboard that can be manually separated (e.g. bag in a box or cardboard box with a plastic closure or handle) need to use a weighed calculation that takes into account both materials. This kind of packaging, consisting of X% plastic and Y% cardboard must fulfil the WUR-limit X/100*WUR (plastic-based packaging) + Y/100*WUR (paper-based packaging).

The WUR is calculated only for primary packaging (container, closure, labels, including handles etc.) using the formula below:

$$WUR = \Sigma [(Wi + Ui)/(Di * ri)]$$

Where:

Wi = the weight (g) of the packaging component (i) including the label if applicable.

Ui = the weight (g) of non-recycled (virgin) material in the packaging component (i). If the proportion of recycled material in the packaging component is 0 % then Ui = Wi.

Di = the number of functional units contained in the packaging component (i).

ri = recycling figure, i.e. the number of times the packaging component (i) is used for the same purpose through a return or refill system. The default value for r is set to 1 (= no re-use). Only if the applicant can document that the packaging component is re-used for the same purpose and how many times, a higher value for r can be used in the calculation.

✉ Declaration/documentation from the packaging manufacturer stating the type of material in the packaging components (e.g. closure, bottle and labels), as provided through requirement O19-O23. Appendix 4 or 5 can be used.

✉ Declaration from the packaging manufacturer about the proportion of recycled material, if recovered/recycled material is used, as provided through requirement O19-O23. Appendix 4 or 5 can be used.

✉ Calculation of weight-utility ratio (WUR) and required documentation on reuse of the packaging component. Nordic Ecolabelling's calculation sheet can be used and can be obtained from https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/ or Nordic Ecolabelling's national websites.

O25 Fill ratio

The product's fill ratio must exceed the limit values in the table below.

Limit values for fill ratio

Product type	Fill ratio [doses/litre]
Solid dishwasher detergents in rigid plastic-based packaging	40
Liquid dishwasher detergents in rigid plastic-based packaging	55
Dishwasher detergents in flexible plastic pouches	25
Solid dishwasher detergents in cardboard and corrugated board packaging	30
Liquid dishwasher detergents in cardboard-based packaging	55

Rinse aid is exempted from this requirement.

The fill ratio is the ratio between the number of doses and the volume of the packaging in litres. It is to be calculated for all sizes of packaging for the same product variant (multifunctional and single functional dishwasher detergents).

✉ Calculation of the fill ratio.

6 Consumer guidance

Consumer behaviour is an important factor influencing the burdens in the life cycle of detergents and cleaning products. Nordic Ecolabelling would therefore like to help the consumers towards a more sustainable machine dishwashing routine, by providing information on how to limit energy and resource consumption, as well as how to recycle the packaging.

O26 Dosage instructions

The following must be stated clearly on the label of dishwasher detergents:

- The recommended dosage* must be stated for soft water (0-6º dH).
- A recommendation to use salt to soften the water in the dishwasher in areas with hard water.
- Information stating that the product is efficient at /from 45ºC (or lower if tested at a lower temperature).

* Recommended dosage for soft water must be identical to the dosage used in the performance test.

For products marketed in several Scandinavian countries (Sweden, Denmark, Norway), instructions in one Scandinavian language is accepted.

Exemptions:

If multifunction products meet the performance requirement at higher water hardness without added salt in the machine, the recommendation about salt does not need to be given.

The text on water softener is not required in Norway.

✉ Sample label.

O27 Washing guidance on packaging

The following recommendations for a sustainable dishwashing procedure must be stated on the label of dishwasher detergents:

- Scrape large leftovers from dishes and cutlery. Rinsing is not necessary.
- Fill up the dishwashing machine completely before start.
- Follow the dosing instructions.
- Choose eco-program.

For products marketed in several Scandinavian countries (Sweden, Denmark, Norway), guidance in one Scandinavian language is accepted.

Rinse aids are exempted from the requirement.

✉ Sample label.

O28 Information on recycling

The product label must include information on how to sort the packaging for recycling after use. If there are differences between the Nordic countries, correct sorting in each country of sale must be communicated. The common Nordic pictogram system 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/

✉ Sample label showing the recycling information.

7 Licence maintenance

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

O29 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.

O30 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 products the licence number shall be included.

More information on graphical guidelines, regulations and fees can be found at www.nordic-swan-ecolabel.org/regulations/

Follow-up inspections

Nordic Ecolabelling may decide to check whether the licenced product fulfils 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 licenced 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.

Criteria version history

Nordic Ecolabelling adopted version 7.0 of the criteria for Dishwasher detergents and rinse aids on 19 May 2022. The criteria are valid until 30 June 2026.

Nordic Ecolabelling decided on 29 March 2022 to adjust requirement O11 by also exempting H411 classified surfactants from the requirement. The new version is called 7.1.

Nordic Ecolabelling decided on 24 May 2022 to exclude aluminium-layers and printing inks from the ban on metal in requirement O20 if the packaging is proven to be recyclable. The new version is called 7.2.

Nordic Ecolabelling decided on 18 October 2022 to change the allowed amount of EVOH in flexible plastic pouches (O20) from 2% to 5%. The new version is called 7.3.

Nordic Ecolabelling decided on 31 March 2023 to introduce a time-limited transition period for titanium dioxide in solid mixtures, e.g. in enzymes (O4) until 30 June 2024. The new version is called 7.4.

Nordic Ecolabelling decided on 29 August 2023 to divide the limit value for fill ratio of dishwasher detergents in rigid plastic packaging into two separate products types for solid and liquid detergents (O25). The new version is called 7.5.

Nordic Ecolabelling decided on 12 March 2024 to clarify that coloured packaging components made from PP are allowed to have up to 5% PE if it comes from the masterbatch and that recycled plastic, which is bought as one type of polymer, e.g. PP, is considered monomaterial (O19). On 16 April 2024, it was decided to prolong the transition period for TiO_2 in the requirements for classification of ingoing substances (O4) until 2025-03-31. The new version is called 7.6.

Nordic Ecolabelling decided on 13 August 2024 to allow IFS standard for Household and Personal care as an alternative to ISO9001 (Appendix 1). The new version is called 7.7.

On 18 March 2025, Nordic Ecolabelling decided to prolong the validity of the criteria until 30 November 2027. The new version is called 7.8.

On 11 November 2025 Nordic Ecolabelling adopted an adjustment of requirement O23 Cardboard packaging for liquid products: Sustainable material and design for recycling, specifying that only printing done on the cardboard of the packaging must be done with water-based inks. The new version is called 7.9.

On 20 January 2026 Nordic Ecolabelling decided to prolong the validity of the criteria until 30 September 2028. The new version is called 7.10.

Appendix 1 Analyses, test methods and calculations

1A Requirements on the analysis laboratory

The following stipulations apply regarding ecotoxic effects. The analysis laboratory must be competent and impartial as specified below.

The analysis laboratory used shall fulfil the general requirements of standard EN ISO 17025 or have official GLP status.

1B Requirements on the analysis laboratory for performance

The analysis laboratory used shall fulfil the general requirements of standard EN ISO 17025 or have official GLP status.

The applicant's own laboratory, and external testing institutes that do not meet EN ISO 17025 or do not have official GLP status, may be approved to carry out performance tests. In this case, the following conditions must be met:

- The organisation must be ISO 9001 certified or certified according to the International Features Standards (IFS) standard for Household and Personal Care.
- The test laboratory must be covered by the certification, and the performance test must be included in the quality management system.
- Nordic Ecolabelling is to be given access to all the raw data from the performance test.

The applicant's own laboratory may be approved to carry out performance tests even if the test laboratory and the performance test are not covered by ISO 9001 or IFS standard for Household and Personal Care certification. The following conditions must be met:

- The organisation must have a quality assurance system and an ISO 9001 or IFS standard for Household and Personal Care certification. The laboratory and the performance test do not have to be within the certification, but it needs to be described in that system. Nordic Ecolabelling is to be given access to all the raw data from the performance test.
- The laboratory must document that the test method used is suitable for differentiating between different products, and that the results achieved are reproducible.
- It must be possible for Nordic Ecolabelling to come and observe the performance of a test.

2 Ecotoxicological test methods

International test methods (OECD Guidelines for the Testing of Chemicals) or similar methods must be used. If equivalent methods are used, these must be evaluated by an independent body and controlled by Nordic Ecolabelling to ensure that the test results are equivalent. The test methods to be used are specified below.

3 Aquatic toxicity

Acute aquatic toxicity is tested with the aid of test methods Nos. 201, 202, 203 and 212 in OECD guidelines for testing of chemicals or equivalent test methods. Other scientifically accepted test methods can be used if the test result is evaluated by an independent body and controlled by Nordic Ecolabelling.

For chronic aquatic toxicity test methods nos. 210, 211, 215 and 229 in the OECD Guideline for the Testing of Chemicals or equivalent test methods are used. OECD 201 can be used as chronic test if chronic endpoints are chosen.

4 Bioaccumulation

A substance is considered bioaccumulating if tested for bioaccumulation on fish according to method OECD 305 A-E and its bioconcentration factor (BCF) is >500. If no BCF value has been determined, a substance is considered bioaccumulating if its logKow value ≥ 4.0 according to method 107, 117 or 123 in the OECD Guidelines for the Testing of Chemicals or equivalent method, unless proven otherwise. If the maximum measured BCF ≤ 500, the substance is not considered bioaccumulating even if logKow ≥ 4.0.

OECDs test method 107 cannot be used for surface-active substances, which are both fat and water soluble. Based on current knowledge, for such substances it must be shown to a high degree of certainty that the substance itself and its decomposition products do not pose a long-term hazard to aquatic organisms

Data models (such as BIOWIN) are permitted but if the results of an approximation are close to the set limit values or if Nordic Ecolabelling holds contradictory information, more reliable information is required.

5 Aerobic biodegradability

Test methods 301 (A to F) or 310 in the OECD Guidelines for the Testing of Chemicals should be used to test aerobic biodegradability.

Other scientifically accepted test methods may also be used. The test results of such equivalent methods must be evaluated by an independent body and controlled by Nordic Ecolabelling.

6 Anaerobic biodegradability

Anaerobic degradability can be tested in accordance with ISO 11734, ECETOC No 28 (June 1988), OECD 311 or some other scientifically approved method. For a substance to be regarded as anaerobically degradable, a minimum of 60% mineralisation is required after maximun 60 days (equates to > 60% ThOD / $ThCO_2$ or > 70% DOC reduction).

Other scientifically accepted test methods can be used if the test result is evaluated by an independent body and controlled by Nordic Ecolabelling.

Substances that are not surfactants and are not found on the DID-list or data on the DID list is lacking, may be exempted from the anaerobic degradability requirements if they are aerobically degradable and not toxic to aquatic organisms (NOEC/ECx > 0.1 mg/l or LC50/EC50/IC50>10 mg/l), and if any of the following criteria are fulfilled:

- readily degradable aerobically and have low adsorption (A<25 %) or
- readily degradable aerobically and have high desorption (D>25 %) or
- readily degradable aerobically and are not potentially bioaccumulable

Adsorption/desorption is determined using method 106 in OECD Guidelines or ISO CD 18749 "Water quality – Adsorption of substances on activated sludge", mineralisation in the test (> 70 % BOD/ DOC/COD reduction) after 28 days.

7 DID list

The DID list is common to the European ecolabel and Nordic Ecolabelling. The list has been established in collaboration with stakeholders from industry and consumer and environmental organisations. The list contains information on the toxicity and biodegradability of substances that may be used in chemical/technical products. The DID list does not show which substances can be used in ecolabelled products.

The DID list cannot be used to document the toxicity of individual substances for classification purposes. For this purpose, MSDS, pertinent literature and information from the primary producer shall be used.

The DID list is available via the relevant national Nordic Ecolabelling website (see page 2 for addresses).

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

If no data for chronic toxicity is available, acute data and the associated safety factor can be used to estimate the chronic toxicity factor, see DID list part B.

Appendix 2 Declaration from the producer of the dishwasher detergent or rinse aid

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabelling of dishwasher detergents and rinse aids. 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(s):

_____

Product type:

_____

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 Nordic Swan Ecolabelled product in concentrations <100 ppm (<0.0100 weight percent, <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.

Note: Any component of the product, that enter the dishwasher machine and eventually goes down the drain, is considered as part of the formulation/recipe (eg. water-soluble film, print on film etc.).

O4: Does the product contain ingoing substances classified with any of the hazard phrases below?				
Incl. all classification variants. For example, H350 also covers classification H350i.				
H350 – Carc 1A or 1B	Yes	☐	No	☐
H351 – Carc 2	Yes	☐	No	☐
H340 – Muta 1A or 1B	Yes	☐	No	☐
H341 – Muta 2	Yes	☐	No	☐
H360 – Repr 1A or 1B	Yes	☐	No	☐
H361 – Repr 2	Yes	☐	No	☐
H362 – Lact.	Yes	☐	No	☐
H334 – Resp Sens. 1/1A/B	Yes	☐	No	☐
H317 – Skin Sens. 1/1A/B	Yes	☐	No	☐
O5: Does the product contain any of the following ingoing substances?				
Alkylphenolethoxylates (APEO) and/or alkylphenol derivatives (APD)	Yes	☐	No	☐
EDTA (Ethylenediaminetetraacetic acid) and its salts and/or DTPA (diethylene triamine pentaacetic acid, CAS 67-43-6)	Yes	☐	No	☐
Linear alkylbenzene sulphonates (LAS)	Yes	☐	No	☐
Nitro musks and polycyclic musk compounds	Yes	☐	No	☐
Per- and polyfluoroalkyl substances (PFAS)	Yes	☐	No	☐
Phosphates	Yes	☐	No	☐
Antimicrobial or disinfecting ingredients added for other purposes than preservation	Yes	☐	No	☐
Organochloride compounds and hypochlorite	Yes	☐	No	☐
Methylisothiazolinone (MI, CAS 26823-20-4)	Yes	☐	No	☐

Microplastics

Microplastics, according to either the new* or the old** definition (you are only required to answer for one of the two definitions):

According to the new definition: Yes ☐ No ☐

According to the old definition: Yes ☐ No ☐

*New definition: Microplastics are synthetic polymer microparticles as defined in REACH Regulation ((EC) No 1907/2006), Annex XVII, Entry no. 78:

Synthetic polymer microparticles: polymers that are solid, and which fulfil both of the following conditions:

a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles.

b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:

(i) all dimensions of the particles are equal to or less than 5 mm.

(ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.

The following polymers are excluded from this designation:

a) polymers that are the result of a polymerisation process that has taken place in nature, independently of the process through which they have been extracted, which are not chemically modified substances.

b) polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006].

c) polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006].

d) polymers that do not contain carbon atoms in their chemical structure.

N.B. The following "Conditions of restriction" paragraphs apply: 1 (concentration limit in mixtures), 2 (definitions), 3 (particle size limits). The remaining points do not apply, e.g. 4 (Paragraph 1 shall not apply to the placing on the market of:), e.g. 4(a) “synthetic polymer microparticles, as substances on their own or in mixtures, for use at industrial sites”, 5 (derogations), e.g. 5 (b) "synthetic polymer microparticles the physical properties of which are permanently modified during intended end use in such a way that the polymer no longer falls within the scope of this entry".

**Old definition: Microplastic means particles with a size of below 5 mm of insoluble macromolecular plastic, obtained through one of the following processes: (a) a

polymerisation process such as polyaddition or polycondensation or a similar process using monomers or other starting substances; (b) chemical modification of natural or synthetic macromolecules; (c) microbial fermentation. Please note that Nordic Ecolabelling is following the ECHA restriction proposal and its definition and reserve the right to change the definition above when the definition used in the restriction proposal is finalized. An appropriate transition period would be decided.				
Nanomaterials/-particles Nanomaterials/-particles are defined according to EU commission recommendation on the definition of nanomaterial (2011/696/EU): "A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50% or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm." Examples include ZnO, TiO_2, SiO_2 and Ag. Polymer emulsions are not considered nanomaterials	Yes	☐	No	☐
Substances judged to be "Substances of very high concern", which are included on the Candidate List:http://echa.europa.eu/candidate-list-table	Yes	☐	No	☐
Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists" List I; II*; and/or III? https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities *including List II sublist "Substances no longer on list" if the substance was evaluated under the Cosmetics Regulation"	Yes	☐	No	☐
Substances evaluated by 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 and substances that have not yet been investigated but which meet these criteria.	Yes	☐	No	☐
O6: Does the product contain ingoing substances with phosphorous? If yes, send in calculation on phosphorous content	Yes	☐	No	☐
O7: Does the product (contents or packaging) contain fragrances (incl. fragrance substances in plant extracts)?	Yes	☐	No	☐
If yes, have fragrances been handled in line with IFRA guidelines? www.ifraorg.org	Yes	☐	No	☐
If yes, does the fragrance contain substances that are judged to be sensitising with the hazard statement H317 and/or H334, or which is subject to declaration? If yes, send in perfume specifications	Yes	☐	No	☐
If yes, does the fragrance contain following:	Yes	☐	No	☐

Cananga Odorata and Ylang-ylang oil	83863-30-3; 8006-81-3
Eugenia Caryophyllus Leaf / Flower oil	8000-34-8
Jasminum Grandiflorum / Officinale	84776-64-7; 90045-94-6; 8022-96-6
Myroxylon Pereirae	8007-00-9;
Santalum Album	84787-70-2; 8006-87-9
Turpentine oil	8006-64-2; 9005-90-7; 8052-14-0
Verbena absolute	8024-12-02
Cinnamomum cassia leaf oil/Cinnamomum zeylanicum, ext.	8007-80-5/84649-98-9

If yes, send in perfume specifications				
If yes, does the fragrance contain HICC (CAS 31906-04-4), chloroatranol (CAS 57074-21-2), atranol (CAS 526-37-4), lilial (CAS 80-54-6) or benzyl salicylate (CAS 118-58-1)?	Yes	☐	No	☐
O9: Does the product contain colourants? If yes, please state name and log Kow/BCF or E-number:	Yes	☐	No	☐

O11: Does the product contain ingoing substances classified as environmentally hazardous with H410, H411 and H412? Please note that in order to assess classification, all available data must have been evaluated, including data in ECHA databases. If yes, state the amount (% by weight) per classification:	Yes ☐ No ☐

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.

_____

_____

_____

_____

_____

O21: Is there any direct print on the container except for date codes, batch codes and UFI (Unique Formula Identifier)?	Yes ☐ No ☐

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

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

Appendix 3 Dishwasher detergents and rinse aids: Declaration from the manufacturer/ supplier of the raw material / ingredient

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of dishwasher detergents and rinse aids.

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.

Trade name of the raw material/ingredient:

_____

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

_____

_____

_____

_____

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

_____

_____

_____

_____

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 https://www.nordic-swan-ecolabel.org/criteria/dishwasher-detergents-and-rinse-aids-017/):

_____

_____

_____

_____

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.

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 Nordic Swan Ecolabelled product in concentrations <100 ppm (<0.0100 weight percent, <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.

Note: Any component of the product, that enter the dishwasher machine and eventually goes down the drain, is considered as part of the formulation/recipe (eg. water-soluble film, print on film etc.). Note that if the raw material contains impurities listed in this appendix, write the amount at the end of the appendix. The manufacturer of the Nordic Swan Ecolabelled product is responsible for calculating compliance with the requirements of the criteria.

Part 1 – General requirements (applies to all raw materials)				
O4: Does the product contain ingoing substances classified with any of the hazard phrases below? Incl. all classification variants. For example, H350 also covers classification H350i.				
H350 – Carc 1A or 1B	Yes	☐	No	☐
H351 – Carc 2	Yes	☐	No	☐
H340 – Muta 1A or 1B	Yes	☐	No	☐
H341 – Muta 2	Yes	☐	No	☐
H360 – Repr 1A or 1B	Yes	☐	No	☐
H361 – Repr 2	Yes	☐	No	☐
H362 – Lact.	Yes	☐	No	☐
H334 – Resp Sens. 1/1A/B	Yes	☐	No	☐
H317 – Skin Sens. 1/1A/B	Yes	☐	No	☐
O5: Does the product contain any of the following ingoing substances?				
Alkylphenolethoxylates (APEO) and/or alkylphenol derivatives (APD)	Yes	☐	No	☐
EDTA (Ethylenediaminetetraacetic acid) and its salts and/or DTPA (diethylene triamine pentaacetic acid, CAS 67-43-6)	Yes	☐	No	☐
Linear alkylbenzene sulphonates (LAS)	Yes	☐	No	☐
Nitro musks and polycyclic musk compounds	Yes	☐	No	☐
Per- and polyfluoroalkyl substances (PFAS)	Yes	☐	No	☐

Phosphates	Yes	☐	No	☐
Antimicrobial or disinfecting ingredients added for other purposes than preservation	Yes	☐	No	☐
Organochloride compounds and hypochlorite	Yes	☐	No	☐
Methylisothiazolinone (MI, CAS 26823-20-4)	Yes	☐	No	☐
Microplastics Microplastics, according to either the new* or the old** definition (you are only required to answer for one of the two definitions): According to the new definition: According to the old definition: *New definition: Microplastics are synthetic polymer microparticles as defined in REACH Regulation ((EC) No 1907/2006), Annex XVII, Entry no. 78: Synthetic polymer microparticles: polymers that are solid, and which fulfil both of the following conditions: a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles. b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions: (i) all dimensions of the particles are equal to or less than 5 mm. (ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3. The following polymers are excluded from this designation: a) polymers that are the result of a polymerisation process that has taken place in nature, independently of the process through which they have been extracted, which are not chemically modified substances. b) polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006]. c) polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006]. d) polymers that do not contain carbon atoms in their chemical structure. N.B. The following "Conditions of restriction" paragraphs apply: 1 (concentration limit in mixtures), 2 (definitions), 3 (particle size limits). The remaining points do not apply, e.g. 4 (Paragraph 1 shall not apply to the placing on the market of:), e.g. 4(a) “synthetic polymer microparticles, as substances on their own or in mixtures, for use at industrial sites”, 5 (derogations), e.g. 5 (b) "synthetic polymer microparticles the physical properties of which are permanently modified during intended end use in such a way that the polymer no longer falls within the scope of this entry". **Old definition: Microplastic means particles with a size of below 5 mm of insoluble macromolecular plastic, obtained through one of the following processes: (a) a polymerisation process such as polyaddition or polycondensation or a similar process using monomers or other starting substances; (b) chemical modification of natural or synthetic macromolecules; (c) microbial fermentation.	Yes	☐	No	☐ Yes ☐ No ☐ Yes ☐ No ☐
Nanomaterials/-particles Nanomaterials/-particles are defined according to EU commission recommendation on the definition of nanomaterial (2011/696/EU): ”A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50% or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm." Examples include ZnO, TiO2, SiO2 and Ag. Polymer emulsions are not considered nanomaterials	Yes	☐	No	☐
Substances judged to be “Substances of very high concern”, which are included on the Candidate List:http://echa.europa.eu/candidate-list-table	Yes	☐	No	☐
Potential or identified endocrine disruptors according to any of the EU member state initiative “Endocrine Disruptor Lists” List I; II*; and/or III? https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities	Yes	☐	No	☐

*including List II sublist “Substances no longer on list” if the substance was evaluated under the Cosmetics Regulation”					
Substances evaluated by 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 and substances that have not yet been investigated but which meet these criteria.	Yes	☐	No	☐	
O6: Does the product contain ingoing substances with phosphorous? If yes, send in calculation on phosphorous content	Yes	☐	No	☐	
O7: Does the product (contents or packaging) contain fragrances (incl. fragrance substances in plant extracts)?	Yes	☐	No	☐	
If yes, have fragrances been handled in line with IFRA guidelines? www.ifraorg.org	Yes	☐	No	☐	
If yes, does the fragrance contain substances that are judged to be sensitising with the hazard statement H317 and/or H334, or which is subject to declaration? If yes, send in perfume specifications	Yes	☐	No	☐	
If yes, does the fragrance contain following:	Yes	☐	No	☐	

Cananga Odorata and Ylang-ylang oil	83863-30-3; 8006-81-3
Eugenia Caryophyllus Leaf / Flower oil	8000-34-8
Jasminum Grandiflorum / Officinale	84776-64-7; 90045-94-6; 8022-96-6
Myroxylon Pereirae	8007-00-9;
Santalum Album	84787-70-2; 8006-87-9
Turpentine oil	8006-64-2; 9005-90-7; 8052-14-0
Verbena absolute	8024-12-02
Cinnamomum cassia leaf oil/Cinnamomum zeylanicum, ext.	8007-80-5/84649-98-9

If yes, send in perfume specifications					
If yes, does the fragrance contain HICC (CAS 31906-04-4), chloroatranol (CAS 57074-21-2), atranol (CAS 526-37-4), lilial (CAS 80-54-6) or benzyl salicylate (CAS 118-58-1)?	Yes	☐	No	☐	
O9: Does the product contain colourants? If yes, please state name and log Kow/BCF or E-number:	Yes	☐	No	☐	
O11: Does the product contain ingoing substances classified as environmentally hazardous with H410, H411 and H412? Please note that in order to assess classification, all available data must have been evaluated, including data in ECHA databases. If yes, state the amount (% by weight) per classification: _____	Yes	☐	No	☐	

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.

_____

_____

_____

_____

_____

O3: Is palm oil, palm kernel oil or derivaties of these used in the raw material/ingredient? **Yes** ☐ **No** ☐

Part 2 - Only if a raw material/ingredient contains palm oil, palm kernel oil or derivatives of these

Is the renewable raw material sustainability certified? Yes ☐ No ☐	
If yes, please state the raw material sustainability certification system: _____	
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	☐
Identity preserved	☐
Segregated	☐
Mass balance	☐
Book & Claim	☐

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

Place and date	Company name/stamp
Is the company a manufacturer or other kind of supplier of the raw material? ☐ Manufacturer ☐Other kind of supplier (please specify)	
Responsible person	Signature of responsible person. Electronic signature is accepted
Telephone	Email

Appendix 4 Declaration from the manufacturer of the primary packaging component

- plastic packaging

-paper-based packaging for solid products

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of dishwasher detergents and rinse aids.

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.

Please note that small amounts of impurities when using recycled materials are possible and do not affect fulfilment of the requirements.

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.

How should the packaging component be recycled? (E.g. as carboard or plastic packaging) (O18)

O19: Rigid plastic packaging		
Does the container/closure contain post-consumer/commercial recycled material (PCR)*?	Yes ☐	No ☐
* Post-consumer/commercial recycled material is defined in the requirement according to ISO 14021:2016: "Post-consumer/commercial" is defined as material generated by households or by commercial, industrial and institutional facilities in their role as end-		

users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain. **If yes**, state the percentage PCR (weight%):		
Is the component made of monomaterial?	Yes ☐	No ☐
If no, is the component a PE- or PP-closure for use in squeeze bottles?	Yes ☐	No ☐
If made of polyethylene terephthalate (PET): Have any pigments/colours been added?	Yes ☐	No ☐
Has carbon black been added to the component?	Yes ☐	No ☐
Are fillers used in the components?	Yes ☐	No ☐
If yes, state the density of the packaging component [g/cm^3]:		
Are any barriers used in the component?	Yes ☐	No ☐
Does the component contain metal seals or other metal parts?	Yes ☐	No ☐
For closures: Does the component contain silicone?	Yes ☐	No ☐
O20: Flexible plastic pouches		
Is the component made of monomaterial?	Yes ☐	No ☐
Are any barriers used in the component? **If yes**, please state barrier type and percentage (weight %):	Yes ☐	No ☐
Has carbon black been added to the component?	Yes ☐	No ☐
Are fillers used in the components?	Yes ☐	No ☐
If yes, state the density of the packaging component [g/cm^3]:		
Does the component contain metal seals or other metal parts?	Yes ☐	No ☐
For closures: Does the component contain silicone?	Yes ☐	No ☐
O21: Labels for rigid plastic packaging		
Does the label contain post-consumer/commercial recycled material (PCR), as defined in ISO 14021? (requirement O19) If yes, state the percentage PCR:	Yes ☐	No ☐
Please specify the label material:		
For non-polyolefin plastic labels applied to PE or PP containers: Please state the density of the label: Note: Density in g/cm^3, not the grammage.		
For labels applied to PET containers: Please state the density of the label: Note: Density in g/cm^3, not the grammage.		
Is there Polyvinyl chloride (PVC) or other halogenated plastics present in the labels?	Yes ☐	No ☐
Does the label contain metal?	Yes ☐	No ☐
O22: Paper-based packaging for solid products		
Does the packaging contain recycled material*?	Yes ☐	No ☐

* 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, 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)?	Yes ☐	No ☐
Is the packaging a cardboard packaging?	Yes ☐	No ☐
Is the packaging a corrugated board packaging?	Yes ☐	No ☐
Is the packaging laminated with any barrier material?	Yes ☐	No ☐
If yes, please state the barrier material type: …….. If yes, is the laminate on one side only?	Yes ☐	No ☐
Does the packaging contain PVC (polyvinyl choride) or other types of halogenated plastics?	Yes ☐	No ☐
Does the packaging contain metal seals or other metal parts?	Yes ☐	No ☐
Is the packaging material solid coloured?	Yes ☐	No ☐

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

Appendix 5 Declaration from the manufacturer of the primary packaging component – cardboard packaging for liquid products

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabelling of dishwasher detergents and rinse aids.

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.

Please note that small amounts of impurities when using recycled materials are possible and do not affect fulfilment of the requirements.

Packaging manufacturer	Trademark/trade name of the primary packaging:

Recycling (requirement O18)

How should the packaging component be recycled? (E.g. as carboard or plastic packaging) (O18)

Constituent materials

Please fill in all fields in the table below. Materials such as paper/paperboard, coating materials and closure materials must be listed. Additives or chemicals such as printing inks or chemicals within the pulp/paper does not need to be listed.

Overview of materials, suppliers and weights

Material	Function	Weight of the material [g]	% by weight of the material as a ratio of the total weight of the packaging	Is the material bio-based**? State Yes/No	Is the material post-consumer/commercial recycled*? State Yes/No
Total			**100 %**		

** Post-consumer/commercial recycled material is defined in the requirement according to ISO 14021:2016:*

"Post-consumer/commercial" is defined as material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

*** Bio-based means that the material consists of biomass that may have undergone physical, chemical or biological treatment(s). Biomass has a biological origin, but excludes material that is found embedded in geological and/or fossil formations. Examples of biomass are: (all or parts of) plants, trees, algae, marine organisms, microorganisms, animals, etc.*

Ratio of bio-based material/recycled material in the packaging:

_____

Pulp/paper

State the percentage by weight of the pulp/paper that originates from forestry certified under the FSC or PEFC schemes:

_____

State the percentage (by weight) of the pulp/paper that is post-consumer/commercial recycled*:

_____

With reference to the percentages above. Is the remaining proportion of wood raw material covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources)?	☐ Yes	☐ No

Bio-based plastic

Has palm oil been used as a raw material, other than as secondary raw material***?	☐ Yes	☐ No
Has soy been used as a raw material, other than as secondary raw material***?	☐ Yes	☐ No
Has sugar cane been used as a raw material, other than as a secondary raw material***?	☐ Yes	☐ No

****Secondary raw materials are defined here as residual products from other production processes, such as waste products from the food industry, by-products such as straw from grain production, by-products from maize and dried palm leaves. PFAD from palm oil is not counted as a residual/waste product.*

Materials excluded from use

Does the packaging contain PVC or other types of halogenated plastics?	☐ Yes	☐ No
Does the packaging contain aluminum or other metals?	☐ Yes	☐ No

Printing

Is any print done as direct printing on the packaging?	☐ Yes	☐ No
If yes, are all inks that are used on the cardboard in the packaging water-based?	☐ Yes	☐ No

Place and date	Company name/stamp
Responsible person	Signature of responsible person
Telephone	E-mail