Nordic Ecolabelling for

Cleaning products

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Nordic Ecolabelling

Content

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This document is a translation of an original in Swedish. In case of dispute, the original document should be taken as authoritative.

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
info@ecolabel.dk
www.svanemaerket.dk

Iceland
Ecolabelling Iceland
svanurinn@uos.is
www.svanurinn.is

Finland
Ecolabelling Finland
joutsen@ecolabel.fi
www.joutsenmerkki.fi

Norway
Ecolabelling Norway
hei@svanemerket.no
www.svanemerket.no

Sweden
Ecolabelling Sweden
info@svanen.se
www.svanen.se

What is a Nordic Swan Ecolabelled cleaning product?

Nordic Swan Ecolabelled cleaning products are among the best cleaning products in terms of environmental profile. The whole life cycle of the products is taken into account and strict requirements are set concerning the environmental and health effects of the constituent substances and with regard to packaging. The use phase and raw material extraction are also taken into account in the requirements.

The environmental requirements include strict requirements as to the content of environmentally harmful substances and substances not readily degradable in aquatic environments. The environmental impact of cleaning products affects the aquatic environment since the products are released into the water after use. Properties such as biodegradability, bioaccumulation and toxicity for aquatic organisms are therefore important parameters for the constituent substances.

The chemical content of the products is also subject to requirements in areas such as fragrance, preservatives and allergenic substances.

The effect of the products on the environment also depends on the way in which they are used. There is therefore a requirement for dosing instructions and a requirement for performance testing to show that the product is effective at the recommended dose.

Packaging requirements limit the use of packaging materials, as well as contribute to resource efficiency and a circular economy.

Sustainable extraction of raw materials is a vital global issue with a major environmental impact. We raise awareness of this issue via information and policy requirements and the requirement for sustainably produced palm oil helps us contribute to the production of more sustainable raw materials.

Nordic Swan Ecolabelled cleaning products:

- Meet strict requirements concerning environmentally hazardous chemicals, including requirements on ecotoxicity and biodegradability
- Meet strict requirements concerning chemicals that are harmful to health, including a ban on the sensitising preservative MI
- Offer effective cleaning performance with a small amount, so the product lasts longer and conserves the planet’s resources.
- Packaging requirements contribute to a circular economy, for example by addressing packaging design and material choices.

Why choose the Nordic Swan Ecolabel?

- Licence holder 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 products for future environmental legislation.
- Nordic Ecolabelling can be seen as providing a business with guidance on the work of environmental improvements.
- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Swan Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Swan Ecolabel?

The criteria apply in the first instance to general cleaning and not specialist cleaning products.

Cleaning products designed to clean fixed, hard surfaces (floors, walls, countertops, windows etc.) in the form of concentrated products and RTU (Ready-to-use) products. Spray products can only be Nordic Swan Ecolabelled if they have a permanently mounted foam nozzle, see requirement O29. Products for cleaning of textile flooring can also be Nordic Swan Ecolabelled.

The product group encompasses cleaning products intended for indoor, general and regular cleaning of:

- fixed surfaces (floors, walls, ceilings, doors and tiles
- kitchen equipment (for example work surfaces, kitchen cabinets, stoves, ovens)
- sanitary installations (for example WCs, baths, showers, wash basins, cabinets and mirrors)
- Windows (inside and outside)
- Textile flooring, such as carpeted floors
- Wash polish/wash-and-wax care products

The product group also includes the following types of cleaning products for outdoor usage:

- Facade cleaning
- Patio/terrace cleaning

Concentrated products for the professional market containing microorganisms are also included in the product group, but only for indoor use.

Products for the professional market (products are considered professional if more than 80% of sales are to the professional market) and/or consumer products can be labelled.

Sub-categories

The product group is divided into subgroups, which also can be found under requirements where there are several different requirement levels.

Concentrated, professional: This category includes professional products that require dilution with water prior to use. It contains products for all the aforementioned surfaces, such as floors, walls, ceilings, kitchen work surfaces, tiles, WCs, bathtubs and showers. Chemical products for cleaning of textile flooring is also included in this sub-category. Tablets/capsules/granulates are included in this category.

RTU (Ready-to-use), professional (other except windows): Professional products that are pre-diluted and ready for use including foam/spray products. This category includes products for WCs, kitchens, oven, bathtubs, showers, windows and so on, but not for large areas* such as floors. Please note requirement O29 regarding foam nozzles.

RTU window cleaner, consumer and professional: Professional window and glass cleaners that are pre-diluted and ready for use straight from the package including foam/spray products.

Concentrated, consumer: Concentrated products that require dilution with water prior to use and are designed for the consumer market. This category contains products for all the aforementioned surfaces in the home, such as floors, walls, ceilings, windows (inside and outside), kitchen work surfaces, tiles, WCs, bathtubs and showers. Tablets/capsules for WCs are included in this category. Wash polish/wash-and-wax care products for consumer use are also included.

RTU, WC, consumer: Consumer WC cleaners that are pre-diluted and ready for use straight from the package. This category only includes products for use on WCs and excludes cleaners for other sanitary porcelain and bathroom cleaners.

RTU, consumer (other except windows and WC): Pre-diluted consumer products that are ready to use without dilution including foam/spray products. This includes products for kitchens, ovens, bathtubs, showers and so on, but not for large areas* such as floors. Please note requirement O29 regarding foam nozzles.

**The term "large areas" refers to areas such as floors and tiled bathroom walls. RTU products shall be intended for use on smaller surfaces and "spot cleaning".*

Concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water can be Nordic Ecolabelled together with the RTU product. The product may be e.g. a vial or a tablet. The common thing is that the product is diluted up to 100 times to a use solution in a bottle and that the person handling the concentrated products does not run the risk of coming into contact with the product when it is diluted to the finished product.

Wash polish/wash-and-wax care products: combined cleaning and polish improvers. They contain care products: film-forming components such as polymers, resin and/or wax. Wash-and-wax care products here are concentrated products diluted prior to use.

Facade and patio / terrace cleaning, concentrate: Products intended for cleaning outside such as cleaning facades, patios and terraces.

Concentrated products that can be used both in a diluted state, such as diluted in a bucket of water, and in a more concentrated state, such as diluted with a small quantity of water for use in a foam bottle, must fulfil the requirements for both concentrated (diluted in bucket) and RTU (spray bottle) products.

Products that are sold on both professional and consumer markets must fulfil the requirements for professional products.

Products designed for several areas of use, such as WC and bathroom cleaner (walls, floor and so on), must fulfil the requirements of each applicable category.

Cleaning products intended for specialist cleaning purposes cannot be ecolabelled under these criteria. This includes products intended solely for the purpose of:

- limescale removal
- unblocking blockages, cleaning drains
- restricting or preventing biological growth (algae, mould, bacteria)
- total or partial disinfection
- continuous cleaning, e.g. fragrance block for cleaning WCs
- cleaning products for refrigerated rooms
- cleaning wipes
- floor wax and floor polish without cleaning effect

In the event of dispute, Nordic Ecolabelling will determine whether a product may be ecolabelled 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 addresses see page 3.

What is required?

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.

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

Queries

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

1 General requirements

Requirements O1-O4 and O26-O36 are for all products.

In section 2.1 are requirements, O5-O15, for all cleaning products except wash polish/wash-and-wax care products.

In section 2.2 are requirements, O16-O26, for wash polish/wash-and-wax products.

The definition of constituent substances is included to explain what is meant by constituent substances and impurities. The requirement has been changed compared with the previous generation of the criteria. The aim has been to make the criteria easier to understand.

Definition:

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 exempt from the requirements.

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

- Ingoing substances: all substances in the Nordic Swan Ecolabelled product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.
- Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100,0 ppm (0,01000 w-%, 100,0 mg/kg) in the Nordic Swan Ecolabelled product.
- Impurities in the raw materials exceeding concentrations of ≥ 100000 ppm (≥ 1,000 w-%, ≥ 10000 mg/kg) 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.

Foil that is not removed before use of the product is considered as part of the formulation/recipe.

O1 Description of the product

The applicant must give detailed information on the cleaning product to which the application relates. The following information is required:

- Description of the product, including its area of use, in accordance with “What can carry the Nordic Swan Ecolabel?” (consumer/professional product, RTU* or concentrated, and so on)

Note that RTU products are not intended to be used on large surfaces such as floors or larger bathroom surfaces such as tiled walls. RTU products are to be intended for use for smaller surfaces and "spot-cleaning". RTU products in spray application have to have a mounted foaming nozzle, see requirement O29. The products are referred to as foam/spray products.

- User instructions that clearly explain how the product should be used.
- If the product is designed to be diluted before use, the recommended dose for normal soiling/normal use must be stated clearly and simply on the label/packaging and in the technical product data sheet
    - For consumer products, the dosing must be stated as x number of millilitres to y litres of water or as z number of caps to y litres of water.
    - For products intended for professional use, the dosing may, for example, be stated as x ml or an equivalent y pump or similar per z litre of water. The information sheet or technical data sheet must include a recommendation on dosing equipment (e.g., pump, measuring vessel, pipette or similar).
- A complete formulation for the product. The formulation must for each ingoing raw material include:
    - Trade name
    - Chemical name for the main component, and, if relevant, additives (e.g., colorants, preservatives and stabilizers)
    - Amount (both with and without solvents, e.g., water)
    - CAS no. / EC no.
    - Function
    - 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, version 2016 or later, which is used in calculating chemical requirements. The DID list can be obtained from Nordic Ecolabelling's websites, see addresses on page.

✉ Description of the product in accordance with "What can carry the Nordic Swan Ecolabel?", e.g. label or other documentation. Label and product data sheet (if available) that includes dosing and user instructions. The information on labels and/or product data sheets must be in the languages in which the product is marketed.

✉ A complete formulation in line with the requirement. Nordic Swan Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.

✉ Safety data sheets for each ingredient in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/E2EC).

1.1 Sustainable raw materials

O2 Sustainable raw materials

1. The licence holder must document that they are working to increase their purchasing of sustainable and renewable raw materials or that they require their manufacturer to work on increasing their purchasing of sustainable renewable raw materials for Nordic Swan Ecolabelled cleaning products. This can for example be done by promoting certified raw materials, by avoiding problematic raw materials or by changing from fossil based raw materials to sustainable raw materials. The targets must be quantitative and time-based, and they must be set by the company's management.

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

2. The following data is required for each organic raw material/ingredient in the Nordic Swan Ecolabelled cleaning product:

   a) The proportion of the raw material/constituent part of the raw material/ingredient that comprises renewable raw material or originates from renewable raw material, calculated on an annual basis.

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

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

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

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

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

✉ 1. Policy or equivalent documentation of the licence holders work for renewable and sustainable materials in Nordic Swan Ecolabelled products, including quantitative, time-based targets.

✉ 2. Appendix 3 from the raw material supplier.

O3 Certified raw materials from oil palms

Palm oil, palm kernel oil and palm 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% in the final product.

For concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water the limit of 1 % applies for the diluted final product.

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

✉ A valid RSPO CoC certificate

✉ The producer of raw materials or the producer of the Nordic Swan Ecolabelled product must show by means of a balance calculation and/or invoices/delivery notes that the proportion of certified raw material corresponds to the amount of certified palm oil raw materials. Alternatively, a declaration from the producer of raw materials that all purchased palm oil raw materials are certified.

1.2 Surfactants

O4 Surfactants – aerobically and anaerobically biodegradable

a) All surfactants irrespective of their function must be easily biodegradable according to test method no. 301 A–F in the OECD guidelines for testing of chemicals or other equivalent testing methods evaluated by an independent body and controlled by Nordic Ecolabelling.

b) All surfactants irrespective of their function must be anaerobically biodegradable in accordance with ISO 11734, ECETOC no. 28, OECD 311 or equivalent testing methods evaluated by an independent body and controlled by Nordic Ecolabelling.

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

✉ If the DID list lacks the relevant data for surfactants, data may be taken from the safety data sheet on 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 analogous observations, as long as they are carried out by a competent, independent third party, and refer to relevant data from literature that has been subject to scientific scrutiny.

2 Product specific requirements

In section 2.1 are requirements, O5-O15, for all cleaning products except wash polish/wash-and-wax products.

In section 2.2 are requirements, O16-O26, for wash polish/wash-and-wax products.

All products need to fulfil requirements O26-O36.

2.1 Cleaning products

2.1.1 Classification of the cleaning product

O5 Classification of the product

The product must not be classified as shown in Table O5. The requirement applies to all products, including concentrated products for refill for RTU bottles in concentrated form.

Tabell O5 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 Exception: Professional products can be labelled with Acute toxicity, Category 4 with H332, H312, H302 if the packaging is designed so that the user does not come in contact with the product	H300 H310 H330 H301 H311 H331 H302 H312 H332
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 Exceptions: - Professional products where classification is due to pH. - WC-products for consumers where the classification is due to pH.	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 Products labelled with EUH208: “Contains (name of sensitising substance). May cause an allergic reaction.” Can not be Nordic Swan Ecolabelled**

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

*** Concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water are exempted if the user does not come in contact with the product when diluted.*

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

✉ Safety data sheets for the product in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/E2EC).

✉ Description of the packaging design showing that the user is not in contact with the product for the professional products for which an exemption is made from the requirement of classification as H332, H312 and/or H302 and for concentrated products for refill for RTU bottles for which an exemption is made from labelling with EUH208. Documentation in the form of a technical description and user instructions showing how the user avoids contact with the product.

✉ Documentation confirming that the product (professional products and WC products for consumers) has been classified as corrosive due to its pH value if an exemption is made for H314.

2.1.2 Requirements for constituent substances

O6 Classification of ingoing substances

Ingoing substances in the product must not be classified as shown in Table O6:

Table O6 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.

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

*** The following substances are exempt:

- Enzymes (including stabilisers and preservatives in the enzyme raw material) can be included if they are in liquid form or granulate capsules.
- Microorganisms in professional products, see also requirement O9. The exception does not apply to foam/spray products.
- Fragrance can be included in the final product, see requirement O7 on fragrances. The exception does not apply to professional foam products.
- Sensitising preservatives, but see also requirement O6 Prohibited substances and O8 Preservatives.

☒ 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.

☒ Formulation (for foam/spray products).

O7 Prohibited substances

The following substances are excluded from use in the product:

- Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)
- EDTA (Ethylene diamine tetraacetate and its salts) and DTPA (Diethylenetriamine pentaacetate)
- Quarternary ammonium salts that are not readily degradable
- Organic chlorine compounds and hypochlorites
- Methyldibromo glutaronitrile (MG, CAS 35691-65-7)
- Methylisothiazolinone (MI, CAS 2682-20-4)
- Nitro musks and polycyclic musk compounds
- Phthalates
- Phosphate, phosphonate, phosphonic acid or phosphoric acid
- VOC

  Volatile organic compounds are defined in accordance with the European Commission's directive 1999/13/EC on the limitation of emissions of volatile organic compounds with steam pressure > 0.01 kPa at 20°C.

  Exemption for acetic acid, isopropanol, ethanol (including denaturing agents), and fragrances. Note that fragrances, acetic acid, isopropanol, and ethanol (including denaturing agents) must still fulfill all other requirements in this criteria document.

- Fluorine surfactants and other per- and polyfluorinated compounds (PFC)
- BHT (butylated hydroxytoluene, CAS 128-37-0)

  There is an exemption for BHT in fragrances in quantities of ≤100 ppm, on condition that the amount in the cleaning product does not exceed 1 ppm.

- D4 (octamethylcyclotetrasiloxane, CAS 556-67-2),

  D5 (decamethylcyclopentasiloxane, CAS 541-02-6),

  D6 (dodecamethylcyclohexasiloxane, CAS 540-97-6)

- 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.

Note that foils/films wrapping tablets and similar generating microplastics may not be Nordic Swan Ecolabelled.

- Substances that are considered potential endocrine disruptors in category 1 or 2, according to official lists within the EU. The EU's report on endocrine disruptors can be read in full at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf (Appendix L, page 238 onwards)
- 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.
- Substances judged to be "Substances of very high concern", which are included on the Candidate List: https://echa.europa.eu/candidate-list-table.
- Nanomaterials/particles

  Nanomaterials/particles are defined in accordance with the European Commission's definition of nanomaterials dated 18 October 2011: "A natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions are in the size range of 1-100 nm." Examples are ZnO, TiO2, SiO2, Ag and laponite with particles of nanosize in concentrations exceeding 50%. Polymer emulsions are not considered to be nanomaterial.

✉ A duly completed and signed declaration of compliance with the requirement, Appendix 2 or similar documentation for the product, Appendix 3 or similar signed documentation for the raw materials.

O8 Fragrances

The requirement also includes fragrances in plant extracts:

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) Fragrances must not be present in professional* foam cleaning products or their refills.

c) A fragrance substance which is judged to be sensitising with the hazard statement H317 and/or H334, or which is subject to declaration, may be present at a maximum of 0.0100% (100 ppm) in the cleaning product.

In concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water any of the above mentioned substances may be present in concentrations up to 0.0100% by weight (100 ppm) in the) in the diluted final product. Note, however, that requirement O5 and prohibition of H317 / H334 apply to these refills in concentrated form.

d) The fragrance substances in Table O8 may be present in products at a maximum of 0.0100% (100 ppm) per substance:

Table O8 Other fragrance substances that may be present to a maximum of 100 ppm

INCI name (if it doesn't exist, parfum name according to Cosing)	CAS nummer
Cananga Odorata och 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

In concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water any of the above mentioned substances may be present in concentrations up to 0.0100% by weight (100 ppm) in the) in the diluted final product. Note, however, that requirement O5 and prohibition of H317 / H334 apply to these refills in concentrated form.

e) HICC, chloroatranol and atranol are not permitted in the product.

f) Foam products for consumers: Fragrances subject to declaration under Regulation (EC) No 648/2004 on Detergents as amended and/or classified as H317 and/or H334 and/or listed in Table O6 above must not exceed levels of > 50 ppm (> 0.0050%) per substance in the cleaning product.

Refills for foam/spray products can contain each of the above-mentioned substance in concentrations of up to 0.050% by weight (500 ppm), on condition that the stated dilution gives a concentration in the diluted product of less than 0.0050% by weight (50 ppm).

** Products for professional use are defined here as products that are marketed for use in professional contexts such as institutions, catering kitchens, restaurants and within the public sector.*

Where products are sold to both professionals and consumers, the product is considered a professional product if the proportion sold to professionals is 80% or higher. Where there is any confusion about whether a product is for professionals or consumers, Nordic Ecolabelling may require documentation explaining where the product is intended to be sold. The requirement also includes fragrances in plant extracts.

✉ Appendix 2 and 3 or equivalent certification completed and signed plus fragrance specifications.

✉ Calculation of the amount of the 26 allergens, substances classified as H334 and/or H317 and substances listed in table O8 present in the end product.

O9 Preservatives

a) Preservatives included in the product or constituent substances must not be bioaccumulative. Preservatives 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.

b) Sensitising preservatives are permitted to a maximum of 100 ppm. Note that requirement O5 and O6 must also be fulfilled.

Note that methylisothiazolinone (MI, CAS 2682-20-4) is forbidden in the products in requirement O7.

In concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water sensitizing preservatives may be present in concentrations up to 0.0100% by weight (100 ppm) in the diluted final product. Note, however, that requirement O5 and prohibition of H317 / H334 apply to these refills in concentrated form.

✉ a) Documentation of BCF or logKow, Appendix 2 and 3 or similar documentation completed and signed and safety data sheet for the preservative.

✉ b) Calculation of the amount of ingoing sensitising preservatives in the final product.

O10 Microorganisms

a) Products containing microorganisms to be eligible for Nordic Swan Ecolabelling are professional cleaning products (within the product group definition) for indoor use. See also O6 which excludes microorganisms in foam/spray products.

b) Only microorganisms that fulfil the following requirements may be included in the cleaning product:

- The microorganisms are found in Risk group 1 in Directive 2000/54/CE.
- It must be controlled, that the product is not contaminated with pathogen microorganisms

- The microorganisms must not contain any of the following pathogen species when screened using the following or equivalent test methods:
  - E. Coli, test method ISO 16649-3:2015
  - Streptococcus (Enterococcus), test method ISO 21528-1:2004
  - Staphylococcus aureus, test method ISO 6888-1
  - Bacillus cereus, test method ISO 7932:2005 or ISO 21871:2006
  - Salmonella, test method ISO6579:2002 or ISO 19250
- The microorganisms' DNA is identified according to a "Strain identification protocol" (using the 16S ribosomal DNA sequencing or other equivalent methods).
- Are not resistant to the following types of antibiotics:
  - Aminoglycosides
  - Macrolides
  - Beta lactam
  - Tetracyclines
  - Fluoroquinolones or other quinolones

  according to EUCAST or Nordic AST or other equivalent method.
- Microorganisms must not be GMO.
- Colony forming units (CFU) > 1,0 x 105 microorganisms per ml in-use solution.
- The products must on their labels/product information sheet or in other marketing material provide the user with the following information:
  - That the product contains microorganisms
  - Instruction saying that the products shall not be used on surfaces in contact with food.
  - That the products shall not be used with spray application
- Products containing microorganisms shall display superior cleaning performance beyond the general cleaning requirements of R15 and R16. It must be demonstrated that the cleaning product can degrade the following:
  - Protein: degradation of proteins shown as degradation on standard casein agar medium or through other scientifically acknowledged medium displaying protein degradation.
  - Starch: degradation of starch shown as degradation on standard starch agar or through other scientifically acknowledged medium displaying starch degradation.
  - Fat and/or vegetable oil: degradation shown as degradation on "Spirit Blue"-agar medium or through other scientifically acknowledged medium.
- Shelf-life: show that the microorganisms have a good stability by performing a stability test at room temperature showing that the microorganisms not decrease more than 20% alternatively decrease at < 1log per year according to ISO 4833-1:2014 (Horizontal method for the enumeration of microorganisms) or through other scientifically acknowledged method to count the number of microorganisms.

Analysis shall be performed by a laboratory fulfilling the requirements of Appendix 2.

Note that products containing microorganisms sold in Norway have to fulfil the national legislation "FOR 1998-01-22 nr 93" and that they must also be listed on www.pib.no. In addition, "FOR 2004-06-01 nr 931" must be fulfilled when relevant.

✉ Documentation demonstrating that the microorganisms are classified as Risk Group 1.

✉ Documentation describing how it is controlled that the products is not contaminated with pathogen microorganisms

✉ Test results demonstrating the the microorganisms does not contain the following pathogen species: E. Coli, Streptococcus (Enterococcus), Staphylococcus aureus, Bacillus cereus, and Salmonella.

✉ Documented DNA identification.

✉ Test results demonstrating that the microorganisms are not resistant to antibiotics, do not include the aforementioned pathogenic strains and are not GMO.

✉ Documentation of colony forming units per ml in-use solution.

✉ Performance test demonstrating that the product can degrade protein, start, fat and oil.

✉ Product label and marketing material showing that the product is designed for professional use, application method and that the above-mentioned requirement regarding information on the label is present.

✉ Stability study showing shelf life according to the requirement above.

2.1.3 Ecotoxicity and biodegradability

In all calculations, the highest recommended normal dose must be used. A higher dose is often indicated for special purposes, that are not performed daily. That dosage does not need to be taken into account in calculations. The water in the toilet is never included as a part of the in-use solution.

For concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water requirements O11-O13 apply for the diluted final product.

Note that if the refill is dosed as a unit containing a water-soluble foil intended not to be removed before diluting, the foil must be part of the product formulation in the requirements dealing with CDV, environmental hazards and aNBO and anNBO. (O11-O13).

O11 Long-term environmental effects

The use of constituent substances which are classified with any of the hazard statements H410, H411 or H412, incl. self-classifications in the ECHA database is limited as follows:

$FV < LV$

$FV = 100 * CH_{410} + 10 * CH_{411} + CH_{412} \leq LV$ grams/litre in-use solution

where

FV = Factor value

LV = Limit value, see table O11

CH_{410} = concentration of substances with H410 in grams/litre in-use solution

CH_{411} = concentration of substances with H411 in grams/litre in-use solution

CH_{412} = concentration of substances with H412 in grams/litre in-use solution

The product's FV is calculated on the basis of the highest recommended normal dose stated on the packaging.

Table O11 Limit values for environmentally hazardous substances

Category	Limit value (LV) (g/l in-use solution)
Concentrated, consumer	0.020
RTU, WC, consumer	0.50
RTU, other, consumer	0.50
Concentrated, professional	0.0020
Spray, professional	0.10
RTU, other (incl. WC), professional	0.050
RTU windows, professional, consumer	0.30
Façade and terrace cleaners	0,020

Exemptions:

- Protease/Subtilisin classified as Aquatic Chronic 2 (H411) is exempt from the requirement, see also the requirement concerning enzymes in O6.
- Surfactants classified as H411 and H412 are exempted from the requirement, on condition that they are readily biodegradable* and anaerobically biodegradable**.

* *In accordance with the DID list, version 2016 or later. If the substance is not on the DID list, or data on the DID list is lacking, the substance is documented in accordance with test method no. 301 A–F or no. 310 in the 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. If the substance is not on the DID list, or data on the DID list is lacking, the substance is documented in accordance with ISO 11734, ECETOC no. 28 (June 1988) or 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 bioaccumulability) is not available, the substance is treated as a worst case, i.e. as environmentally hazardous, H410.

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

✉ Summary of the product's content in % by weight of substances classified as H410, H411 and H412.

✉ Appendices 2 (product) and 3 (raw material) signed and completed, or alternatively equivalent signed information.

✉ Calculation according to the above formula showing that the requirement is fulfilled. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.

O12 CDV – critical dilution volume

The critical dilution volume (CDV) is calculated for all constituent substances included in the cleaning product. CDV is a theoretical value that takes account of each substance's toxicity and biodegradability in the environment.

The product's critical dilution volume (CDV) is calculated on the basis of the highest recommended dose stated on the packaging.

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

Table O12. CDV limit values

Category	$CDV_{chronic}$
Concentrated, consumer	10,500
RTU, WC, consumer	600,000
RTU, other, consumer	600,000
Concentrated, professional	9,500
Foam, professional	100,000
RTU, other (incl. WC), professional	350,000
RTU windows, professional, consumer	48,000
Façade and terrace cleaners	20,000

* *Microorganisms are exempted from the CDV calculation.*

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

$CDV_{chronic} = \sum CDV_i = \sum (dose_i \times DF_i \times 1000 / TF_i \text{ chronic})$

$dose_i$ = the constituent volume of each individual substance "i", in g/l in-use solution

DF_i = degradation factor for substance "i", in accordance with the DID list

TFi 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.

✉ Calculation of CDVchronic for the cleaning product. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.

Reference 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 Content of substances which are not aerobically and/or anaerobically biodegradable (aNBO and anNBO)

The product's total content of substances that are not aerobically biodegradable (aNBO) and that are not anaerobically biodegradable (anNBO) may not exceed the limits stated in Table O13 per litre of in-use solution.

The product's aNBO and anNBO are calculated on the basis of the highest recommended normal dose stated on the packaging.

Note that all surfactants must be aerobically and anaerobically biodegradable in accordance with O13. See also the exemption from the requirement of anaerobic biodegradability for substances which are not surfactants (Appendix 1, item 6, Anaerobic biodegradability).

Table O13: Limit values for aNBO and anNBO

Category	aNBO (g/litre in-use solution)	anNBO (g/litre in-use solution)
Concentrated, consumer*	0.10	0.10
RTU, WC, consumer	2.00	5.00
RTU, other, consumer	2.00	2.00
Concentrated, professional*	0.045	0.250
Foam, professional	0.70	0.70
RTU, other (incl. WC), professional	2.00	5.00
RTU windows, professional, consumer	0.70	0.70
Façade and terrace cleaners	0.10	0.10

✉ Calculation of the concentration of aNBO and anNBO for the cleaning product in grams/litre of in-use solution. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's 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.

2.1.4 Performance

Under the requirement, a product must be at least as good as or better than the product with which it is being compared (the reference product). For professional products, the applicant can choose between conducting a laboratory test (O14) or a user test (O15). The laboratory test is the only option for consumer products (O14). Cleaning products for textile floors need to be tested with a user test (O15).

For concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water performance requirements apply for the diluted final product.

O14 Performance test – laboratory test (professional and consumer)

a) The product must, through laboratory testing, demonstrate equal or better cleaning performance, when compared with a reference product in the same product category the product must also clean better than water alone.

If the product is marketed for both professional and consumer use, it must be tested against a professional product.

The test must demonstrate the ability to remove soil, in accordance with the description in Appendix 5.

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

b) If the product is tested in accordance with the EU Ecolabel's test for all-purpose cleaners and sanitary cleaners (Commission decision of 23 June 2017 or later version), this laboratory test can be used.

✉ Alternative a: Test report containing data on dosing, selection of reference product, description of the test method, description of the soil and soil preparation, selection of surfaces, calculation of EFF (performance index) in accordance with Appendix 5. The report shall demonstrate that the product is equal to or better than the reference product and better than water.

✉ Alternative a: Documentation on the test laboratory demonstrating compliance with the requirements concerning test laboratories in Appendix 1 (point 1B).

✉ Alternative b: Description of how the EU Ecolabel test has been performed and complete results from the test.

O15 Performance test – user test (professional products)

a) The product must demonstrate cleaning performance that is equal to or better than a reference product within the same product category in 80% of tests.

The performance of the product is judged on the following three parameters:

- Ability to remove soil in comparison to the reference product
- Abrasion to the cleaned surface in comparison to the reference product
- Effectiveness in comparison to the reference product

The tests must be performed by at least 5 users. All users/testers must complete Appendix 6a-c or 7a (depending on the product category). The applicant must then collate the results according to Appendix 6d or 7b (facade and terrace cleaners).

b) The performance of cleaning products for cleaning of textile floors are judged on the following three parameters:

- Ability to remove soil in comparison to the reference product
- Ability to remove stains in comparison to the reference product
- Effectiveness in comparison to the reference product
- Abrasion toward the surface in comparison to the reference product

The tests must be performed by at least 5 users. All users/testers must complete Appendix 8a. The applicant must then collate the results according to Appendix 8b).

c) If the product is tested in accordance with the EU Ecolabel's test for all-purpose cleaners and sanitary cleaners (Commission decision of 28 June 2011 or later version), this user test can be used.

✉ Alternative a) for all surface cleaners and kitchen cleaners, sanitary and WC cleaners and glass/window cleaners: Description of how the test is performed, plus all fully completed questionnaires (Appendix 6a–cd), plus a summary of the responses (Appendix 6d).

✉ Alternative b) for textile floor cleaners and facade and terrace cleaners: Description of how the test is performed, plus all fully completed questionnaires (Appendix 7a or 8a), plus a summary of the responses (Appendix 7b or 8b).

✉ Alternative c) Description of how the EU Ecolabel test has been performed and complete results from the test.

2.2 Wash polish/wash and wax care products

2.2.1 Classification of the wash polish/wash-and-wax care products

O16 Classification of product

The product must not be classified as shown in Table O16:

Tabell O16 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 Exception: Professional products can be labelled with Acute toxicity, Category 4 with H332, H312, H302 if the packaging is designed so that the user does not come in contact with the product	H300 H310 H330 H301 H311 H331 H302 H312 H332
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 Exceptions: - Products where classification is due to pH.	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 Products labelled with EUH208: “Contains (name of sensitising substance). May cause an allergic reaction.” can not be Nordic Swan Ecolabelled**

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

*** Exemption from hazard phrase EUH 208 for products containing MI (Methylisothiazolinones) in polymer dispersions/waxes in concentration ≤100ppm in the raw material and ≤15ppm Methylisothiazolinones in the final product causing this hazard statement. Also see requirement O18.*

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

✉ Safety data sheets for the product in line with prevailing European legislation (Annex II to REACH Regulation, 1907/2006/E2EC).

✉ Description of the packaging design showing that the user is not in contact with the product for the products for which an exemption is made from the requirement of classification as H332, H312 and/or H302. Documentation in the form of a technical description and user instructions showing how the user avoids contact with the product.

✉ Documentation confirming that the product has been classified as corrosive due to its pH value, if an exemption is made for H314.

2.2.2 Requirements for constituent substances

O17 Classification of ingoing substances

Ingoing substances in the product must not be classified as shown in Table O17:

Table O17 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.

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

*** The following substances are exempt:

- Enzymes (including stabilisers and preservatives in the enzyme raw material) can be included if they are in liquid form or granulate capsules.
- Sensitising preservatives, but see also requirement O18 Prohibited substances and O20 Preservatives. The exemption does not apply to foam products.

✉ 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.

✉ Formulation (for foam products)

O18 Prohibited substances

The following substances are excluded from use in the product:

- Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)
- EDTA (Ethylene diamine tetraacetate and its salts) and DTPA (Diethylenetriamine pentaacetate)
- Quarternary ammonium salts that are not readily degradable
- Organic chlorine compounds and hypochlorites
- Methyldibromo glutaronitrile (MG, CAS 35691-65-7)
- Methylisothiazolinone (MI, CAS 2682-20-4)

  Exemption: polymer dispersions/waxes in concentration ≤100ppm in the raw material and ≤15ppm Methylisothiazolinones in the final product
- Nitro musks and polycyclic musk compounds
- Phthalates
- Phosphate, phosphonate, phosphonic acid or phosphoric acid

  Exemption: ≤ 0,10% phosphorous is accepted in wash polish/wash-and-wax products.
- VOC

  Volatile organic compounds are defined in accordance with the European Commission's directive 1999/13/EC on the limitation of emissions of volatile organic compounds with steam pressure > 0.01 kPa at 20°C.

  Exemption for isopropanol and ethanol.
- Fluorine surfactants and other per- and polyfluorinated compounds (PFC)
- BHT (butylated hydroxytoluene, CAS 128-37-0)
- D4 (octamethylcyclotetrasiloxane, CAS 556-67-2),
- D5 (decamethylcyclopentasiloxane, CAS 541-02-6),
- D6 (dodecamethylcyclohexasiloxane, CAS 540-97-6)
- 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.

Note that foils/films wrapping tablets and similar emitting microplastics may not be Nordic Swan Ecolabelled.

- Substances that are considered potential endocrine disruptors in category 1 or 2, according to official lists within the EU. The EU's report on endocrine disruptors can be read in full at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf (Appendix L, page 238 onwards)
- 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.
- Substances judged to be "Substances of very high concern", which are included on the Candidate List: https://echa.europa.eu/candidate-list-table.
- Nanomaterials/particles

  Nanomaterials/particles are defined in accordance with the European Commission's definition of nanomaterials dated 18 October 2011: "A natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions are in the size range of 1-100 nm." Examples are ZnO, TiO2, SiO2, Ag and laponite with particles of nanosize in concentrations exceeding 50%. Polymer emulsions are not considered to be nanomaterial.

✉ A duly completed and signed declaration of compliance with the requirement, Appendix 2 or similar documentation for the product, Appendix 3 or similar signed documentation for the raw materials.

O19 Fragrances

Fragrances and fragrances in plant extracts must not be present in wash polish/wax-and-wash-products.

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

O20 Preservatives

a) Preservatives included in the product or constituent substances must not be bioaccumulative. Preservatives 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.

b) Sensitising preservatives are permitted to a maximum of 100 ppm. Note that requirement O5 and O6 must also be fulfilled.

c) Methylisothiazolinone (MI, CAS 2682-20-4) is forbidden in the products according to requirement O18.

✉ a) Documentation of BCF or logKow, Appendix 2 and 3 or similar documentation completed and signed and safety data sheet for the preservative.

✉ b) Calculation of the amount of ingoing sensitising preservatives in the final product.

2.2.3 Ecotoxicity and biodegradability

In all calculations, the highest recommended normal dose must be used. A higher dose is often indicated for special purposes, that are not performed daily. That dosage does not need to be taken into account in calculations. The water in the toilet is never included as a part of the in-use solution.

O21 Long-term environmental effects

The use of constituent substances which are classified with any of the hazard statements H410, H411 or H412 incl. self-classification in the ECHA database is limited as follows:

$FV < LV$

$FV = 100 * CH_{410} + 10 * CH_{411} + CH_{412} \leq LV$ grams/litre in-use solution

where

FV = Factor value

LV = Limit value, see table O21

CH_{410} = concentration of substances with H410 in grams/litre in-use solution

CH_{411} = concentration of substances with H411 in grams/litre in-use solution

CH_{412} = concentration of substances with H412 in grams/litre in-use solution

The product's FV is calculated on the basis of the highest recommended normal dose stated on the packaging.

Table O21 Limit values for environmentally hazardous substances

Category	Limit value (LV) (g/l in-use solution)
Wash polish/wax-and-wash-products	0.0020

Exemptions:

- Protease/Subtilisin classified as Aquatic Chronic 2 (H411) is exempt from the requirement, see also the requirement concerning enzymes in O17.
- Surfactants classified as H411 and H412 are exempted from the requirement, on condition that they are readily biodegradable* and anaerobically biodegradable**.

** In accordance with the DID list, version 2016 or later. If the substance is not on the DID list, or data on the DID list is lacking, the substance is documented in accordance with test method no. 301 A–F or no. 310 in the 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. If the substance is not on the DID list, or data on the DID list is lacking, the substance is documented in accordance with ISO 11734, ECETOC no. 28 (June 1988) or 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 bioaccumulability) is not available, the substance is treated as a worst case, i.e. as environmentally hazardous, H410.

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

✉ Summary of the product's content in % by weight of substances classified as H410, H411 and H412.

✉ Appendices 2 (product) and 3 (raw material) signed and completed, or alternatively equivalent signed information.

✉ Calculation according to the above formula showing that the requirement is fulfilled. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.

O22 CDV – critical dilution volume

The critical dilution volume (CDV) is calculated for all constituent substances included in the cleaning product. CDV is a theoretical value that takes account of each substance's toxicity and biodegradability in the environment.

The product's critical dilution volume (CDV) is calculated on the basis of the highest recommended dose stated on the packaging.

The product's critical dilution volume (CDV) may not exceed the limit values for $CDV_{chronic}$ in table O22.

Table O22. CDV limit values

Category	$CDV_{chronic}$
Wash polish/wax-and-wash-products	9,500

**Substances in wash polish/wash-and-wax care products for floors with a molecular weight > 700, max diameter > 1.17 nm and a max molecular length > 4.3 nm and toxicity > 100mg/l are not included in the calculation. See however O18 Microplastics.*

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

$CDV_{chronic} = \sum CDV_i = \sum (dose_i \times DF_i \times 1000 / TF_i \text{ chronic})$

$dose_i$ = the constituent volume of each individual substance "i", in g/l in-use solution

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

TFi 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.

☒ Calculation of $CDV_{chronic}$ for the cleaning product. Nordic Ecolabelling’s calculation sheet can be used and can be obtained from Nordic Ecolabelling’s websites.

☒ Reference 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.

O23 Content of substances which are not aerobically and/or anaerobically biodegradable (aNBO and anNBO)

The product's total content of substances* that are not aerobically biodegradable (aNBO) and that are not anaerobically biodegradable (anNBO) may not exceed the limits stated in Table O23 per litre of in-use solution.

The product's aNBO and anNBO are calculated on the basis of the highest recommended normal dose stated on the packaging.

Note that all surfactants must be aerobically and anaerobically biodegradable in accordance with O4. See also the exemption from the requirement of anaerobic biodegradability for substances which are not surfactants (Appendix 1, section 6, Anaerobic biodegradability).

Table O23: Limit values for aNBO and anNBO

Category	aNBO (g/litre in-use solution)	anNBO (g/litre in-use solution)
Wash polish/wax-and-wash products	0.045*	0.250*

** Substances in wash polish/wash-and-wax care products for floors with a molecular weight > 700, max diameter > 1.17 nm, a max molecular length > 4.3 nm and toxicity > 100mg/l are not included in the calculation. See however O18 Microplastics.*

✉ Calculation of the concentration of aNBO and anNBO for the cleaning product in grams/litre of in-use solution. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's 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.

2.2.4 Performance

Under the requirement, a product must be at least as good as or better than the product with which it is being compared (the reference product). For wash polish/wax-and-wash products, the applicant can choose between conducting a laboratory test (O24) or a user test (O25). The laboratory test is the only option for consumer products (O24).

O24 Performance test – laboratory test (professional and consumer)

The product must, through laboratory testing, demonstrate equal or better cleaning performance, when compared with a reference product in the same product category the product must also clean better than water alone.

The test must demonstrate the ability to remove soil, in accordance with the description in Appendix 5.

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

✉ Test report containing data on dosing, selection of reference product, description of the test method, description of the soil and soil preparation, selection of surfaces, calculation of EFF (performance index) in accordance with Appendix 5. The report shall demonstrate that the product is equal to or better than the reference product and better than water.

✉ Documentation on the test laboratory demonstrating compliance with the requirements concerning test laboratories in Appendix 1 (point 1B).

O25 Performance test – user test (professional products)

The product must demonstrate cleaning performance that is equal to or better than a reference product within the same product category in 80% of tests.

The performance of the product is judged on the following three parameters:

- Ability to remove soil in comparison to the reference product
- Abrasion toward the surface in comparison to the reference product
- Effectiveness in comparison to the reference product

The tests must be performed by at least 5 users. All users/testers must complete Appendix 9a. The applicant must then collate the results according to Appendix 9b).

✉ Description of how the test is performed, plus all fully completed questionnaires (Appendix 9a), plus a summary of the responses (Appendix 9b).

3 Packaging

Nordic Ecolabelling have set requirements on packaging to increase the possibility to recycle the material to make the materials be reused and there contribute to circular economy. Requirements O26-O29 are requirements on the primary packaging such as bottles, containers, pouches, cardboard boxes etc. The requirement regarding recycling design has been divided into two requirements, one for pouches (O27) and one for other types of packaging (O26). For foam/spray products there is an additional requirement, O29.

For concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water both the refill packaging and the "mother" packaging must meet the packaging requirements. If the product is not marketed together with a "mother" packaging with contents, but if the label or other communication refers to a specific packaging, bottle or similar, which should be used for dilution, this is referred to as a "mother" packaging. If the packaging format, in which the product is to be diluted is not specified at all, the packaging requirements apply only for the packaging of the concentrated product.

O26 A - Recycling design of packaging and closures (excluding pouches)

Plastic packaging of less than 200 liter should have a design that enables effective material recovery. This means that:

- The plastic packaging and closure must be made from Polyethylene (PE), Polypropylene (PP) or Polyethylene terephthalate (PET).

  Exemption is made for spray triggers that can contain following plastics in small technical details: polyoxymethylene (POM), expanded polyethylene (EPE), ethylene butyl acrylate copolymer (EBA), synthetic rubber copolymer of acrylonitrile and butadiene (NBR), and up to 6% Ethylene vinyl acetate (EVA)

Exemption is made for 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/cm³.

- PS (polystyrene) and PVC (polyvinylchloride) or plastics based on other types of halogenated plastics must not be present in the closure.

- Packaging should be white or uncoloured. Exemption: packaging containing recycled plastic (postconsumer recycled) may be coloured/tinted. The colouration may not include carbon black.

  Exemption is made for small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the box/bottle/container or the closure to the correct plastic fraction.

- Carbon black pigments can not be added to the closures. Exemption is made for small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the box/bottle/container or the closure to the correct plastic fraction.
- Fillers (such as CaCO3) cannot be included in PE or PP packaging and closures at a level that the density of the plastic exceeds 0.995g / cm3
- Metal parts may not be included in the packaging or closure.

  There is, however, an exemption for parts for foam triggers as well as other parts of the foam function in foam bottles, which are sold together with refill packaging to the professional market. Small metal parts in pumps are also exempted (both for professional and consumer, with or without refill).
- Packaging and closures must be compatible with each other, in accordance with the following:
  - PET: closures must have a density of less than 1 g / cm^3.
    - Silicon closures are not allowed
  - PP and PE:
    - Silicon closures are not allowed
  - PE: PP/OPP-closures are not allowed unless the following test or similar is stated on the packaging: "Take the cap/closure off prior to recycling to improve recycling".

Packaging includes bottles, containers and similar. Closures includes caps/lids, dosage equipment and pumps mounted on the packaging.

✉ Packaging specifications (including bottle and closures) or certificate showing the plastic used and what colours the packaging and closure have.

✉ Appendix 4 Declaration from the manufacturer of the packaging.

✉ A signed declaration of compliance with the stated material composition for the packaging, including bottle, closure, filler, colorant where applicable, Appendix 4 or an equivalent declaration may be used.

✉ A calculation showing that the density measurement is not exceeded.

✉ Label showing text regarding instruction to remove the cap before recycling, where applicable.

O26 B - Labels for rigid plastic packaging: Design for recycling of packaging

- For 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/cm3. 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[1].

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

    - Exemption: Fold-out (cross-over) labels of PP if the label does not cover more than 50% of the packaging surface for sizes ≤ 500 ml and 70% for sizes > 500 ml.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[2].

- Containers in polyethylene terephthalate (PET) must have a label of a different plastic material, with a density < 1.0 g/ cm3, 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).

- Polystyrene (PS), 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: Nordic Ecolabelling conducted a project on labels in 2020 and concluded that requirements on labels should be included in the criteria. This requirement was introduced in 2021. More information can be found in the background document under the argumentation regarding requirement O26B. 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.

[2] https://recyclass.eu/wp-content/uploads/2021/10/RecyClass-Washing-QT-Procedure-for-Paper-Labels-applied-on-HDPE-and-PP-Containers_FINAL.pdf (Accessed on 2021-11-19)
[3] https://recyclass.eu/wp-content/uploads/2021/10/RecyClass-Washing-QT-Procedure-for-Paper-Labels-applied-on-HDPE-and-PP-Containers_FINAL.pdf (Accessed on 2021-11-19)

✉ 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.

✉ Declarations that PS, 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.

O27 Recycling design of pouches/plastic bags

- The plastic packaging and closure must be made from Polyethylene (PE), Polypropylene (PP) or Polyethylene terephthalate (PET).

Exemption is made for TPE-PE in fittings for pouches in closed-system automatic dosing.

- The packaging should be made of monomaterial, i.e. not laminates with layers of different materials.

A transition period is introduced for pouches in closed-system automatic dosing until 31.12.2023.

- Silicone, PS and PVC or plastics based on other types of halogenated plastics must not be present in the closure or label.
- Carbon black pigments can not be added to the pouch or closures. Exemption is made for text and pictograms. Exemption is also made for small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the pouch or the closure to the correct plastic fraction.
- Fillers (such as CaCO3) cannot be included in PE or PP packaging and closures at a level that the density of the plastic exceeds 0.995g / cm^3.
- Barrier coatings can only be made of EVOH (Ethylene vinyl alcohol) in maximum amounts of 5% related to the total weight.

Closures includes caps and lids. The packaging includes pouches or other plastic "bags".

✉ Packaging specifications (including pouch, labels and closures) or certificate showing the plastic used and what colours the packaging and closure has.

✉ Appendix 4 declaration from the manufacturer of the packaging.

✉ A signed declaration of compliance with the stated material composition and barrier coatings, for the packaging including pouch, closure, filler, colourant where applicable, Appendix 4 or an equivalent declaration may be used.

✉ A calculation showing that the density measurement is not exceeded.

O28 Weight-Utility Ratio (WUR)

WUR is a measure of the amount of packaging used to deliver an amount of product with a certain benefit.

The exemptions from WUR calculation are:

- Packaging made from more than 80% post-consumer recycled (PCR)* raw material is exempted from the requirement.
- Products that are supplied in packaging that is part of a take-back system** for a product.

** 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.

*** Take-back system refers to packaging that are taken back, washed and refilled. Packaging that is a part of a recycling system where the packaging is recycled into new plastic is not part of what here is called a take-back system.*

The calculation of WUR (grams of packaging/litre of in-use solution) is performed as follows:

$$WUR = \Sigma [(2*Vi - 2.5*Ri)/(Di * ti)] \leq \text{limit value in table O28}$$

Vi = Weight of primary packaging in grams, including closure, fitted dosing devices and similar + any refills (that are sold per original bottle) in grams including closures.

Ri = Weight (g) of recycled material (postconsumer) in the packaging component (i) in grams.

Packaging is considered postconsumer recycled if the raw materials are recovered following use by consumers. If the raw material is industrial waste from the material or packaging producer's own production, the material is not considered to be recycled.

Di = No. of functional doses in the primary packaging component (i). For products that are sold pre-diluted, D = product volume (in no. of litres).

If the primary packaging is sold packaged together with a refill, D is calculated as the sum of the functional doses in both packs (just as V is the sum of the weight of both packs (see description of V)).

ti = Reuse factor. This is 1 + the number of times the packaging component (i) is reused (through the sale of refills). t = 1 if the packaging component is not reused for the same function (disposable packaging).

t > 1 may only be used if it can be documented that the packaging is reused several times for the same purpose.

Table O28 WUR limit values

Product type	VNF limit (grams of packaging/litre of in-use solution)
Foam/spray products	175,0
Other RTU products	150,0
Concentrated cleaning products including wash polish/wax-and-wash products and facade and terrace cleaners	1,0
Concentrated products for refill for RTU bottles which are always diluted at least 10 times by the	30

user to the finished product with a certain amount of water *	

**Note that if the refill is dosed as a unit containing a water-soluble foil intended not to be removed before diluting, the foil must be part of the product formulation in the requirements dealing with CDV, environmental hazards and aNBO and anNBO. (O11-O13). If the product is not marketed together with a "mother" packaging with contents, but if the label or other communication refers to a specific packaging, bottle or similar, which should be used for dilution, this is referred to as a "mother" packaging. WUR for this "mother" packaging is calculated as if the packaging were filled with finished product.*

☒ Declaration/documentation from the packaging manufacturer stating the type of material in the packaging components (e.g., closure (cap, spray nozzle etc.), bottle and labels). Appendix 4 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 Nordic Ecolabelling's websites.

☒ Declaration from the packaging manufacturer about the proportion of recycled material, if recovered/recycled material is used. Appendix 4 can be used.

☒ If t >1: Documentation in the form of sales statistics or similar showing how many refills are sold per original packaging.

☒ If the exemption is used:

- Documentation that shows that packaging made of more than 80% post-consumer recycled (PCR) material (Appendix 4 can be used).

or

- Documentation that shows is part of a take-back system for a product.

O29 Spray products and concentrated products for refill for RTU bottles – Packaging

a) Sprays that use a propellant must not be used.

b) Foam/spray products: all spray products must have a permanent aerosol reducing foaming nozzle.

Alternatively, other aerosol-reducing devices such as aerosol-reducing formulation in the form of a viscous product. This is acceptable if there is a test showing that the amount of inhalable, thoracic and respirable aerosol is at least as low for the test product in its ordinary packaging compared to a reference product with a mesh foamer. The reference product must be a Nordic Swan labelled product with for example a mesh foamer. The chemical composition and physical properties of the reference product must be equivalent to the cleaning product that is the subject of the licence application. The test must be performed according to "Bestemmelse av inhalerbar, torakal og respirabel aerosolfraksjon" as described in Olsen et al. (2017)[4]. The test must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 1 (point 1A).

[4] Rengjøringsmidler i sprayform – Frigir de helseskadelige stoffer til arbeidsatmosfæren som kan inhaleres til lungene? Olsen, R., *et al.* (2017). STAMI-rapport nr. 2. ISSN nr. 1502-0932. https://brage.bibsys.no/xmlui/bitstream/handle/11250/2433134/STAMI-rapport%2Bnr%2B%2B2%2B2017.pdf?sequence=2

c) Packaging for concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water must be designed so that the user does not come in contact with the product when diluting.

d) For concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water: If it is communicated on the label or in any other way that the product can be used in a spray bottle, but there is no reference to a specific spray bottle, the following text must be included: "The spray bottle must have a foaming nozzle to protect the user's health".

✉ a: Documentation that propellant is not used, e.g. description of the packaging

✉ b: Declaration/documentation from the manufacturer of the spray trigger, stating that it has a permanent foaming nozzle.

Alternatively

✉ b: Description of the aerosol-reducing device and a report from the test of the aerosol reducing device in comparison with a reference product with mesh foamer if relevant.

✉ b: Documentation regarding the test laboratory in accordance to appendix 1.

✉ c: Description of the packaging design showing that the user is not in contact with the product when diluting. Documentation in the form of a technical description and user instructions showing how the user avoids contact with the product.

✉ d: Label showing the text "The spray bottle must have a foaming nozzle to protect the user's health".

4 Environmental management and regulatory requirements

To ensure that Nordic Ecolabelling requirements are fulfilled, the following procedures must be implemented.

O30 Responsible person and organisation

The company shall appoint individuals who are responsible for ensuring the fulfilment of the Nordic Ecolabelling requirements, for marketing and for finance, as well as a contact person for communications with Nordic Ecolabelling.

✉ Organisational chart showing who is responsible for the above.

O31 Documentation

The licensee must archive the documentation that is sent in with the application, or in a similar way maintain information in the Nordic Ecolabelling data system.

🔑 Checked on site as necessary.

O32 Quality of the cleaning product

The licensee must guarantee that the quality of the Nordic Swan Ecolabelled product does not deteriorate during the validity period of the licence.

🔑 The claims archive is checked on site.

O33 Planned changes

Written notice must be given to Nordic Ecolabelling of planned changes in products and markets that have a bearing on Nordic Ecolabelling requirements.

✉ Procedures detailing how planned changes in products and markets are handled.

O34 Unplanned nonconformities

Unplanned nonconformities that have a bearing on Nordic Ecolabelling requirements must be reported to Nordic Ecolabelling in writing and journaled.

✉ Procedures detailing how unplanned nonconformities are handled.

O35 Traceability

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

✉ Description of/procedures for the fulfilment of the requirement.

O36 Legislation and regulations

The licensee shall ensure compliance with all applicable local laws and provisions at all production facilities for the Nordic Swan Ecolabelled product, e.g. with regard to safety, working environment, environmental legislation and site-specific terms/permits.

✉ Duly signed application form.

🔑 The requirement is checked on site. The applicant must be able to describe on on-site inspection to which regulatory authorities they are subject to, as well as the authorities' site-specific conditions and environmental concessions.

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-ecolabel.org/regulations/

Follow-up inspections

Nordic Ecolabelling may decide to check whether cleaning products 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 cleaning 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 6.0 of the criteria for Cleaning products on 7 November 2018. The criteria are valid until 31 October 2022.

On 29 May 2019 Nordic Ecolabelling decided to adjust requirement O7 by exempting fragrances from exclusion of VOC. The new version is called 6.1.

On the 21 January 2020 Nordic Ecolabelling decided to adjust requirements O26-O28 to harmonise them with same requirements in criteria for laundry detergents and stain removers. It was also specified that concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product with a certain amount of water can be Nordic Ecolabelled together with the RTU product. Several requirements were adjusted to specify what applies for these concentrated refills. The new version is called 6.2.

On the 11 August 2020 Nordic Ecolabelling decided to introduce a transition period for requirement O27 until 2021-08-31. The new version is called 6.3.

On the 1 December 2020 Nordic Ecolabelling decided to adjust requirement O26 by allowing metal parts in pumps, and to clarify that the VOC exemption in requirement O7 also applies for denaturing agents in ethanol. The new version is called 6.4.

On 23 February 2021 Nordic Ecolabelling decided to prolong the validity of the criteria with 12 months until 31 October 2023. An exemption for membranes of thermoplastic elastomer was introduced in O26. The new version is called 6.5.

On 29 June 2021 Nordic Ecolabelling decided to clarify the packaging requirements for concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product. Furthermore Nordic Ecolabelling decided to exempt plastic packaging of volume bigger than 200 litres from the recycling design requirement (O26). The new version is called 6.6.

On 27 September 2021, Nordic Ecolabelling decided to edit requirement O26 to include an exception for EVA content in triggers for spray products.

On 30 November 2021 it was decided to prolong the validity of the criteria until 31 December 2024.

Further, as notified in O26 on publishing, Nordic Ecolabelling has conducted a label project to investigate how requirements for labels could be implemented in the criteria. The new label requirement called "O26 – B Labels for rigid plastic packaging: Design for recycling of packaging" is now included in the criteria, with a transition period until 2023-12-31. The new version is called 6.7 and is valid until 31 December 2024.

Nordic Ecolabelling decided on 29 March 2022 to adjust requirement O11 and O21 by also exempting H411 classified surfactants from the requirement. The new version is called 6.7.

On 28 June 2022, Nordic Ecolabelling decided to introduce a time-limited exemption from the monomaterial requirement (O27) for pouches in closed-system dosing until 31.12.2023 and to introduce an exemption from the PE prohibition (O27) for TPE-PE in fittings for pouches in closed-system automatic dosing (no time limitation). Further on August 9, 2022, Nordic Ecolabelling decided to clarify that products containing microorganisms are only for the professional market and only for indoor use. The new version is called 6.9.

On 18 October 2022, Nordic Ecolabelling decided to change the allowed amount of EVOH in flexible plastic pouches (O27) from 2% to 5%. The new version is called 6.10.

On 29 November 2022 it was decided to prolong the validity of the criteria until 31 December 2025. The new version is called 6.11.

On 6 June 2023, Nordic Ecolabelling decided to change the requirements for microorganisms (O10) so that it is no longer required to state on the label/products information sheet that "the products shall not be used in places where immunocompromised people are present". At the same time a requirement that it must be controlled, that the product is not contaminated with pathogen microorganisms is introduced. The new version is called 6.12.

On 24 October 2024 Nordic Ecolabelling decided to change the transition period of the requirement O26B Labels for rigid plastic packaging until 2024-12-31. The new version is called 6.13.

On 13 August 2024 Nordic Ecolabelling decided to allow IFS standard for Household and Personal care as an alternative to ISO9001 (Appendix 1). The new version is called 6.14.

On 15 October 2024 Nordic Ecolabelling decided to adjust requirement O7 by exempting acetic acid from exclusion of VOC. On 10 December 2024 it was decided to prolong the validity of the criteria until 31 August 2027. The new version is called 6.15.

On 20 May 2025 Nordic Ecolabelling decided to adjust requirement O26 by making an exemption for fold-out (cross-over) labels of PP. The new version is called 6.16.

Appendix 1 Analyses, test methods and calculations

1A Requirements on the analysis laboratory

The following stipulations apply regarding ecotoxic effects, microorganisms and Challenge tests. 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 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, 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 aimed at differentiating between different cleaning 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, ISBN 92-64-1222144) or similar methods must be used. If equivalent methods are used, these must be evaluated by an independent body 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 and 203 in OECD guidelines for testing of chemicals (ISBN 92-64-1222144) or equivalent test methods

For chronic aquatic toxicity test methods nos. 210*, 211, 215*and 229* in the OECD Guideline for the Testing of Chemicals (ISBN 92-64-1222144) 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 (ISBN 92-64-1222144) 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 (ISBN 92-64-1222144) 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.

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. In order for a substance to be regarded as anaerobically degradable, a minimum of 60% mineralisation is required after maximum 60 days (equates to > 60% ThOD / $ThCO_2$ or > 70% DOC reduction).

Substances that are not surfactants and are not found on the DID-list, 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 (Potential) endocrine disruptors

A (potential) endocrine disruptor is an exogenous substance or mixture of substances that changes the function(s) of the hormonal system and thus causes serious health effects in an unaffected organism, its offspring or populations.

Nordic Ecolabelling counts all substances that in the EU are considered to be (potential) endocrine disruptors (categories 1, 2 and 3b: "Category 1 - evidence of endocrine disrupting activity in at least one species using intact animals"; "Category 2 - at least some in vitro evidence of biological activity related to endocrine disruption"). Where changes are made to the EU's list, it is the latest updated reports that apply.

The most recent reports can be obtained from http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf and an Access database in which all evaluated substances listed can be downloaded at http://ec.europa.eu/environment/chemicals/endocrine/strategy/index_en.htm.

8 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.

To calculated CDV in R11, a worksheet is available from Nordic Ecolabelling Web sites, see page 2 in this criteria document.

If no data for chronic toxicity are available, acute data and the associated safety factor can be used to estimate the chronic toxicity factor.

Appendix 2 Declaration from the producer of the cleaning product

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabelling of cleaning products. 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: _____

Product type / areas of use:

_____

☐ Professional product ☐ Consumer/retail product

Products for professional use are defined here as products that are marketed for use in professional contexts such as institutions, catering kitchens, restaurants and within the public sector.

Where products are sold to both professionals and consumers, the product is considered a professional product if the proportion sold to professionals is 80% or higher. Where there is any confusion about whether a product is for professionals or consumers, Nordic Ecolabelling may require documentation explaining where the product is intended to be sold.

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

- Ingoing substances: all substances in the Nordic Swan Ecolabelled product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.
- Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than ≤100,0 ppm (≤0,01000 weight percent, ≤100,0 mg/kg) in the Nordic Swan Ecolabelled product.
- Impurities in the raw materials exceeding concentrations ≥10000 ppm (≥1,000 weight percent, ≥10000 mg/kg) 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.

O6, O17 : Does the product contain 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 och 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	☐
O7, O18: Does the product contain any of the following 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	☐
Quaternary ammonium salts that are not readily biodegradable	Yes	☐	No	☐
Organochloride compounds and hypochlorite	Yes	☐	No	☐
Methyldibromoglutaronitrile ((MG, CAS 35691-65-7)	Yes	☐	No	☐
Methylisothiazolinone (MI, CAS 2682-20-4) If yes, state the amount (%) _____	Yes	☐	No	☐
Nitro musks and polycyclic musk compounds	Yes	☐	No	☐
Phthalates	Yes	☐	No	☐
Phosphate, phosphonate, phosphonic acid and phosphoric acid? If yes, state the amount (%) _____	Yes	☐	No	☐
VOC *Volatile organic compounds are defined in accordance with the European Commission's directive 1999/13/EC on the limitation of emissions of volatile organic compounds with steam pressure > 0.01 kPa at 20°C.* Please note that as for all other ingoing substances on this form, any ingoing VOC substances that are exempted, including exempted denaturing agents, must be stated.	Yes	☐	No	☐
Fluoro surfactants and othert perfluorinated and polyfluorinated substances (PCF)	Yes	☐	No	☐
BHT (butylated hydroxytoluene, cas 128-37-0) If yes, state the amount (%) _____	Yes	☐	No	☐
D4 (oktametylcyklotetrasiloxan, CAS 556-67-2) D5 (dekametylcyklopentasiloxan, CAS 541-02-6) D6 (dodecamethylcyclohexasiloxane CAS 540-97-6)	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:	Yes Yes	☐	No 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: 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: all dimensions of the particles are equal to or less than 5 mm. 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: 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. polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006]. polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006]. 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.*			
Substances considered to be (potential) category 1 or 2 endocrine disruptors accordance with the European Union’s reports concerning endocrine disruptors The EU’s reports on potential endocrine disruptors can be read in their entirety at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf, see appendix page 238 onwards)	Yes	☐ No	☐
Substances that have been judged in the EU to be PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative), in accordance with the criteria in Annex XIII of REACH and substances that have not yet been investigated but which meet these criteria.	Yes	☐ No	☐
Substances on the Candidate List (SVHC), se ECHA webpage: http://echa.europa.eu/candidate-list-table	Yes	☐ No	☐
Nanomaterials/-particles *The definition of a nanomaterial follows the European Commission’s definition of nanomaterials from 18 October 2011: ”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*	Yes	☐ No	☐

external dimensions is in the size range 1 nm-100 nm." Examples include ZnO, TiO2, SiO2 and Ag. Polymer emulsions are not considered nanomaterials			
O8, O19: Does the product contain fragrances (incl. fragrances substances in plant extracts)?	Yes ☐	No ☐	
If yes, have fragrances been added in line with IFRA guidelines? *(IFRAs (International Fragrance Association, www.ifraorg.org/)*	Yes ☐	No ☐	
If yes, is the product foam product?	Yes ☐	No ☐	
If yes, does the product contain fragrance 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 product contain following:	Yes ☐	No ☐	
If yes, send in perfume specifications			
If yes, does the product contain HICC, chloroatranol and atranol?	Yes ☐	No ☐	
O9, O20: Does the product contain preservatives? If yes, state name, amount (%) and log Kow/BCF: _____	**Yes** ☐	**No** ☐	
O10: Does the product contain microorganisms?	Yes ☐	No ☐	
O11, O21: Does the product contain substances classified as environmentally hazardous with H410, H411 and H412, incl self-classifications in the ECHA database? If yes, state the amount (% by weight) per classification: _____	**Yes** ☐	**No** ☐	
O26, O27: Are all parts of packaging compatible in regards of O26 and O27?	**Yes** ☐	**No** ☐	

Cananga Odorata och 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 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.

_____

_____

_____

_____

_____

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

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

Appendix 3 Declaration from the manufacturer of the raw material / ingredient

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of cleaning products.

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

Name of 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 http://www.nordic-ecolabel.org/product-groups/group/?productGroupCode=026):

_____

_____

_____

_____

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 raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations <100,0 ppm (<0,01000 weight percent, <100,0 mg/kg) in the Nordic Swan Ecolabelled product.
- Impurities in the raw materials exceeding concentrations of ≥ 10000 ppm (≥ 1,000 weight percent, ≥ 10000 mg/kg) 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 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)				
O6, O17: Does the raw material/ingredient contain 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 och 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	☐
O7, O18: Does the raw material/ingredient contain any of the following 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	☐
Quaternary ammonium salts that are not readily biodegradable	Yes	☐	No	☐
Organochloride compounds and hypochlorite	Yes	☐	No	☐
Methyldibromoglutaronitrile ((MG, CAS 35691-65-7)	Yes	☐	No	☐
Methylisothiazolinone (MI, CAS 2682-20-4) If yes, state the amount (%) _____	Yes	☐	No	☐
Nitro musks and polycyclic musk compounds	Yes	☐	No	☐
Phthalates	Yes	☐	No	☐
Phosphate, phosphonate, phosphonic acid and phosphoric acid? For polymer dispersions / waxes: If yes, state the amount (%) _____	Yes	☐	No	☐
VOC Volatile organic compounds are defined in accordance with the European Commission's directive 1999/13/EC on the limitation of emissions of volatile organic compounds with steam pressure > 0.01 kPa at 20°C. Please note that as for all other ingoing substances on this form, any ingoing VOC substances that are exempted, including exempted denaturing agents, must be stated.	Yes	☐	No	☐
Fluoro surfactants and othert perfluorinated and polyfluorinated substances (PCF)	Yes	☐	No	☐
BHT (butylated hydroxytoluene, cas 128-37-0) If yes, state the amount (%) _____	Yes	☐	No	☐
D4 (oktametylcyklotetrasiloxan, CAS 556-67-2) D5 (dekametylcyklopentasiloxan, CAS 541-02-6) D6 (dodecamethylcyclohexasiloxane CAS 540-97-6)	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: 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: all dimensions of the particles are equal to or less than 5 mm.				

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: 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. polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006]. polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006]. 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.*	
Substances considered to be (potential) category 1 or 2 endocrine disruptors accordance with the European Union’s reports concerning endocrine disruptors *The EU’s reports on potential endocrine disruptors can be read in their entirety at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf, see appendix page 238 onwards)*	Yes ☐ No ☐

Substances that have been judged in the EU to be PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative), in accordance with the criteria in Annex XIII of REACH and substances that have not yet been investigated but which meet these criteria.	Yes	☐	No	☐
Substances on the Candidate List (SVHC), ECHA webpage: http://echa.europa.eu/candidate-list-table	Yes	☐	No	☐
Nanomaterials/-particles *The definition of a nanomaterial follows the European Commission's definition of nanomaterials from 18 October 2011 "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	☐
O8, O19: Does the raw material/ingredient contain fragrances (incl. fragrance substances in plant extracts)?	Yes	☐	No	☐
If yes, have fragrances been handled in line with IFRA guidelines? www.ifra.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 och 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, chloroatranol and atranol?	Yes	☐	No	☐
O9, O20: Does the raw material/ingredient contain preservatives? If yes, state name and log Kow/BCF:	Yes	☐	No	☐
O11, O21: Does the raw material/ingredient contain substances classified as environmentally hazardous with H410, H411 and H412, incl self-classication in the ECHA database? 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.

_____

_____

_____

Are renewable raw materials used in the raw material/ingredient? Yes ☐ No ☐

Part 2 - Only to be used if a raw material/ingredient contains renewable raw materials

List the renewable raw materials used (e.g. palm oil, coconut oil, rapeseed oil, beeswax) and the amount in % in yearly basis:

PLEASE ONLY ONE RENEWABLE RAW MATERIAL PER LINE

	Origin of renewable raw material in the raw material/ingredient (e.g. palm oil, coconut oil, rapeseed oil, beeswax, etc)	**Amount of the renewable raw material (weight percent) in the raw material/ingredient on a yearly basis** **The calculation of the proportion of the renewable material can be done using the following formula:** **Used amount renewable material / (used amount renewable material + used amount non-renewable material) x 100%** **Amounts in kg, molar weight or carbon atoms can be used in the calculation. Average carbon chain lengths can be used.** **State how the calculation has been done.**
Renewable raw material 1		
Renewable raw material 2		
Renewable raw material 3		
Renewable raw material 4		
Renewable raw material 5		
Total amount (weight-%) of renewable raw materials in the raw material/ingredient:		

For each renewable raw material in the raw material / ingredient, the following data is to be completed:

Renewable raw material 1 (E.g. palm oil or coconut oil or rapeseed oil or beeswax): _____	
Name of the supplier, if stated:	
Is the renewable raw material sustainability certified? **Yes** ☐ **No** ☐	
If yes, 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	☐

Renewable raw material 2 (E.g. palm oil or coconut oil or rapeseed oil or beeswax): _____	
Name of the supplier, if stated:	
Is the renewable raw material sustainability certified? **Yes** ☐ **No** ☐	
If yes, 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	☐

Renewable raw material 3 (E.g. palm oil or coconut oil or rapeseed oil or beeswax): _____	
Name of the supplier, if stated:	
Is the renewable raw material sustainability certified? **Yes** ☐ **No** ☐	
If yes, 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	☐

Renewable raw material 4 (E.g. palm oil or coconut oil or rapeseed oil or beeswax): _____	
Name of the supplier, if stated:	
Is the renewable raw material sustainability certified? **Yes** ☐ **No** ☐	
If yes, 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	☐

Renewable raw material 5 (E.g. palm oil or coconut oil or rapeseed oil or beeswax): _____	
Name of the supplier, if stated:	
Is the renewable raw material sustainability certified? **Yes** ☐ **No** ☐	
If yes, 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 composition of the product, a new declaration of fulfilment of the requirements is to be submitted to Nordic Swan Ecolabelling.

Place and date	
Raw material producer	Company name/stamp
Responsible person	Signature of responsible person electronic signature is accepted
Telephone	Email

Appendix 4 Declaration from the manufacturer of the primary packaging incl. closures

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of cleaning products.

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

Producer/distributor
Part of the packaging (bottle, pouch, closure, label)
Packaging material (type of plastic: PE, PET, PP; cardboard etc.)

NOTE! Closure includes cork / lid and mounted dosing devices / pumps.

Plastic packaging (includes bottle)		
Is the plastic packaging white or transparent? (O26)	Yes ☐	No ☐
Is the plastic packaging coloured/tinted with Carbon black? (O26)	Yes ☐	No ☐
Has carbon black been added to the plastic packaging? (O26) If so, can the NIR sensor read and sort the plastic packaging into the correct plastic fraction? Please submit test results or other documentation showing correct reading/sorting.	Yes ☐ Yes ☐	No ☐ No ☐
Is there metal coverings or metal seals or other metal parts? (O26)	Yes ☐	No ☐
Are fillers used? (O26) If yes, state concentration and density of the plastic: _____	Yes ☐	No ☐
Does the packaging contain post-consumer recycled/regrind material (PCR)? (O28) If yes, what is the recycling percent? _____	Yes ☐	No ☐
Plastic packaging: pouches		
Is the packaging of monomaterial, ie not laminates with different material layers (O27)?	Yes ☐	No ☐
Is the pouch white or transparent (O27)?	Yes ☐	No ☐
Is the pouch tinted/coloured with Carbon Black (O27)?	Yes ☐	No ☐
Has carbon black been added to the pouch? (O27) Has carbon black been added to other elements than text and pictogram? If so, can the NIR sensor read and sort the pouch into the correct plastic fraction? If yes, please submit test results or other documentation showing correct reading/sorting.	Yes ☐ Yes ☐ Yes ☐	No ☐ No ☐ No ☐
Are fillers used (O27)? If yes, state concentration and density of the plastic: _____	Yes ☐	No ☐
Is there a barrier coating of EVOH (Ethylene vinyl alcohol) of max 5% of the weight of the packaging (O27)?	Yes ☐	No ☐
Does the packaging contain postconsumer recycled/regrind material (PCR)? (O27) If yes, what is the recycling percent? _____	Yes ☐	No ☐

Paper or cardboard or packaging		
Does the paper/carton/packaging contain postconsumer regrind/recycled material (PCR)? (O28) If yes, what is the recycling percent? _____	Yes ☐	No ☐
Closure (includes cork / lid and mounted dosing devices / pumps)		
Is there PS (Polystyrene) or PVC or plastics based on other types of halogenated plastics present in the closure? (O26-O27)	Yes ☐	No ☐
Is the closure black? (O26-O27)	Yes ☐	No ☐
Has carbon black been added to the closure? (O26-O27) If so, can the NIR sensor read and sort the closure into the correct plastic fraction? Please submit test results or other documentation showing correct reading/sorting.	Yes ☐ Yes ☐	No ☐ No ☐
Are there metal parts in the closure, such as metal in foam trigger? (O26) What is the density (g / cm^3) of the closure? _____	Yes ☐	No ☐
Does the closure contain post-consumer recycled/regrind material (PCR)? (O28) If yes, what is the recycling percent? _____	Yes ☐	No ☐
If the closure is a trigger to a spray product: Does it have a permanent aerosol reducing foaming nozzle? (O29) Permanent means that it is fixed in foaming position. Please describe the ingoing materials (in percentage) in the trigger: _____ _____ _____	Yes ☐	No ☐
Label and shrink film label		
Is there PS or PVC or plastics based on other types of halogenated plastics present in the label? (O26)	Yes ☐	No ☐
Are there metal parts in the label such as metallized labels? (O26)	Yes ☐	No ☐
Does the packaging have labels covering > 60% of the surface of the packaging? (O26)	Yes ☐	No ☐
Does the label contain post-consumer recycled/regrind material (PCR)? (O26) If yes, what is the recycling percent? _____	Yes ☐	No ☐

Signature of the packaging producer

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

Appendix 5 Laboratory test

This appendix describes a proposal for a laboratory test. Other well-described and well-documented tests may also be used. If some other test than the test described below is used, the test must be approved in advance by Nordic Ecolabelling.

The purpose of the laboratory test is to determine whether the test product produces a result that is better than or as good as a reference product*, and that the test product does harm the surfaces that it is marketed for use on.

> ** Reference product refers to an equivalent product within the same category and designed for the same area of use. For example, a professional WC cleaner shall be tested against another professional WC cleaner and a consumer kitchen cleaner tested against a second consumer kitchen cleaner.*

Proposal for a laboratory test

The test institute must fulfil these framework requirements so that the test provides a reliable result. Questions 1 and 2 below under "requirements" shall be answered by the applicant.

Reference product
The test product and comparative reference product shall be tested in the same way. Both products shall belong to the same category (professional/consumer and RTU/concentrated) and designed for the same area of use (WC, kitchen, sanitary, all-purpose, glass, etc.). Refer to the section “What products are eligible for a Nordic Swan Ecolabel”. The reference product must be a product that is well-established/well-known in the market.

Dosage
The lowest specified dosage for normal soil of the test product and the reference product respectively shall be used for the performance test.

Water test
A water test shall be performed using the same quantity of water as in the other tests. Data from the water test shall be collated together the other test data. The test and reference product must both perform better than water alone.

Soil
The soiling used for each test must be relevant to the product’s intended area of use according to item 4 "Soil" in this Appendix.

Requirements for test laboratories
The requirements stipulated for test laboratories are presented in Appendix 1.

Requirements

1. Dose

The dose that must be used is the lowest recommended dose for the product and the recommended dose for the comparative product for normal soils/normal use.

✉ State the dose of the product and of the comparative product.

2. The comparative product

The reference product must be recently purchased and must be a product intended for the same area of use (kitchen, sanitary, window) and belong to the same product category (professional, consumer, RTU) as the product.

✉ Answer the following:

a) How long has the comparative product been on the market?
b) What areas of application do the product and the comparative product have in common?
c) Why was this product in particular, chosen as the comparative product?

The manufacturer can compare the product for which they apply the Nordic Swan Ecolabel with a self-produced product. However, the prerequisites for doing so are that the self-produced product is well-known in the market and is intended for the same area of use as the product for which the license is applied for (see above).

3. Surfaces

The surfaces on which the products are tested must be relevant to the area of use in respect of which the product is marketed. If other surfaces have been chosen must this be explained.

✉ Answer the following:

a) What type of surface was used in the test?
b) Why is this surface relevant?
c) Is the product gentle on this type of surface?

4. Soil

The soil mixture must be relevant to the product's intended area of use according to the following table 1. Products marketed for several different areas of use or other types of soil should be tested on all the major types of soil that products market with, including soil types, that may not be listed in the table (for example, protein and starch). The soil mixture must be as follows: relevant to the area of use of the product – homogenous – based on well-described and internationally available substances.

Table 1 Soil(s)

Product/Area of use	Soil(s)
Sanitary cleaner	Lime soap and limescale
WC cleaner	Limescale
All-purpose cleaner and kitchen cleaner	Fat
Wash polish/wash-and-wax care products	Fat
Window and glass cleaner	Fat (fingerprints) and particulate matter (dust and/or soot).
Oven cleaners	Burned. The dirt should contain a mixture of fats, proteins and carbohydrates.
Facade and terrace cleaners	Soot, fat, oil, asphalt (bitumen), biological material*

**Note that products claiming biocidal effects such as limiting or hindering the growth of biological material (algae, mould, bacteria) cannot be Nordic Swan Ecolabelled, see section "What can carry the Nordic Swan Ecolabel?". This requirement refers to the ability to wash off biological material.*

✉ State the formula for the soil

✉ State why the composition of the soil is relevant to the area of use of the product.

5. Method of cleaning

The method of cleaning shall be relevant to the product type. The test shall be performed for the soil types specified in Table 1 that are relevant to the product's area of use.

De-scaling performance can be determined by gravimetric analysis. Fat-removing performance is determined by reflectance. The removal of particulate can be determined by gravimetric analysis or reflectance.

✉ Describe the method of cleaning and how this method is relevant.

6. Description of the test

The same number of repetitions shall be performed for the test product, reference product and water (at least 10 per product). One batch of soil that is sufficient to all tests shall be used. The soil shall be applied to at least 30 test pieces of a relevant material. Refer to item 3 “Surfaces”. Following this, the tests shall be performed using the test product, reference product and water.

The test shall be performed using a random selection of soiled test pieces, i.e. at least 10 pieces shall be chosen at random for the test product, the same number for the reference product and the same number for the water test.

The reflectance of all plates must be measured before the soil is applied, after the soil has been applied and after washing.

Reflectance can also be determined visually if it is clearly explained how this assessment is conducted in a reproducible manner.

Effectiveness, EFF, is calculated separately for each plate and recorded in a table.

- ✉ Describe how soiling, washing and measurement/detection were performed.
- ✉ Specify raw data from the weighing and values from the reflectance measurements.

7. Calculation of the wash effectiveness index (EFF)

The wash effectiveness index is calculated using the following formula:

EFF = (Rc - Rb) / (Ra - Rb)

Ra = Reflectance before soiling (i.e. on a clean plate)

Rb = Reflectance after soiling

Rc = Reflectance after washing

This is performed for each individual parallel of the product, the reference product and water.

The following must also be calculated:

EFFp = Average EFF value for the product undergoing testing

EFFs = Average EFF value for the reference product

EFFs = Average EFF value for water

Requirement level

For sanitary cleaning products, both calcium and fat-removing effects must be documented. Fat and calcium-removing effects must comply with the following requirements (7.1 a or 7.1.b)

For WC cleaners, calcium removing effect must be documented and comply with one of the following requirements (7.1a or 7.1b).

In the case of all-purpose cleaners and cleaning products for kitchens, it will only be necessary to determine the fat-removing effect. (7.1 a or 7.1.b)

Wash polish/wash-and-wax care products it will only be necessary to determine the fat-removing effect. (7.1 a or 7.1.b)

Window and glass cleaner's ability to remove grease and particulate shall fulfil one of two requirements (7.1a or 7.1b).

Facade and terrace cleaners' ability to clean fat, oil and asphalt and also clean soot and biological material. They shall fulfil one of the two requirements (7.1a or 7.1b).

All product tests shall also demonstrate that the results are better than water alone, see 7.2.

7.1 a

It must be shown with a 95% unilateral confidence interval that the test product has a wash effectiveness that is greater than or equal to that of the reference product,

or

7.1 b

$EFFp \geq EFFs$

7.2. Wash effectiveness better than water

Irrespective of the method of evaluation (7.1a or 7.1b), the following shall be fulfilled:

EFFp > EFFv

☒ All raw data from all tests shall be submitted.

☒ Wash effectiveness EFF, stated to two significant figures, is calculated separately for each plate. An average is then calculated for the test product, reference product and water respectively.

☒ Calculations according to 7.1a or 7.1b demonstrating that the requirement is fulfilled.

☒ The cleaning performance of the test product in comparison to water shall be specified (7.2).

The report shall contain:

- The formulation number providing linkage to the product name and the version of the recipe that is specified in the licence application.
- The results of requirements 1-7 of this appendix, including all raw data.
- Information about the laboratory demonstrating that the laboratory fulfils the requirements of Appendix 1.

Appendix 6 User test

This appendix describes the way in which a **professional product** test is to be performed. The purpose of the test is to demonstrate, whether or not the test product for which a Nordic Swan Ecolabel licence is sought is as good as or better than a comparative product. The test must also demonstrate whether the test product harms the surfaces that it is marketed for use on.

No reference product is needed for wash polish/wash-and-wax care products, See Appendix 7d for user test for wash polish/wash-and-wax care products.

Quality requirements

At least 80% of the test persons must assess the product to be as good as or better than the reference product in order to fulfil the performance test.

Test individuals

Test individuals must be professional users* of the cleaning product. At least five professional users shall test the product. The five individuals shall be randomly chosen and shall come from five different companies/organisations/institutions.

* *Consumer products are subject to laboratory testing.*

The reference product:

The test product must be compared with the product normally used by the user. The reference product must not be the same as the test product. The test product and the reference products may be produced by the same manufacturer.

Microorganism based products are to be compared to an equivalent product without microorganisms.

Performance of the test:

The test must be performed on the type(s) of surface relevance in relation to the recommendations on the product label.

The dosage used must be the minimum dosage specified on the label for normal soil. I.e. if the normal dosage of the label is specified as an interval, the lowest* quantity in this interval must be used. Likewise, the dosage of the comparative reference product must be the lowest recommended dosage for normal soil.

**If other dosage is used than the lowest in the interval this needs to be clearly motivated.*

The duration of the test period must be sufficient for the test product to be used at least five times by the test user on the same place.

Performance questionnaire

There are four questionnaires for the user test:

- All-purpose cleaner and kitchen products (Appendix 6a)
- Sanitary cleaner (Appendix 6b)
- Window and glass cleaner (Appendix 6c)

- Cleaners for textile floors (Appendix 7a)
- Facade and terrace cleaners (Appendix 8a)
- Wash polish/wash-and-wax care products (Appendix 9a)

Each test individual must complete all questions on the questionnaire. One questionnaire shall be completed per product.

Responses shall be tabulated, see Tables 1-3 in

- Appendix 6d for all-purpose cleaners, sanitary cleaners and window/glass cleaners
- Appendix 7b for cleaners for textile floors
- Appendix 8b for façade and terrace cleaners
- Appendix 9b for wash polish/wash-and-wax care products.

The tables shall indicate the number of responses and number of each answer. The applicant must also document which individuals have answered the questionnaire and the percentage of answers.

It must be demonstrated that the recipe of the test product at the time of the performance test is the same as that submitted on application to Nordic Ecolabelling.

Documentation requirements

The following documentation must be submitted to Nordic Ecolabelling:

- A description of the way in which the test users were selected
- All reply forms received from the test users (please remember that all questions must be answered)
- The overall result/all replies received on the wash effectiveness of the user test specified in a table/a form (see table 1−3 in Appendix 6d) for all-purpose cleaners, sanitary cleaners, WC-cleaners and glass/window cleaners.
- Cleaners for textile floors shall be tabulated in appendix 7b, façade and terrace cleaners in appendix 8b and wash polish/wash-and-wax care products in appendix 9b.

The formulation of the test product must be attached to the overall result of the user test.

Appendix 6a Wash effectiveness – for all-purpose cleaners and kitchen products

The following questionnaire shall be answered (all questions) by each test individual.

Information about the test

Name of test product (= the new product): _____

Dosing of test product: _____

Name of reference product (= the product that is normally used):

_____

Dosing of reference product: _____

Types of surface on which the test product is used, specify material. Specify the material, e.g. stone, tiles, linoleum, wood, painted surface or stainless steel.

☐ Floors: _____

☐ Tables: _____

☐ Fixtures/furnishings: _____

☐ Walls: _____

☐ Ceilings: _____

☐ Other: _____

Test period

Start date: _____ End date: _____

How many times was the test product used on the same surface during the specified test period?

_____

How long have you been using the comparative product? _____

How frequently (approximately) do you use the comparative product? _____

Use

How has the product been used (floor machine, mop, etc.)? _____

_____

Where has the product been used? In which areas of use has the test been performed (kitchen, bathroom, school, office, restaurant, hotel)?

_____

_____

Which type of soil has been most problematic in this area?

_____

Assessment of the product

On completion of the tests, the test product shall be compared to the reference product and assessed using the following table.

	Poorer	As good as	Better
How do you consider the test product's ability to remove soil compared to the reference product?'			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?'			
How effective do you consider the test product in comparison to the reference product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Comments: _____

_____

_____

_____

Information on the user site

The cleaning test and the associated assessment were performed by:

Company name: _____

Company address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Further description of the site at which the cleaning test was performed:

_____

If questions regarding the test arise, Nordic Ecolabelling will first contact the producer of the cleaning product but may also contact test individuals.

Appendix 6b Wash effectiveness – for sanitary and WC cleaners

The following questionnaire shall be answered (all questions) by each test individual.

Information about the test

Name of test product (= the new product): _____

Dosing of test product: _____

Name of reference product (= the product that is normally used): _____

_____

Dosing of reference product: _____

Types of surface on which the test product is used, specify material.

☐ Wash basin: _____

☐ Bathroom cabinets: _____

☐ Tiles: _____

☐ WC: _____

☐ Floors - state type: stone, tile, terrazzo or other: _____

_____

☐ Other: _____

Test period

Start date: _____ End date: _____

How many times was the test product used on the same surface during the specified test period?

_____

How long have you been using the reference product? _____

How frequently (approximately) do you use the reference product?

_____

Use

How has the product been used (floor machine, mop, etc.)? _____

_____

Where has the product been used? In which areas of use has the test been performed (kitchen, bathroom, school, office, restaurant, hotel)?

_____

_____

Which type of soil has been most problematic in this area?

_____

_____

Assessment of the product

On completion of the tests, the test product shall be compared to the reference product and assessed using the following table.

	Poorer	As good as	Better
How do you consider the test product's ability to remove soil compared to the reference product?'			
In the case of acid products: The ability of the test product to remove calcium deposits is:			
In the case of alkaline products: How do you consider the ability of the test product to prevent calcium deposits is compared to the reference product?			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?'			
How effective do you consider the test product in comparison to the reference product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Comments: _____

_____

_____

Information on the user site

The cleaning test and the associated assessment were performed by:

Company name: _____

Company address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Further description of the site at which the cleaning test was performed:

_____

If questions regarding the test arise, Nordic Ecolabelling will first contact the producer of the cleaning product but may also contact test individuals.

Appendix 6c Wash effectiveness – for glass and window cleaners

The following questionnaire shall be answered (all questions) by each test individual.

Information about the test

Name of test product (= the new product): _____

Dosing of test product: _____

Name of comparative product (= the product that is normally used): _____

_____

Dosing of comparative product: _____

Types of surface on which the test product is used, specify material

☐ Windows ☐ Mirrors

☐ Other glass surfaces: _____

☐ Other

Test period

Start date: _____ End date: _____

How many times was the test product used on the same surface during the specified test period?

_____

How long have you been using the comparative product? _____

How frequently (approximately) do you use the comparative product? _____

Use

How has the product been used (floor machine, mop, etc.)? _____

_____

Where has the product been used? In which areas of use has the test been performed (kitchen, bathroom, school, office, restaurant, hotel)?

_____

_____

Which type of soil has been most problematic in this area?

_____

_____

Assessment of the product

On completion of the tests, the test product shall be compared to the reference product and assessed using the following table.

	Poorer	As good as	Better
How do you rate the test product's ability to remove dirt (mainly fine particles) compared to the control product?			
How do you rate the test product's ability to remove grease (mainly finger marks) compared to the control product?			
Does the test product leave edges on the surface to a greater extent than the control product?			
How effective do you consider the test product to be compared to the control product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Comments: _____

_____

_____

_____

Information on the user site

The cleaning test and the associated assessment were performed by:

Company name: _____

Company address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Further description of the site at which the cleaning test was performed:

_____

If questions regarding the test arise, Nordic Ecolabelling will first contact the producer of the cleaning product but may also contact test individuals.

Appendix 6d Summary of results

To be completed by the applicant for a Nordic Swan Ecolabel licence.

Date: _____

Name of test product: _____

Description of the selection of test individuals: _____

_____

_____

_____

How many questionnaires were sent out? _____

How many responses were received? _____

Table for the collation of answers

The results from the questionnaires shall be collated in the appropriate table below. Results are given in % of the total number of responses.

Table 1 All-purpose cleaners and kitchen products

	Poorer (%)	As good as (%)	Better (%)
How effective do you consider the test product's ability to remove soil compared to the reference product?'			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?'			
How effective do you consider the test product in comparison to the reference product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Table 2 Sanitary cleaners

	Poorer (%)	As good as (%)	Better (%)
How effective do you consider the test product's ability to remove soil compared to the reference product?'			
In the case of acid products: The ability of the test product to remove calcium deposits is:			
In the case of alkalic products: In the case of alkalic products: How is the test product's ability to prevent calcium deposits compared to the reference?			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?'			
How effective do you consider the test product in comparison to the reference product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Table 3 Glass and window cleaners

	Poorer	As good as	Better
How do you rate the test product's ability to remove dirt (mainly fine particles) compared to the control product?			
How do you rate the test product's ability to remove grease (mainly finger marks) compared to the control product?			
Does the test product leave edges on the surface to a greater extent than the control product?			
How effective do you consider the test product to be compared to the control product?			
Products with microorganisms: How do you consider the products residual cleaning effects, ie the ability to degrade fat, starch and protein?			

Comments_____

_____

_____

_____

Signature of the applicant

City and Date	Company
Name of contact person	Signature by contact person
Telephone	E-mail

Appendix 7a Performance test for Facade and terrace cleaners

The following questionnaire shall be answered (all questions) by each test individual.

Information about the test

Name of test product (= the new product): _____

Dosing of test product: _____

Name of comparative product (= the product that is normally used): _____

_____

Dosing of comparative product: _____

Types of surface on which the test product is used, specify material

☐ Wooden terrace: _____

☐ Stone floor: _____

☐ Wooden facade: _____

☐ Stone facade: _____

☐ Other surface: _____

Test period

Start date: _____ End date: _____

How many times was the test product used on the same surface during the specified test period?

_____

How long have you been using the comparative product? _____

How frequently (approximately) do you use the comparative product? _____

Use

How has the product been used (with machine, manually, etc.)?

_____

_____

Which type of soil has been most problematic in this area (oil, fa, asphalt, soot, biological material)?

_____

_____

Assessment of the product

On completion of the tests, the test product shall be compared to the reference product and assessed using the following table.

	Poorer	As good as	Better
How do you rate the test product's ability to remove dirt such as oil, fat, soot, asphalt and biological material compared to the reference product?			
How effective do you consider the test product to be compared to the reference product?			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?			

Comments: _____

_____

_____

_____

Information on the user site

The cleaning test and the associated assessment were performed by:

Company name: _____

Company address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Further description of the site at which the cleaning test was performed:

_____

If questions regarding the test arise, Nordic Ecolabelling will first contact the producer of the cleaning product but may also contact test individuals.

Appendix 7b Summary of results for Facade and terrace cleaners

To be completed by the applicant for a Nordic Swan Ecolabel licence.

Date: _____

Name of test product: _____

Description of the selection of test individuals: _____

_____

_____

_____

How many questionnaires were sent out? _____

How many responses were received? _____

Table for the collation of answers

The results from the questionnaires shall be collated in the appropriate table below:

Results are given in % of the total number of responses.

	Poorer (%)	As good as (%)	Better (%)
How do you rate the test product's ability to remove dirt such as oil, fat, soot, asphalt and biological material compared to the reference product?			
How effective do you consider the test product to be compared to the reference product?			
How do you consider the test product's gentleness to the cleaned surface compared to the reference product?			

Comments_____

_____

_____

_____

Signature of the applicant

City and Date	Company
Name of contact person	Signature by contact person
Telephone	E-mail

Appendix 8a Performance test for cleaners for textile floors

The following questionnaire shall be answered (all questions) by each test individual.

Information about the test

Name of test product (= the new product): _____

Dosing of test product: _____

Name of comparative product (= the product that is normally used): _____

_____

Dosing of comparative product: _____

Types of surface on which the test product is used, specify material

☐ Textile floor: _____

☐ Other surface: _____

Test period

Start date: _____ End date: _____

How many times was the test product used on the same surface during the specified test period?

_____

How long have you been using the comparative product? _____

How frequently (approximately) do you use the comparative product? _____

Use

How has the product been used (with machine, manually, etc.)?

_____

_____

Where has the product been used? In which areas of use has the test been performed (school, office, restaurant, hotel, other)?

_____

_____

Which type of soil has been most problematic in this area?

_____

Assessment of the product

On completion of the tests, the test product shall be compared to the reference product and assessed using the following table.

	Poorer	As good as	Better
How do you rate the test product's ability to remove dirt compared to the reference product?			
How do you consider the test product's ability to remove stains on the surface compared to the reference product?			
How effective do you consider the test product to be compared to the reference product?			
How do you consider the test product's gentleness to the cleaned surface (for example colour fastness, moist, wear on the carpet) compared to the reference product?			

Comments: _____

_____

_____

_____

Information on the user site

The cleaning test and the associated assessment were performed by:

Company name: _____

Company address: _____

Contact person: _____

Telephone: _____

E-mail: _____

Further description of the site at which the cleaning test was performed:

_____

If questions regarding the test arise, Nordic Ecolabelling will first contact the producer of the cleaning product but may also contact test individuals.

Appendix 8b Summary of the results for textile floor cleaners

To be completed by the applicant for a Nordic Swan Ecolabel licence.

Date: _____

Name of test product: _____

Description of the selection of test individuals: _____

_____

_____

_____

How many questionnaires were sent out? _____

How many responses were received? _____

Table for the collation of answers

The results from the questionnaires shall be collated in the appropriate table below:

Results are given in % of the total number of responses.

	Poorer (%)	As good as (%)	Better (%)
How do you rate the test product's ability to remove dirt compared to the reference product?			
How do you consider the test product's ability to remove stains on the surface compared to the reference product?			
How effective do you consider the test product to be compared to the reference product?			
How do you consider the test product’s gentleness to the cleaned surface (for example colour fastness, moist, wear on the carpet) compared to the reference product?			

Comments_____

_____

_____

_____

Signature of the applicant

City and Date	Company
Name of contact person	Signature by contact person
Telephone	E-mail

Appendix 9a Performance test for wash polish/wash-and-wax care products

The following requirements apply

- The product must be used by at least 5 users for 3 months.
- The product must be used with satisfactory results on the types of substrate for which the maintenance product is intended.
- The traffic conditions under which the products are to be tested must correspond to normal traffic in corridors in large office buildings.

In the user test, the user allocates points for various properties, with 5 being the highest score and 1 the lowest score.

The types of floors that must be tested

- The test must include all of the floor types for which the product is marketed. This means at least one user per floor type.

Requirements applicable to the individual parameter

- A score of 1 must not be awarded by a user for any parameter.

Overall assessment of the product

- A score of 3 must be given by at least 4 out of the 5 users (at least 80% of all users).
- A score of 1 must not be awarded by any of the users.

For each product, the individual parameters must be assessed separately (test parameters). In the case of non-standard products, Nordic Ecolabelling may permit the user's report to add a further point's assessment for other overall properties. The table below shall be used.

Product type	Floor type	Test parameter	Points (1-5p, where 5 is best)
Name of Wash polish/ wash-and-wax care product:	Types of floor for which the product is intended (to be completed by the manufacturer):	**Application** How is the product to apply/distribution capacity?	_____ P
		Foaming: Is the foam level low when applying the product? Alternatively, is the foaming satisfactory during application?	_____ P
		Odour of the product?	_____ P
		Cleaning/maintenance with the product Ability to avoid re-soiling of the floor?	_____ P

		Ability to maintain the gloss of the floor? Slip resistance? Water resistance? Cleaning ability?	_____ P _____ P _____ P _____ P
Overall assessment of the product (other parameters such as removal, drying time before next coat, wear resistance etc. can also be included here):			_____ P
Test period:			
Floor type/substrate:			
Are polishing machines used?			
Comments on overall assessment:			
User's signature:			
Name of user:			

Appendix 9b Summary of the results for wash polish/wash-and-wax care products

To be completed by the applicant for a Nordic Swan Ecolabel licence.

Date: _____

Name of test product: _____

Description of the selection of test individuals: _____

_____

_____

_____

How many questionnaires were sent out? _____

How many responses were received? _____

Table for the collation of answers

The results from the questionnaires shall be collated in the appropriate table below:

Results are given in % of the total number of responses.

Table 1. Summary of results for wash polish/wash-and-wax care products

Wash polish/wash-and-wax care products	% replies with following points		
	5, 4 or 3	2	1
How is the product to apply/distribution capacity?			
Foaming: Is the foam level low when applying the product? Alternatively, is the foaming satisfactory during application?			
Odour of the product			
Ability to avoid re-soiling of the surface			
Durability of the gloss on the floor			
Slip resistance			
Water resistance			
Cleaning effect			
Overall assessment of the product (other parameters such as removal, drying time before next coat, wear resistance etc. can also be included here)			

Comments_____

_____

_____

_____

Signature of the applicant

City and Date	Company
Name of contact person	Signature by contact person
Telephone	E-mail