

Nordic Ecolabelling for Cleaning products



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Contents

1	Environmental communication guideline for Nordic Swan Ecolabel cleaning products	4
2	What can carry the Nordic Swan Ecolabel?.....	5
3	How to read this criteria document	7
4	Requirements.....	8
	Definitions	8
	4.1 General requirements	11
	4.2 Raw material sourcing	13
	4.3 Requirements for ingoing substances	14
	4.4 Ecotoxicity and biodegradability.....	23
	4.5 Performance	26
	4.6 Packaging requirements	28
	4.7 Licence maintenance.....	35
5	Criteria version history.....	37
6	Future criteria generation	37
7	How to apply and regulations for the Nordic Ecolabelling	37
Appendix 1	Declaration from the manufacturer of the cleaning product	
Appendix 2	Declaration from the manufacturer/supplier of the raw material to the cleaning product	
Appendix 3	Analyses, test methods, and calculations	
Appendix 4	Declaration from the manufacturer of the primary packaging including closures	
Appendix 5	Laboratory Test	
Appendix 6	User test: Information and requirements	
Appendix 6a	Performance test by professional users of cleaning products	
Appendix 7	User test for wash polish/wash-and-wax care products	
Appendix 7a	Performance test by professional users of wash polish/wash-and-wax care products	
Appendix 8	Directions for raw material standards and certification schemes	

Contact information

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

Denmark

Ecolabelling Denmark
www.svanemaerket.dk

Finland

Ecolabelling Finland
www.joutsenmerkki.fi

Sweden

Ecolabelling Sweden
www.svanen.se

Iceland

Ecolabelling Iceland
www.svanurinn.is

Norway

Ecolabelling Norway
www.svanemarket.no

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1 Environmental communication guideline for Nordic Swan Ecolabel cleaning products

Nordic Swan Ecolabelled cleaning products are among the best cleaning products in terms of environmental profile. The whole life cycle of the products is considered, and strict requirements are set for the products' ingredients and packaging. The raw material extraction, production of the cleaning product, transportation, use phase, and end of life are considered in the requirements.

Nordic Swan Ecolabelled cleaning products:

- Offer effective cleaning performance
- Meet strict environmental requirements for chemicals to avoid long-term, negative effects in nature (biodegradability), to avoid harmful chemicals accumulating in animals and humans (bioaccumulation), and to avoid substances that are toxic to, for example, fish and crustaceans (ecotoxicity)
- Must not contain microplastics
- Meet strict health requirements for chemicals, including a ban on adding substances classified to cause cancer, toxic to reproduction, or to potentially damage genetic material. Also identified or potential endocrine disruptors on up-to-date lists from EU and national authorities or by classification are banned
- Use packaging design and material composition choices that promote material recycling and reduce resource use, contributing to a circular economy
- Promote responsible sourcing of renewable raw materials, and any palm oil or palm kernel oil in the product is RSPO certified (mass balance, segregated, or identity preserved)

The environmental impacts throughout the lifecycle of this product group and Nordic Swan Ecolabel's identification of where ecolabelling can have the greatest effect is described in Section 6 Environmental impact of cleaning products.

2 What can carry the Nordic Swan Ecolabel

Product group definition

The criteria apply to products designed to clean hard surfaces and textile flooring. The products can be in the form of concentrated products, ready-to-use (RTU) products, and mix-it-yourself RTU products. Products for consumers and/or professionals can be labelled.

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

- Fixed surfaces (e.g., floors, walls, ceilings, doors, tiles, sauna)
- Kitchen surfaces and equipment (e.g., work surfaces, kitchen cabinets, stoves, and interior of kitchen equipment such as ovens, dishwashers, coffee machines, milk frothers, ice cream makers)
- Sanitary installations (e.g., WCs, baths, showers, wash basins, cabinets)
- Interior of laundry machines
- Windows, glass, and mirrors
- Textile flooring, such as carpeted floors
- Floors with wash polish and wash-and-wax care products
- Outdoor surfaces (e.g., facades, patios, terraces, grills, fireplaces, roofs)

Cleaning products containing micro-organisms are also included in the product group and are subject to specific requirements (see O11).

Subcategories

The product group is divided into subcategories. These subcategories are used in requirements where there are several different requirement levels. The subcategories are described in more detail in the background document.

- **Concentrated, consumer:** Consumer products that require dilution with water prior to use.
- **RTU, consumer:** Consumer products that are pre-diluted and ready for use straight from the package including foam/spray products and liquid toilet cleaners.
- **Concentrated, professional:** Professional products that require dilution with water prior to use.
- **RTU, professional:** Professional products that are pre-diluted and ready for use straight from the package including foam/spray products and liquid toilet cleaners.
- **RTU window cleaner:** Consumer and professional window and glass cleaners that are pre-diluted and ready for use straight from the package including foam/spray products.
- **Outdoor surface cleaners:** Consumer and professional cleaners that are for use outdoors. These are typically concentrated products for large surfaces.

Products with multiple uses or users

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/spray bottle, must fulfil the requirements for both concentrated (diluted in bucket) and RTU (foam/spray bottle) products.

Products that are sold to both consumers and professionals, but not more than 80% to either group, must meet the stricter requirement, where applicable, for either consumer or professional products.

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

Other product groups

Nordic Ecolabelling has separate criteria for other types of cleaning products including:

- Care products for vehicles 013
- Industrial cleaning and degreasing agents 065
- Cleaning agents for use in the food industry 070

Nordic Ecolabelling will decide in case of questions about which product group criteria should be used.

What cannot be licensed

Relevant cleaning products in addition to those mentioned above can be included in the product group upon request. However, these criteria do not apply to products intended solely for the purpose of:

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

Furthermore, products within the scope of the Biocides Regulation 528/2012 cannot be Nordic Swan Ecolabelled. This includes cleaning products that intend to have a biocidal effect or claim to be antibacterial, antimicrobial, antiseptic, or disinfecting. In addition, Nordic Ecolabelling does not allow products making claims about antibacterial, antimicrobial, antiseptic or disinfectant ingredients.

The decision on which products can be included in the product group is made by Nordic Ecolabelling.

3 How to read this criteria document

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:

↑ Upload

📍 Requirement checked on site

To be awarded a Nordic Swan Ecolabel licence:

- All obligatory requirements must be fulfilled.
- Nordic Ecolabelling must inspect the 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.

4 Requirements

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

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

Definitions

Terms	Definition
RTU (Ready- to-use)	Cleaning products that are pre-diluted and ready for use directly on the area or object of cleaning.
Concentrated products	Cleaning products that need to be diluted with water before use on the area or object of cleaning.
Mix-it-yourself RTU products	Cleaning products that are to be diluted at least 10 times by the user to form the final RTU product. The product may be, for example, a vial, tablet, or water-soluble sheet. The product is diluted in a reusable bottle in a manner that the person handling the concentrated products does not run the risk of coming into contact with the product. In the previous generation, these products were called "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."
Foam/spray products	The term "foam/spray" is used to denote foam or spray products. In accordance with requirement O22, these must have a nozzle that reduces aerosol formation.
Consumer products	Cleaning products for use by consumers in or around their home that are primarily sold through retailers. Products are considered for consumer use if more than 80% of sales are to consumers. See also Table 1.
Professional products	Cleaning products that are marketed for use in professional contexts such as cleaning services, institutions, and within the public sector. Products sold for use in the workplace are thus not automatically considered to be professional products under this definition. The product is not considered to be professional if it is primarily sold through retailers. Products that are primarily marketed to consumers, but that are also sold via wholesalers for professional use exist. Products that are sold to both consumers and professionals, are considered for the professional market if more than 80% of sales are to professional users. A threshold of 80% makes it clear that the majority of the products are sold to that market. See also Table 1.
Products for both professionals and consumers	For products sold to both consumers and professionals, but not more than 80% to either group. Where applicable, these products must meet the stricter requirement for either consumer or professional products. See also Table 1.
Calculation sheet	Applicants must use an Excel sheet to calculate values for several requirements, e.g., CDV, aNBO, anNBO, WUR. Download the calculation sheet from the Nordic Swan Ecolabel website. ¹
In-use solution	Mass of product used per volume cleaning solution. This value (grams/liter in-use solution) is used in the calculation sheet. For concentrated products, this is the grams per liter after dilution. For pre-diluted/RTU products, use grams for 1 liter product.
Micro-organism / microbial cleaning product	Micro-organism as defined in Article 3(1), point (b), of Regulation (EU) No 528/2012. ² A microbial cleaning product has one or more micro-organisms intentionally added, either on its own or via one of the components of the product.
Ingoing substances**	All substances* in the cleaning product including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing

¹ <https://www.nordic-swan-ecolabel.org/criteria/cleaning-products-026/>

² Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products. <https://eur-lex.europa.eu/eli/reg/2012/528>

	<p>substances (e.g. biocidal active substances generated by preservatives, such as formaldehyde, and arylamine and in situ-generated preservatives) are also regarded as ingoing substances. Foil that is not removed before use of the product, and that is water soluble is also considered ingoing substances. See more concerning definition of ingoing substances and impurities below the Definitions Table.</p> <p><i>*N.B. the difference from the definition of substances in the REACH Regulation (EC) No 1907/2006. Whereas a REACH substance encompasses a chemical element or compound as well as its stabilising additives and process impurities, a substance here refers to each of the constituents separately. The constituents of a UVCB substance (Unknown or Variable composition, Complex reaction products or of Biological materials) are also regarded separately, and all known constituents shall be regarded.</i></p>
Impurities**	<p>Trace levels of pollutants, contaminants and residues from production, including production of raw materials that remain in the cleaning product in concentrations ≤ 100 ppm (≤ 0.0100 w%, 100,0 mg/kg). For formaldehyde other than as a biocidal active substance and for arylamine, the corresponding concentration is ≤ 50 ppm (≤ 0.0050 w%).</p> <p><i>Examples of impurities: Background environmental pollutants from feedstock, as well as contaminants and residues from production such as reactants (incl. monomers), reagents, catalysts, by-products, scavengers, detergents for production equipment, and carry-over from other or previous production lines.</i></p> <p>Impurities in the raw materials in concentrations $\geq 10\ 000$ ppm (≥ 1.0000 w%) are always regarded as ingoing substances, regardless of the concentration in the final Nordic Swan Ecolabelled product.</p>
DID-list	<p>The DID-list (Detergent Ingredient Database) part A contains information on toxicity and degradability of several substances that are used in detergents and cleaning products. If an ingoing substance is included on the DID-list, the data from the DID-list must be used for calculations of the amount of aerobic/anaerobic non-biodegradable organics, the critical dilution value and biodegradability and toxicity. If a substance is not included on the DID-list, or data is missing, the methods described in part B of the DID-list must be used. For this criteria generation, the DID-list dated 2023 or later versions apply. See further details in Appendix 3. The DID-list can be obtained from the Nordic Swan Ecolabelling websites.</p>
Sales packaging	<p>In accordance with Regulation (EU) 2025/40 on Packaging and Packaging Waste (PPWR), the term "sales packaging" means packaging conceived so as to constitute a sales unit consisting of products and packaging to the end user at the point of sale.</p>
Primary packaging	<p>In accordance with EU Directive 94/62/EC on packaging and packaging waste, the term "primary packaging" is defined as consumer packaging, i.e., packaging conceived to constitute a sales unit to the final user or consumer at the point of sale.</p>
Container	<p>Bottles, foam/spray bottles and similar.</p>
Closure	<p>Caps/lids, dosage equipment, pumps and foam/spray triggers mounted on the packaging.</p>
Label	<p>Traditional label and shrink film label/sleeve.</p>
Concentrated product, main packaging	<p>Packaging containing the undiluted concentrated product, which is to be diluted with water in a refillable packaging.</p>
Concentrated product, refillable packaging	<p>Packaging in which the concentrated product is diluted with water and thus refilled multiple times.</p>
Post-consumer/commercial recycled material	<p>Post-consumer/commercial recycled material is defined according to ISO 14021:2016: "post-consumer/commercial" is defined as material generated by households or commercial, industrial or institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.</p>
Bio-based material for packaging	<p>Bio-based means that the material consists of biomass that may have undergone physical, chemical, or biological treatment(s). Biomass has a biological origin but excludes material that is found embedded in geological and/or fossil formations. Examples of biomass are: (all or parts of) plants, trees, algae, marine organisms, microorganisms, animals, etc.</p>
Waste and residual products for packaging	<p>Waste and residual products refer to definitions in EU Directive 2018/2001/EC. Residues come from agriculture, aquaculture, fisheries, and forestry, or they can be processing residues. A processing residual product is a substance that is not one of</p>

	the end products that the production process directly strives for. Residues must not be a direct target of the process, and the process must not be changed to intentional production of the residual product. Examples of residual products are e.g., straw, husks, pods, the non-edible part of maize, manure, and bagasse. Examples of processing residues are e.g., raw glycerine or brown lye from paper production.
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****Additional information concerning definitions of ingoing substances and impurities**

Limit values: The limit for excluded ingoing substances is 0 ppm (unless otherwise stated), while there's a specific defined limit for impurities. The impurity limit applies separately to each individual excluded substance, from each individual raw material. Concentrations of different impurities with the same excluded classification or substance group characteristics shall not be summed up to meet the impurity limit in the labelled product. Also, concentrations of an individual impurity, originating from different raw materials, shall not be summed.

UVCB substances: UVCB substances (Unknown or Variable composition, Complex reaction products or of Biological materials) have a composition of constituents that is not completely known or is variable from time to time. For UVCB substances, all constituents that are known must be declared in the Nordic Swan Ecolabel raw material appendix based on the best available knowledge. All constituents are considered individually and are subject to the chemical requirements, including for instance those on excluded substances and excluded classifications.

However, in the requirements O12 Long-term environmental effects, O13 Critical dilution volume (CDV) and O14 Content of substances which are not aerobically and/or anaerobically biodegradable, the UVCB substance can be considered as one ingoing substance and placed in a single row in the calculation sheet. If the UVCB substance can be assigned a DID-number, the data on the DID-list must be used. N.B. that for UVCBs that are perfumes, a specific approach applies regarding the requirement on environmentally hazardous substances, as described below.

Perfumes: Perfumes constitute a group of complex raw materials that are often, but not always, UVCBs. All perfume constituents must be declared the same way as described for UVCBs above. A perfume can also be placed in one row in the calculation sheet. However, for requirement O12 Long-term environment effects, a perfume must not be regarded as one ingoing substance, irrespective of whether the perfume is an UVCB or not. Instead, each constituent of the perfume mixture must be regarded in a calculation of the weighted sum of substances classified H410, H411 and H412. For perfumes, specific toxicity and biodegradability data can be used. If data is not available, the data on DID 2549 must be used.

4.1 General requirements

The requirements (O1-O24) are for all product types, unless otherwise stated.

O1 Description of the product

The applicant must provide the following information about the product:

- Description of the product, including its area of use, in accordance with “What can carry the Nordic Swan Ecolabel?” (consumer/professional product, RTU/ concentrated, etc.)
- 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 primary packaging and in the 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. Foil that is not removed before use of the product is considered as part of the formulation/recipe. 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 2023 or later, which is used in calculating chemical requirements. The DID list can be obtained from Nordic Ecolabelling's websites, see contact information at the beginning of the document.*

- † 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 recipe 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 raw material in line with prevailing legislation in the country of application, e.g., Annex II to REACH (Regulation 1907/2006/E2EC).

O2 Classification of the cleaning product

The cleaning product must not be classified with any of the hazards from CLP Regulation (EC) No 1272/2008 listed below.

Table 1 Excluded hazards for the cleaning product

Hazard Class	Hazard Category	Hazard Statement Code
Hazardous to the aquatic environment	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410
	Aquatic Chronic 2	H411
	Aquatic Chronic 3	H412
	Aquatic Chronic 4	H413
Hazardous to the ozone layer	Ozone	H420
Acute toxicity *	Acute Tox. 1 or 2	H300
	Acute Tox. 1 or 2	H310
	Acute Tox. 1 or 2	H330
	Acute Tox. 3	H301
	Acute Tox. 3	H311
	Acute Tox. 3	H331
	Acute Tox. 4	H302 *
	Acute Tox. 4	H312 *
	Acute Tox. 4	H332 *
Specific target organ toxicity: single or repeated exposure	STOT SE 1	H370
	STOT SE 2	H371
	STOT SE 3	H335 **, H336 **
	STOT RE 1	H372
	STOT RE 2	H373
Skin corrosion ***	Skin Corr. 1A, 1B or 1C	H314 ***
Aspiration hazard	Asp. Tox. 1	H304
Respiratory or skin sensitisation	Resp. Sens. 1, 1A or 1B	H334
	Skin Sens. 1, 1A or 1B	H317
		EUH208 "Contains (name of sensitising substance). May cause an allergic reaction."
Carcinogenicity****	Carc. 1A or 1B	H350 ****
	Carc. 2	H351 ****
Germ cell mutagenicity****	Muta. 1A or 1B	H340 ****
	Muta. 2	H341 ****
Reproductive toxicity****	Repr. 1A or 1B	H360 ****
	Repr. 2	H361 ****
	Lact.	H362 ****
Endocrine disruption for human health	ED HH 1	EUH380
	ED HH 2	EUH381
Endocrine disruption for the environment	ED ENV 1	EUH430
	ED ENV 2	EUH431
Persistent, bioaccumulative and toxic properties	PBT	EUH440
Very persistent, very bioaccumulative properties	vPvB	EUH441
Persistent, Mobile and Toxic properties	PMT	EUH450
	vPvM	EUH451

* *Exemptions for Acute toxicity, Category 4 (H302, H312, H332): Professional products if the packaging is designed so that the user does not come in contact with the product*

** *Specific target organ toxicity, single exposure, category 3 (STOT SE 3, H335, H336) applies only to foam/spray products*

*** *Exemptions for Skin corrosion (Skin corr. 1A, 1B, 1C; H314):*

- Professional products where classification is due to pH.
- WC-products for consumers where the classification is due to pH.

**** *Includes all classification variants (e.g., H350 also covers H350i).*

- † A safety data sheet (SDS) prepared in accordance prevailing European legislation (Annex II of REACH Regulation (EC) No 1907/2006) for the cleaning product.
- † Appendix 1 or equivalent, completed and signed.
- † 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. 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.

4.2 Raw material sourcing

The requirements for raw material sourcing include two requirements:

- Supply Chain Policy and Code of Conduct
- Certified raw materials from oil palms

O3 Supply Chain Policy and Code of Conduct

The licence holder must have a) supply chain policy and b) a Code of Conduct for responsible sourcing of minerals and renewable raw materials* used in the cleaning product. The supply chain policy and code of conduct must be both public and communicated to the supply chain.

Licence holders with fewer than 250 employees are exempt.

a) The supply chain policy must include the following:

- A policy statement committing the licence holder to respect human rights and the environment within its operations and supply chain; this includes a commitment to support suppliers' compliance with the supplier code of conduct by engaging in responsible purchasing practices.
- Commitment to comply with all applicable local, national- and international environmental laws and regulations, as well as all applicable health and safety regulations.
- A description for governance processes in place for Due Diligence; this includes routines for assessing biodiversity and deforestation risk along the whole supply chain.

b) The supplier Code of Conduct must inform all suppliers of what is expected of them with respect to the Licensee's supply chain policy regarding human rights and protecting the environment.

**Renewable raw materials composed of biomass that can be continually replenished (for example, wood, crops, marine products, organic waste)*

- † Submit supply chain policy according to the requirement or reference to info on webpage.
- † Submit supplier Code of Conduct according to the requirement or reference to info on webpage.
- † Submit information on how the supply chain policy and supplier Code of Conduct are public and communicated to the supply chain.

O4 Certified raw materials from oil palms

The requirement does not apply to substances derived from palm oil/palm kernel oil in raw materials where the substances amount to < 1% in the cleaning product.

If raw materials from palm oil are used in the product, the palm oil/palm kernel oil must be RSPO certified. This also includes by-products, residues, and waste fractions from palm oil industries, such as palm fatty acid distillate and palm effluent sludge. Traceability must be ensured by Mass Balance, Segregated, or Identity Preserved.

Book and Claim are not accepted.

- † Appendix 2 or equivalent declaration completed and signed by all relevant raw material manufacturers/suppliers.
- † A valid RSPO Supply chain certificate from all relevant raw material manufacturers/suppliers or a valid RSPO Supply chain certificate from the manufacturer of the cleaning product.
- ‡ By request, the manufacturer of the cleaning product must present invoices/delivery notes/order confirmation that the palm oil purchased is RPSO certified and information about traceability system (Mass Balance, Segregated or Identity Preserved accepted).
- ‡ By request, the manufacturer of the cleaning product must, if they are RSPO Chain of Custody certified, present a third party-controlled balance sheet showing RSPO certified raw materials being accounted/recorded to the cleaning product(s).

4.3 Requirements for ingoing substances

The requirements for ingoing substances include seven requirements:

- Classification of ingoing substances
- Excluded substances
- Microplastics
- Surfactants
- Fragrances
- Preservatives
- Micro-organisms

The requirements 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 in the [Definitions table](#).

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

O5 Classification of ingoing substances

Ingoing substances must not be classified with the hazards from CLP Regulation (EC) No 1272/2008 listed below.

Table 2 Excluded hazards for the ingoing substances

Hazard Class	Hazard Category	Hazard Statement Code
Hazardous to the ozone layer	Ozone	H420
Specific target organ toxicity: Repeated exposure	STOT RE 1	H372
Respiratory or skin sensitisation *	Resp. Sens. 1, 1A or 1B Skin Sens. 1, 1A or 1B	H334 * H317 *
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 **
Endocrine disruption for human health****	ED HH 1 ED HH 2	EUH380 **** EUH381 ****
Endocrine disruption for the environment****	ED ENV 1 ED ENV 2	EUH430 **** EUH431 ****
Persistent, Bioaccumulative and Toxic properties****	PBT	EUH440 ****
Very Persistent, Very Bioaccumulative properties****	vPvB	EUH441 ****
Persistent, Mobile and Toxic properties	PMT	EUH450
Very Persistent, Very Mobile properties	vPvM	EUH451

* *Exemptions for respiratory or skin sensitization (H334 and H317):*

- Enzymes (including stabilisers and preservatives in the enzyme raw material) can be included if they are in liquid form or granulate capsules.
- Fragrance can be included in some types of the final product, see requirement O9 on fragrances.
- Sensitising preservatives, but see also requirement O6 Excluded substances and O10 Preservatives.

** *CMR classifications include all classification variants (e.g. H350 also covers H350i).*

*** *Exemption for carcinogenicity 2 (H351): Complexing agents of the MGDA and GLDA type may contain NTA impurities in the raw material in concentrations of less than 0.2% by*

weight of the MGDA/GLDA active content, if the concentration of NTA in the cleaning product is below 0.1% by weight.

**** See also O6 Excluded substances for additional requirements for potential or identified endocrine disruptors (EUH 380, 381, 430, 431) and PBT/vPvB substances (EUH 440, 441).

↑ A safety data sheet (SDS) for all raw materials, prepared in accordance with Annex II of REACH Regulation (EC) No 1907/2006.

↑ Appendix 1 and Appendix 2 or equivalent, completed and signed.

O6 Excluded substances

The following substances or substance groups must not be present as ingoing substances in the cleaning product.

- Alkylphenols (AP) (e.g. butylated hydroxy anisole (BHA, CAS No. 25013-16-5), butylated hydroxytoluene (BHT, CAS No. 128-37-0), alkylphenol ethoxylates (APEOs) and other alkylphenol derivates (APD))
- Amphoacetates (EC No. 271-792-5, 271-794-6, 931-291-0, 938-645-3, 942-589-5, 943-154-2, 944-415-3, 946-565-5, 947-998-2)
- Aromatic solvents and carriers, incl. chlorotoluenes, chlorophenols and chlorobenzenes

Solvents as defined in Directive 1999/13/EC: Organic substances with a vapour pressure of at least 0.01 kPa at 20 °C

- Benzalkonium chloride (CAS No. 8001-54-5)
- Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA³ for further EU regulatory risk management due to known or potential endocrine disruption or reproductive toxicity.
- Boric acid, borates, and perborates
- Endocrine disruptors, potential or identified, listed in "Endocrine Disruptor Lists" List I, II or III

Note: Substances moved to "Substances no longer on list" and not present on Lists I-III, are no longer excluded, except for those on sublist II where concern remains. Nordic Ecolabelling will assess these on a case-by-case basis.

- Ethylenediamine tetraacetate (EDTA, CAS No. 60-00-4) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts
- Halogenated organic compounds
- Isothiazolinones (e.g. methylisothiazolinone (MIT), CAS No. 2682-20-4, methylchloroisothiazolinone (CMIT), C(M)IT/MIT (3:1), CAS No. 55965-84-9, CAS No. 26172-55-4, benzisothiazolinone (BIT), CAS No. 2634-33-5,

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

[1] Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section 2.1: Bisphenols for which further EU RRM is proposed <https://echa.europa.eu/documents/10162/5e60f2fe-12d0-7f6b-5868-f199cfd7f984>

octylisothiazolinone (OIT), CAS No. 26530-20-1 and dichlorooctylisothiazolinone (DCOIT), CAS No. 64359-81-5)

- Linear alkylbenzene sulphonates (LAS)
- Methylidibromo glutaronitrile (MG), CAS no. 35691-65-7
- Nanomaterials/-particles

Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01):⁴

'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions:

(a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;
(b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm;
(c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.

- Nitro musks and polycyclic musk compounds
- NTA (nitrilo triacetic acid, CAS-no. 139-13-9), and its salts

Exemptions: Complexing agents of the MGDA and GLDA type may contain NTA impurities in the raw material in concentrations of less than 0.2% by weight of the MGDA/GLDA active content, if the concentration of NTA in the cleaning product is below 0.1% by weight.

- Organic chlorine compounds, hypochlorites and hypochlorous acid
- PBT and vPvB as defined in REACH Annex XIII, including those under ECHA PBT assessment <https://echa.europa.eu/da/pbt>
- Per- and polyfluoroalkyl substances (PFAS)

PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF₃-) or methylene (-CF₂-) carbon atom (without any H/Cl/Br/I attached to it).

- Phosphate, phosphonate, phosphonic acid and phosphoric acid
- Phthalates (Esters of 1,2-benzenedicarboxylic acid (orthophthalic acid))
- Quaternary ammonium compounds that are not readily aerobic biodegradable such as DTDMAC (CAS No. 61789-80-8), DSDMAC (CAS No. 107-64-2), DHTDMAC (CAS No. 61789-72-8) and DADMAC (CAS No. 7398-69-8).

Aerobic biodegradable according to OECD test method 301 (A-F) or 310 or equivalent methods evaluated by an independent body and controlled by Nordic Ecolabelling.

- Siloxanes
- Silver, colloidal silver and nanosilver
- Substances on the REACH Candidate list of SVHC substances <https://www.echa.europa.eu/candidate-list-table>
- Volatile organic compounds (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.

⁴ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0614\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0614(01)&from=EN)

Exemption for acetic acid, isopropanol, ethanol (including denaturing agents), and solvents in fragrances.

- † Appendix 1 or equivalent, completed and signed.
- † Appendix 2 or equivalent, completed and signed by all raw material manufacturers/suppliers.

O7 Microplastics

Microplastics* must not be present as ingoing substances in the cleaning product and must not be added to the product during manufacturing.

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. The new definition shall be used.

** 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.*
- a) *at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:*
 1. *all dimensions of the particles are equal to or less than 5 mm.*
 2. *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 2g/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".

- † Appendix 1 or equivalent declaration completed and signed.
- † Appendix 2 or equivalent declaration completed and signed by all raw material manufacturers/suppliers.

O8 Surfactants - aerobically and anaerobically biodegradable

All surfactants in the cleaning product, irrespective of their function in the product must be readily aerobically biodegradable* and anaerobically biodegradable*.

** In accordance with the DID-list "Detergents Ingredients Database" version 2023 or later, see Appendix 3 for further details. For substances not on the DID-list, or substances where biodegradation data is missing on the DID-list, the parameters must be calculated based on the guidance in part B of the DID-list and associated documentation must be presented.*

† Documentation showing that the requirement is fulfilled. Nordic Ecolabelling's calculation sheet can be used which is obtained from Nordic Ecolabelling's websites.

O9 Fragrances

All fragrance substances in the cleaning product, including fragrance substances in plant extracts, must live up to the following requirements:

- Fragrances must be in line with the International Fragrance Association (IFRA) guidelines. The IFRA guidelines can be read at https://ifrafragrance.org/docs/default-source/51st-amendment/ifra-51st-amendment--guidance-for-the-use-of-ifra-standards.pdf?sfvrsn=79750005_2
- Substances with the hazard statement H317 and/or H334 or fragrance allergens listed in Annex III of the Cosmetic Regulation may be included in concentrations <0.0100% (100 ppm) of the cleaning product.
- The following substances are prohibited:
 - oak moss extract (Evernia prunastri, CAS No. 90028-68-5)
 - tree moss extract (Evernia furfuracea, CAS No. 90028-67-4)
 - HICC (CAS No. 31906-04-4, 51414-25-6)
- Fragrances must not be present in wash polish/wax-and-wash-products.
- Fragrances must not be present in professional* foam/spray cleaning products or their refills.
- For foam/spray products for consumers,* substances with the hazard statement H317 and/or H334 or fragrance allergens listed in Annex III of the Cosmetic Regulation may be included in concentrations <0.0050% (50 ppm) of the cleaning product.
- For mix-it-yourself refills for foam/spray products for consumers* substances with the hazard statement H317 and/or H334 or fragrance allergens listed in Annex III of the Cosmetic Regulation may be included in concentrations <0.050% (500 ppm) on condition that the stated dilution gives a concentration in the diluted product of <0.0050% by weight (50 ppm).

**See definitions for "Consumer products," "Professional products," and "Products for both professionals and consumers" in the [Definition Table](#).*

† Appendix 1 or equivalent declaration completed and signed

† Appendix 2 or equivalent declaration completed and signed by all relevant raw material manufacturers/suppliers.

† Fragrance allergens list.

O10 Preservatives

- b) Preservatives included in the product or constituent substances must not be bioaccumulative. Preservatives are judged not to be bioaccumulative if $BCF < 100$ or $\log Kow < 3$. If both values are available, the value for the highest measured BCF is to be used, see 0.
- c) Sensitising preservatives are permitted to a maximum of 100 ppm. Note that requirement O2 and O5 must also be fulfilled.

Note that isothiazolinones are forbidden in the products in requirement O6.

In mix-it-yourself RTU products, sensitizing preservatives may be present in concentrations up to 0.0100% by weight (100 ppm) in the diluted final product. Note, however, that requirement O2 (including prohibition of products classified H317 or H334) apply to these refills in concentrated form.

- † a) Documentation of BCF or logKow, Appendix 1 and 2 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

O11 Micro-organisms

Only intentionally added micro-organisms are permitted. Cleaning products containing micro-organisms shall comply with Detergent Regulation 2026/405 Annex II⁵ and the following conditions:

- a) The micro-organisms intentionally added to the product shall belong to a collection of an International Depository Authority (IDA) and be maintained by the culture collection for the authorised period of the Nordic Swan Ecolabelling licence
- b) The micro-organisms shall be identified and characterised using whole genome sequence (WGS) analysis according to "EFSA Guidance on the characterisation of microorganisms used as feed additives or as production organisms"⁶
- c) The taxonomic classification of the micro-organisms shall be provided: genus, species, and strain name or code, based on current International Codes of Nomenclature (ICN)
- d) The product shall not contain genetically modified micro-organisms
- e) The micro-organisms shall belong to both of the following:
 - o Risk Group I as defined by Directive 2000/54/EC – biological agents at work⁷

⁵ Regulation (EU) 2026/405 of the European Parliament and of the Council of 11 February 2026 on detergents and surfactants, and repealing Regulation (EC) No 648/2004 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202600405

⁶ EFSA Panel on Additives and Products or Substances used in Animal Feed (FEEDAP), G. Rychen, G. Aquilina, G. Azimonti, V. Bampidis, M. de L. Bastos, G. Bories, et al., 'Guidance on the Characterisation of Microorganisms Used as Feed Additives or as Production Organisms', EFSA Journal, Vol. 16, No. 3, March 2018. DOI: 10.2903/j.efsa.2018.5206

⁷ Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC) (OJ L 262, 17.10.2000, p. 21). <https://eur-lex.europa.eu/eli/dir/2000/54>

- o The Qualified Presumption of Safety (QPS) list issued by the European Food Safety Authority (EFSA)⁸
- f) It must be controlled that the product is not contaminated with unintended microorganisms. Alternatively, the product should present a low risk of microbial contamination and/or intended use according to relevant European or international standards or equivalent test methods.
- g) The following pathogenic micro-organisms shall not be present in any of the strains included in the finished product when screened in accordance with European or international standards or test methods:
 - o *Escherichia coli*
 - o *Streptococcus* spp (*Enterococcus* spp)
 - o *Staphylococcus aureus*
 - o *Bacillus cereus*
 - o *Salmonella* spp
 - o *Pseudomonas aeruginosa*
 - o *Candida albicans*
 - o Any other pathogenic micro-organisms listed in the updated requirements for detergents containing micro-organisms of Detergents Regulation (EU) 2026/405⁹
- h) The minimum shelf life of a product shall not be shorter than 18 months, during which microorganisms count shall be guaranteed. Products in their in-use form shall have $\geq 1 \times 10^5$ colony-forming units (CFU) per ml in accordance with relevant European or international standard or an equivalent scientifically recognised method for the determination of microorganisms' numbers. The stability of the product, assessed under relevant storage condition and as recommended by the manufacturer, shall be demonstrated by measuring microorganisms' count at least every 18 months.
- i) Hazard identification of the micro-organisms, in accordance with "EFSA Guidance on the characterisation of microorganisms used as feed additives or as production organisms"¹⁰ and/or the QPS status list, must confirm all the following:
 - o (i) no acquired antibiotic resistance (across all the 5 classes: aminoglycosides, macrolides, beta-lactams, tetracyclines, fluoroquinolones or other quinolones, according to EUCAST or Nordic AST or other equivalent method)
 - o (ii) shown not to produce relevant antimicrobial substances
 - o (iii) non-pathogenic and non-toxicogenic properties
- j) A safety, hazard and risk assessment of the cleaning product must be performed including all foreseeable conditions of use claimed by the product.

⁸ EFSA BIOHAZ Panel, Allende, A., Alvarez-Ordóñez, A., Bover-Cid, S., Chemaly, M., De Cesare, A., Nauta, M., Peixe, L., Ru, G., Skandamis, P., Suffredini, E., Cocconcelli, P. S., Fernández Escámez, P. S., Maradona, M. P., Querol, A., Sijtsma, L., Suarez, J. E., Sundh, I., Barizzone, F., ... Ottoson, J. (2025). Updated list of QPS-recommended microorganisms for safety risk assessments carried out by EFSA [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.15827398>

⁹ Regulation (EU) 2026/405 of the European Parliament and of the Council of 11 February 2026 on detergents and surfactants, and repealing Regulation (EC) No 648/2004 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202600405

¹⁰ <https://www.efsa.europa.eu/en/efsajournal/pub/5206>

The exposure route via ingestion must be assessed for food contact surface cleaning products. The exposure route via inhalation must be assessed for cleaning products in spray format. The safety and risk assessment must cover:

- Impacts on human, animal, plant, and environmental health
 - Sensitizing potential (dermal and respiratory) in addition to other relevant endpoints
 - Vulnerable populations (e.g., immunocompromised, elderly, infants, pregnant women)
 - Justification for risk acceptability and uncertainty evaluation
 - Any necessary information for end-user to enable safe use
- k) Products containing micro-organisms must show a prolonged cleaning effect, as described in Appendix 5, by showing degradation continuously over a prolonged period as claimed by the manufacturer, otherwise, 7 days, of:
- Protein (e.g. via casein agar or other scientifically known medium showing protein degradation)
 - Starch (e.g. via starch agar or other scientifically known medium showing starch degradation)
 - Fat/vegetable oil (e.g. via "Spirit Blue"- agar or other scientifically known medium showing fat/vegetable oil degradation)
- l) Product label and user information must
- Clearly state that the product contains micro-organisms
 - Specify a shelf life
 - Provide usage instructions and precautions, particularly from the safety/risk assessment
- m) Analytical and test verification
- All testing must be conducted by laboratories complying with Appendix 3 (1A and/or 1B)
- † a) Certificate of deposition including accession number (IDA).
- † b) WGS documentation, in accordance with section 2.1.1 of "EFSA Guidance on the characterisation of microorganisms used as feed additives or as production organisms"¹¹
- † c) Taxonomic details (ICN)
- † d) Documentation that the strains are not genetically modified
- † e) Documentation demonstrating that the micro-organisms are classified as Risk Group 1.
- † e) Proof that the microorganisms belong to the QPS list issued by EFSA, with reference to the most up to date version

¹¹ EFSA Panel on Additives and Products or Substances used in Animal Feed (FEEDAP), G. Rychen, G. Aquilina, G. Azimonti, V. Bampidis, M. de L. Bastos, G. Bories, et al., 'Guidance on the Characterisation of Microorganisms Used as Feed Additives or as Production Organisms', EFSA Journal, Vol. 16, No. 3, March 2018. DOI: 10.2903/j.efsa.2018.5206

- † f) and g) Documentation describing how it is controlled that the product is not unintendedly contaminated with pathogen micro-organisms, or application of ISO 29621:2017 principles.
- † h) Documentation of colony forming units per ml in-use solution measured at the start and at least every 18 months for a product stored under relevant storage condition and as recommended by the manufacturer.
- † i) EFSA QPS list evidence or other documentation demonstrating compliance
- † j) Full safety/risk assessment structured as hazard identification, hazard characterisation, exposure assessment and risk characterisation. Justification for risk acceptability and uncertainty evaluation. Information for end-user to enable safe use.
- † k) Performance test demonstrating that the product degrades protein, starch, fat and vegetable oil over a prolonged period (can refer to laboratory report for requirement O15)
- † l) Product label and marketing material showing for which market and uses the product is designed, plus the application method and safety information on the label.
- † m) Documentation on the test laboratory demonstrating compliance with applicable parts of Appendix 3 (point 1A and/or 1B).

4.4 Ecotoxicity and biodegradability

The requirements for ecotoxicity and biodegradability include three requirements:

- Long-term environmental effects
- Critical dilution volume (CDV)
- Content of substances which are not aerobically and/or anaerobically biodegradable

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 used in calculations. The water in the toilet is not included as a part of the in-use solution.

Note that if the product is dosed as a unit containing a water-soluble foil or sealing of paraffin wax intended not to be removed before diluting, the foil and/or wax must be part of the product formulation in the requirements O12-O14.

O12 Long-term environmental effects

Content of ingoing substances classified as environmentally hazardous according to Regulation 1272/2008/EEC (C_{total}) in the cleaning product is limited as follows:

$C_{total} \leq$ the limit value in Table 3

C_{total} is calculated using the following formula for all ingoing substances in the product:

$$C_{total} = M \cdot 100 \cdot C_{H410} + 10 \cdot C_{H411} + C_{H412}$$

where

M is the multiplying factor for H410 as described in the CLP regulation (EC) No 1272/2008

C_{H410} is the concentration of substances with H410 in grams/litre in-use solution*

C_{H411} is the concentration of substances with H411 in grams/litre in-use solution*

C_{H412} is the concentration of substances with H412 in grams/litre in-use solution*

*The amount of ingoing substances with respective classification in the product in grams per liter in-use solution based on the highest recommended normal dose stated on the packaging.

See information concerning calculations with UVCB substances and perfumes in section 5 "Additional information concerning definitions of ingoing substances and impurities."

If data is missing on a substance, it is assessed according to a worst-case scenario with H410 and M factor of 10.

Table 3 Limit values for environmentally hazardous substances

Category	Limit value (LV) (grams / liter in-use solution)
Concentrated, consumer	10
RTU, consumer	10
Concentrated, professional	10
RTU, professional	10
RTU windows (professional and consumer)	2,5
Outdoor cleaners (professional and consumer)	0,0

† Appendix 1 (product) and Appendix 2 (raw material) signed and completed, or equivalent signed information.

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

O13 Critical dilution volume (CDV)

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 based on 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 4.

Table 4 CDV limit values

Category	$CDV_{chronic}$ (liters / liter in-use solution)
Concentrated, consumer	4 000
RTU, consumer	250 000
Concentrated, professional *	6 000
RTU, professional	250 000
RTU windows (professional and consumer)	25 000
Outdoor cleaners (professional and consumer)	4 000

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

$$CDV_{chronic} = \sum CDV_i = \sum \left(\frac{dose_i \cdot DF_i \cdot 1000}{TF_{i,chronic}} \right)$$

$dose_i$ = 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

$TF_{i,chronic}$ = chronic toxicity factor for substance "i", in accordance with the DID list.

If $TF_{i,chronic}$ is lacking, $TF_{i,acute}$ can be used.

** In accordance with the DID-list "Detergents Ingredients Database" version 2023 or later, see Appendix 3 for further details. For substances not on the DID-list, or substances where biodegradation data is missing on the DID-list, the parameters must be calculated based on the guidance in part B of the DID-list and associated documentation must be presented.*

See information concerning calculations with UVCB substances and perfumes in section 5 "Additional information concerning definitions of ingoing substances and impurities."

Exemptions: Micro-organisms are exempted from the CDV calculation.

† 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.

O14 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 5 per litre of in-use solution.

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

** In accordance with the DID-list "Detergents Ingredients Database" version 2023 or later, see Appendix 3 for further details. For substances not on the DID-list, or substances where biodegradation data is missing on the DID-list, the parameters must be calculated based on the guidance in part B of the DID-list and associated documentation must be presented.*

See information concerning calculations with UVCB substances and perfumes in section 5 "Additional information concerning definitions of ingoing substances and impurities."

Note that all surfactants must be aerobically and anaerobically biodegradable in accordance with O8. See also the exemption from the requirement of anaerobic biodegradability for substances which are not surfactants (Appendix 3, section 6, Anaerobic biodegradability).

Table 5 Limit values for aNBO and anNBO

Category	aNBO (grams / litre in-use solution)	anNBO (grams / litre in-use solution)
Concentrated, consumer	0.04	0.08
RTU, consumer	1.00	1.50
Concentrated, professional	0.03	0.20
RTU, professional	1.00	1.50
RTU windows (professional and consumer)	0.50	0.50
Outdoor cleaners (professional and consumer)	0.00	0.00

† 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. This is obtained from Nordic Ecolabelling's websites

4.5 Performance

Under the performance 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 (O15) or a user test (O16), with the exception of cleaning products for kitchen equipment and household machines (e.g. dishwashing machine and laundry machine) for which a laboratory test must be conducted. Consumer products must be tested in accordance with the laboratory test (O15). Cleaning products for textile floors can be tested with a user test.

For mix-it-yourself RTU products, performance requirements apply for the diluted final product which shall be compared to a RTU reference product.

Products containing micro-organisms must demonstrate residual cleaning effects via the laboratory test as instructed in Appendix 5 under heading "Prolonged effectivity test for products containing micro-organisms."

O15 Performance test – laboratory test (professional and consumer)

This requirement applies to all consumer products. Professional products can choose laboratory test (this requirement) or user test (see requirement O16), however professional products for kitchen equipment and household machines (e.g. dishwashing machine and laundry machine) must use laboratory test.

The product must, through laboratory testing, demonstrate equal or better cleaning performance, when compared with a reference product in the same product category. The test product and reference 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.

Alternative a:

The test must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 3 (point 1B).

The performance test must be performed in accordance with the test framework described in Appendix 5, where information about choice of product dosage, reference product, soil types, and report documentation requirements are also stated.

Alternative b:

If the product is tested in accordance with the EU Ecolabel's test for hard surface cleaning products (Commission decision of 23 June 2017 or later version), this laboratory test can be used. In addition, products containing micro-organisms must demonstrate residual cleaning effects via the laboratory test as instructed in Appendix 5 under heading "Prolonged effectivity test for products containing micro-organisms."

- † Alternative a: Documentation on the test laboratory demonstrating compliance with the requirements concerning test laboratories in Appendix 3 (point 1B).
- † Alternative a: Test report 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. If the product contains micro-organisms, the product must demonstrate residual cleaning effects.
- † Alternative b: Description of how the EU Ecolabel test has been performed and complete results from the test.
- † Alternative b: If the product contains micro-organisms, the EU Ecolabel test must be supplemented by a test report in accordance with Appendix 5 demonstrating residual cleaning effects.

O16 Performance test - user test (professional products)

This requirement applies only to professional products that choose to demonstrate product performance with the user test. (The alternative is to choose the laboratory test, see requirement O15.) Professional products for kitchen equipment and household machines (e.g. dishwashing machine and laundry machine) must use laboratory test.

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 parameters:

1. Ability to remove soil in comparison to the reference product
2. Gentleness to the cleaned surface (i.e., material care) in comparison to the reference product
3. Effectiveness in comparison to the reference product

In addition, there are some specific questions for certain product types (WC/sanitary, window cleaners, outdoor cleaners, wash polish/wash-and-wax products, and products that contain micro-organisms).

The tests must be performed by at least 5 users. The users must be professional cleaning staff. All users/testers must complete the form in Appendix 6 (for all cleaning products except wash polish/wash-and-wax) or Appendix 7 (for wash polish/wash-and-wax products). The applicant must then collate the results according to the "summary of results" form in Appendix 6 or Appendix 7. The formulation of the test product must be attached to the overall result of the user test.

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) and the tests are performed by at least 5 users who are all professional cleaning staff, this user test can be used.

For professional products containing micro-organisms that conduct a user test: these products must also conduct a laboratory test to demonstrate residual cleaning effects as instructed in Appendix 5 under heading "Prolonged effectivity test for products containing micro-organisms." This applies whether using Nordic Ecolabelling's or EU Ecolabel's user test.

- † Alternative a) for all cleaning products except wash polish/wash-and-wax care products: Description of how the test is performed, plus all fully completed questionnaires, plus a summary of the responses (see Appendix 6), and the formulation of the test product.
- † Alternative b) for wash polish/wash-and-wax care products: Description of how the test is performed, plus all fully completed questionnaires, plus a summary of the responses (see Appendix 7), and the formulation of the test product.
- † Alternative c) Description of how the EU Ecolabel test has been performed, the complete results from the test (only if the tests are performed by at least 5 users who are all professional cleaning staff), and the formulation of the test product.
- † If the product contains micro-organisms, the user test must be supplemented by a test report in accordance with Appendix 5 demonstrating residual cleaning effects.

4.6 Packaging requirements

Nordic Ecolabelling have set requirements on packaging to contribute to a circular economy by increasing the possibility to recycle the material, improving the quality of recycled material, and promoting reuse of materials. Additional packaging requirements for foam/spray products and mix-it-yourself RTU products reduce health risks for the end user. The following are requirements on the primary packaging such as bottles, containers, pouches, and cardboard for liquid products:

- O17 Recycling design of packaging and closures (excluding pouches)
- O18 Labels for rigid plastic packaging
- O19 Recycling design of pouches/plastic bags
- O20 Cardboard for liquid products: Design for recycling
- O21 Weight-Utility Ratio (WUR)
- O22 Packaging for foam/spray products and mix-it-yourself RTU products

Sales packaging made of plastic must either live up to requirements O17-O19 below or the sales packaging must have a Recyclability certificate from RecyClass showing that the whole sales packaging is recyclable with a minimum recyclability score of B.

O17 Recycling design of packaging and closures (excluding pouches)

Plastic packaging of less than 200 litres must 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: Small parts in dispensing systems, however they must not contain PS, PVC or other halogenated plastics. For dispensing systems used on a PET bottle, each small part must have a density <1.0 g/cm³.

- Packaging must be white or uncoloured.

Exemption: Packaging containing postconsumer recycled plastic may be coloured/tinted.

- Carbon black pigments are not permitted.

Exemption: 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 0.995 g/cm³.
- Metal parts may not be included in the packaging or closure.

Exemption: 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 (e.g. bottle) and closures must be compatible with each other, in accordance with the following:
 - PET packaging: closures must have a density of less than 1 g/cm³. Silicon closures are not allowed
 - PP and PE packaging: Silicon closures are not allowed
 - PE packaging: 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 include caps/lids, dosage equipment and pumps mounted on the packaging.

- † A signed declaration of compliance with the stated material composition for the packaging, including bottle, closure, filler and the density of the packaging, colorant where applicable. Appendix 4 or an equivalent declaration may be used. Alternatively, recyclability certificate from RecyClass showing that the whole sales packaging is recyclable with a minimum recyclability score of B
- † Packaging specifications (including bottle and closures) or certificate showing the materials used and the colours of any plastic packaging or closures. Not applicable if the requirement is documented by a RecyClass certificate.
- † Label showing text regarding instruction to remove the cap before recycling, where applicable.

O18 Labels for rigid plastic packaging: Design for recycling of packaging

The following is required for labels ("traditional label," shrink film label, sleeve, etc.):

Label material

For packaging made from polyethylene (PE) and polypropylene (PP):

- The label must be of the same material as the packaging (PE/PP) and the polymer composition of the label material (excluding adhesive and print) must consist of either > 95% polypropylene (PP) or > 99% polyethylene (PE). The total density of the label must be < 1.0 g/cm³.

Exemption for PE packaging: Fold-out (cross-over) labels of PP if the label does not cover more than 60% of the packaging surface.*

For packaging made from polyethylene terephthalate (PET):

- The polymer composition of the label material (excluding adhesive, print and liner) must consist of either > 95% polypropylene (PP) or > 99% polyethylene (PE). The total density of the label must be < 1.0 g/cm³.
- The label must not cover more than 60% of the packaging surface*.

*Instructions and example calculations can be found in section 8 in Appendix 3.

Print

- Printing inks for rigid plastic packaging must be compliant with EuPIA exclusion policy**
- Direct print on the container is not permitted except for date codes, batch codes and UFI (Unique Formula Identifier).

** In accordance with https://www.eupia.org/wp-content/uploads/2024/03/20240313-EuPIA_Exclusion_Policy_for_Printing_Inks_and_Related_Products_-March-2024_6th-Edition-v1-1.pdf

- † Label specifications showing the material used and density. Appendix 4 can be used. Alternatively, recyclability certificate from RecyClass showing that the whole sales packaging is recyclable with a minimum recyclability score of B.
- † For labels of different material than the packaging: Calculation of label size compared to the surface of the container. Nordic Ecolabelling's calculation sheet for the packaging can be used. Not applicable if the requirement is documented by a RecyClass certificate.
- † Declarations that PS, PVC and other halogenated plastics, aluminium and other metals have not been used. Appendix 4 can be used. Not applicable if the requirement is documented by a RecyClass certificate.
- † Declaration from the applicant that direct print is not used except for date codes, batch codes and UFI. Appendix 1 can be used.

O19 Recycling design of pouches/plastic bags

Plastic pouches or bags must have a design that enables effective material recovery. This means that they must meet the requirements below.

- The plastic packaging and closure must be made from Polyethylene (PE), Polypropylene (PP) or Polyethylene terephthalate (PET).
- Exemption is made for pouch valves for closed dosing systems for professional use. PS, PVC and other halogenated plastics are not allowed. The packaging must be made of monomaterial, i.e. not laminates with layers of different materials.

Exemption: Barrier coatings can only be made of EVOH (Ethylene vinyl alcohol) in maximum amounts of 5% related to the total weight of the film.

- 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 cannot be added to the pouch or closures.

Exemption is made for text and pictograms and 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 / cm³.

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

- † A signed declaration of compliance with the stated material composition and barrier coatings, for the packaging including pouch, closure, filler and the density of the pouch, colourant where applicable. Appendix 4 or an equivalent declaration may be used. Alternatively, recyclability certificate from RecyClass showing that the whole sales packaging is recyclable with a minimum recyclability score of B.
- † Packaging specifications (including pouch, labels and closures) or certificate showing the plastic used and what colours the packaging and closure has. Not applicable if the requirement is documented by a RecyClass certificate.

O20 Cardboard packaging for liquid products: Design for recycling

The sales packaging* must have a design that enables material recovery. This means that cardboard packaging for liquid products must meet the requirements below.

- At least 90% by weight of the sales packaging must be made of bio-based material* or post-consumer/commercial recycled material (PCR)* or a combination of these. A mass balance approach is permitted.
- Halogenated plastics (e.g. polyvinyl chloride (PVC) and polyvinylidene chloride (PVDC)), oxo-degradable plastic and biodegradable plastic must not be used.
- Packaging must not be surface treated with PFAS** either on the inside or on the outside of the packaging.
- Metal must not be used.
- Labels must not be used.

Exemption: Removable covers/labels on the closure added to indicate that the product is not a food item

- Printing inks must be compliant with EuPIA*** exclusion policy

Materials

Additionally, the following raw material requirements apply:

Paper/paperboard

- A minimum of 70% of the wood raw material used in the paper/paperboard must originate from forestry certified under the FSC (Forest Stewardship Council) or PEFC (Program for the Endorsement of Forest Certification) schemes, or the raw material can be recycled (PCR)*, or a combination of the two.
- The remaining proportion of wood raw material must be covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources).

Bio-based* plastic

- Palm oil including PFAD (Palm Fatty Acid Distillate) and POME (Palm Oil Mill Effluent), soybean oil, and soy flour must not be used for bio-based polymer.
- The origin of other raw materials must be verified as either a) or b):
 - n) Waste* or residual products* defined in accordance with (EU) Renewable Energy Directive 2018/2001. There must be traceability back to the production/process where the residual production occurred.

o) Certified by one of the following certification schemes:

- Bonsucro EU
- ISCC EU or ISCC Plus
- A standard/certification scheme that meets Nordic Ecolabelling's requirements for raw material standards, please see appendix 8.
- The supplier of the bio-based polymer must have a valid chain of custody (CoC) certificate according to the standard by which the raw material is certified. Traceability must at least be ensured by mass balance. Book and claim systems are not accepted.

* See list of definitions in section 5 of this document.

** PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF₃-) or methylene (-CF₂-) carbon atom (without any H/Cl/Br/I attached to it).

*** In accordance with https://www.eupia.org/wp-content/uploads/2024/03/20240313-EuPIA_Exclusion_Policy_for_Printing_Inks_and_Related_Products_-March-2024_6th-Edition-v1-1.pdf.

- † Packaging specifications, showing percentage (by weight) of paperboard, barriers (material type, whether it is biobased or PCR and percentage) and other elements such as closure (material type, whether it is bio-based or PCR and percentage). Appendix 4 can be used.
- † Calculation showing that the requirement for the proportion of bio-based or recycled material in the sales packaging is fulfilled. Appendix 4 can be used.
- † Declarations that PVC and other plastic based on other types of halogenated plastics, oxo-degradable plastic and biodegradable plastic have not been used, that aluminium and other metals have not been used, that the packaging has not been treated with PFAS, and that labels are not used. Appendix 4 can be used.
- † For paper/paperboard: The producer of the packaging must document, for instance based on invoice or delivery note, that the requirement of minimum 70% certified or recycled material is met on a yearly basis, and that the remaining proportion is covered by the FSC/PEFC control schemes.
- † For biobased plastic: Declaration that palm oil incl. PFAD and POME, soy oil and soy flour have not been used as raw material for the bio-based polymer. Appendix 4 can be used.
- † For biobased plastic (waste and residual products): Documentation that the requirement's definition of waste or residual products is met, as well as traceability which shows where the waste or residual product comes from.
- † For biobased plastic (certified raw materials): Copy of valid CoC certificate or certification number from the raw material supplier. Documentation in form of invoices or delivery notes documenting the purchase of certified bio-based polymer.

O21 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:

$$WUR = \sum \left(\frac{2 \cdot W_i - 2.5 \cdot R_i}{D_i \cdot t_i} \right) \leq \text{limit value in Table 6}$$

W_i = 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.

R_i = 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.

D_i = 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)).

t_i = 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 6 WUR limit values

Product type	WUR 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
Mix-it-yourself RTU products (i.e., concentrated products for refill for RTU bottles which are always diluted at least 10 times by the user to the finished product) *	30.0

**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. (O12-O14). If the product is not marketed together with a reusable 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 the reusable packaging. WUR for this reusable 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, foam/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.

O22 Packaging for foam/spray products and mix-it-yourself RTU products

- a) Foam/spray products must not use a propellant.
- b) All foam/spray products must have a permanent aerosol-reducing nozzle.

Alternatively, other aerosol-reducing devices such as aerosol-reducing formulation in the form of a viscous product are acceptable if test results are provided 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 Nordic Swan labelled reference product with 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)¹². The test must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 3.

- c) Packaging for mix-it-yourself RTU products (i.e., concentrated products for refill for which are always diluted at least 10 times by the user to the finished product) must be designed so that the user does not come in contact with the product when diluting.
- d) For mix-it-yourself RTU products: If it is communicated on the label or in any other way that the product can be used in a foam/spray bottle, the following text must be included: "The foam/spray bottle must have an aerosol-reducing 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 foam/spray trigger, stating that it has a permanent aerosol-reducing 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 with Appendix 3.
- ↑ 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 foam/spray bottle must have an aerosol-reducing nozzle to protect the user's health".

4.7 Licence maintenance

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

- Customer complaints
- Traceability

O23 Customer complaints

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

Note that the original routine for customer complaint handling must be in one Nordic language or in English.

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

¹² 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://stami.brage.unit.no/stami-xmlui/handle/11250/2433134>

O24 Traceability

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

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

↑ Upload your routine or a description

5 Criteria version history

Nordic Ecolabelling adopted version 7.0 of the criteria for cleaning products 11 March 2026. The criteria are valid until 31 March 2031.

6 Future criteria generation

The following points can be considered for the next revision:

- Create a requirement for raw material feedstocks and production with lower life-cycle environmental impacts
- Add additional hazard classifications for restriction in ingoing substances, for example: hazardous to the environment category acute 1, specific target organ toxicity single exposure category 1, acute toxicity category 1 and 2, skin corrosion category 1A, aspiration hazard category 1
- Exclude all phosphorous-containing substances
- Exclude all biocidal active substances, except for preservatives, especially if there is risk of discharge to the environment
- Revise performance tests to exclude the possibility that the reference product is produced by the applicant
- Revise packaging requirements and add a requirement for share of recycled material

7 How to apply and regulations for the Nordic Ecolabelling

Application and costs

For information about the application process and fees for this product group, please refer to the respective national website. For contact information see the beginning of this document.

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

Licence validity

The Nordic Swan Ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be prolonged 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.

Responsibility for Compliance with Applicable Legislation

When applying for the Nordic Swan Ecolabel, the applicant/licensee confirms compliance with all current regulatory requirements related to both the exterior and interior environment in connection with the production and handling of the product(s) covered by the application. Furthermore, the applicant declares that all applicable regulatory requirements within the Nordic region are met for the product(s). Compliance with these regulations is a prerequisite for obtaining a license.

On-site inspection

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

Queries

Please contact Nordic Ecolabelling if you have any queries or require further information. See contact info in the beginning of this document. Further information and assistance (such as calculation sheets or electronic application help) is available. Visit the relevant national website for further information.

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.

Regulations for the Nordic Ecolabelling of products

When the Nordic Swan Ecolabel is used on products the licence number shall be included.

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

Appendix 1 Declaration from the manufacturer of the cleaning product

To be submitted with an application for a Nordic Swan Ecolabel licence of cleaning products.

This declaration is based on the best available knowledge at the time of the application, including test results and/or declarations from raw material manufacturers. It is subject to change if new information or scientific findings become available. In such cases, an updated declaration must be submitted.

Product name:	
Product usage areas (all-purpose cleaner, window cleaner, WC-cleaner, etc):	
Product format (liquid, powder, tablet, water-soluble sheet, etc.)	
Type of product (please see descriptions of these subcategories under product group definition in section 2 of criteria document and in "Justification of product group definition" in background document) Mark all that are relevant (i.e., mark "RTU, consumer" and "RTU, professional" if both apply):	
Concentrated, consumer: Consumer products that require dilution with water prior to use.	<input type="checkbox"/>
RTU, consumer: Consumer products that are pre-diluted and ready for use straight from the package including foam/spray products.	<input type="checkbox"/>
Concentrated, professional: Professional products that require dilution with water prior to use.	<input type="checkbox"/>
RTU, professional: Professional products that are pre-diluted and ready for use including foam/spray products.	<input type="checkbox"/>
RTU window cleaner: Consumer and professional window and glass cleaners that are pre-diluted and ready for use straight from the package including foam/spray products.	<input type="checkbox"/>
Outdoor surface cleaners: Consumer and professional cleaners that are for use outdoors. These are typically concentrated products for large surfaces.	<input type="checkbox"/>
Product dilution (see also Definitions table):	
Concentrate (requires dilution)	<input type="checkbox"/>
Ready-to-use (pre-diluted)	<input type="checkbox"/>
Mix-it-yourself RTU (e.g., tablet for refill bottle)	<input type="checkbox"/>
Other or combination of the above (explain) _____	<input type="checkbox"/>
Product contains micro-organisms? (check box if "yes")	
<input type="checkbox"/>	
Approximately what percentage of total product sales are to the professional market (estimate based on sales data)? _____ %	

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

- **Ingoing substances:** All substances* in the Nordic Swan Ecolabelled/chemical product regardless of amount, including additives (e.g. preservatives and stabilizers) from the raw materials. Substances released from ingoing substances (e.g. biocidal active substances generated by preservatives, such as formaldehyde) are also regarded as ingoing substances. Foil that is not removed before use of the product, and that is water soluble is considered as part of the formulation/recipe.

**N.B. the difference from the definition of substances in the REACH Regulation (EC) No 1907/2006. Whereas a REACH substance encompasses a chemical element or compound as well as its stabilising additives and process impurities, a substance here refers to each of the constituents separately. The constituents of a UVCB substance (Unknown or Variable composition, Complex reaction products or of Biological materials) are also regarded separately, and all known constituents must be regarded.*

- **Impurities:** Trace levels of pollutants, contaminants and residues from production, including production of raw materials, that remain in the chemical product in concentrations ≤ 100 ppm (≤ 0.0100 w%). For formaldehyde other than as a biocidal active substance and for arylamine, the corresponding concentration is ≤ 50 ppm (≤ 0.0050 w%).

Examples of impurities: Background environmental pollutants from feedstock, as well as contaminants and residues from production such as reactants (incl. monomers), reagents, catalysts, by-products, scavengers, detergents for production equipment, carry-over from other or previous production lines.

- **Impurities in the raw materials** in concentrations $\geq 10\ 000$ ppm (≥ 1.0000 w%) are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled/chemical product.

Additional information concerning definitions of ingoing substances and impurities

Limit values: The limit for excluded ingoing substances is 0 ppm (unless otherwise stated), while there's a specific defined limit for impurities. The impurity limit applies separately to each individual excluded substance, from each individual raw material. Concentrations of different impurities with the same excluded classification or substance group characteristics shall not be summed up to meet the impurity limit in the labelled product. Also, concentrations of an individual impurity, originating from different raw materials, shall not be summed.

UVCB substances: UVCB substances (Unknown or Variable composition, Complex reaction products or of Biological materials) have a composition of constituents that is not completely known or is variable from time to time. For UVCB substances, all constituents that are known must be declared in the Nordic Swan Ecolabel raw material appendix based on the best available knowledge. All constituents are considered individually and are subject to the chemical requirements, including for instance those on excluded substances and excluded classifications.

However, in the requirements O12 Long-term environmental effects, O13 Critical dilution volume (CDV), and O14 Content of substances which are not aerobically and/or anaerobically biodegradable, the UVCB substance can be considered as one ingoing substance and placed in a single row in the calculation sheet. If the UVCB substance can be assigned a DID-number, the data on the DID-list must be used. N.B. that for UVCBs that are perfumes, a specific approach applies regarding the requirement on environmentally hazardous substances, as described below.

Perfumes: Perfumes constitute a group of complex raw materials that are often, but not always, UVCBs. All perfume constituents must be declared the same way as described for UVCBs above. A perfume can also be placed in one row in the calculation sheet. However, for requirement O12 Long-term environment effects, a perfume must not be regarded as one ingoing substance, irrespective of whether the perfume is an UVCB or not. Instead, each constituent of the perfume mixture must be regarded in a calculation of the weighted sum of substances classified H410, H411 and H412. For perfumes, specific toxicity and biodegradability data can be used. If data is not available, the data on DID 2549 must be used.

Instructions: Provide information about the cleaning product in the tables below

O3 Supply Chain Policy and Code of Conduct	Yes	No
Mark your answers with an X in the relevant column. Does your company have fewer than 250 employees?		
O4 Certified raw materials from oil palms	Yes	No
If the answer to all the questions below is No, put an X in the column to the right.		
Does the product contain palm oil or palm kernel oil? This includes by-products, residues, and waste fractions from palm oil industries, such as palm fatty acid distillate and palm effluent sludge. If yes, is this palm oil/palm kernel oil RSPO certified? Traceability: Mark traceability level below and state the certificate/licence number: _____		
No traceability		
Identity Preserved		
Segregated		
Mass Balance		

O5 Classification of ingoing substances		
Does the product contain ingoing substances or impurities classified with any of the hazard codes below, including all classification variants (e.g. H350 also includes H350i)? If the answer to all the classifications below is No, put an X in the column to the right.	Yes	No
H420 – Ozone		
H372 – STOT RE 1		
H334 – Resp. Sens. 1, 1A or 1B		
H317 – Skin Sens. 1, 1A or 1B		
H350 – Carc. 1A or 1B		
H351 – Carc. 2		
H340 – Muta. 1A or 1B		
H341 – Muta. 2		
H360 – Repr. 1A or 1B		
H361 – Repr 2		
H362 – Lact.		
EUH380 – ED HH 1		
EUH381 – ED HH 2		
EUH430 – ED ENV 1		
EUH431 – ED ENV 2		
EUH440 – PBT		
EUH441 – vPvB		
EUH450 – PMT		
EUH451 – vPvM		
O6 Excluded substances		
Does the product contain any of the following substances as ingoing substances or impurities?	Yes	No
Alkylphenols (AP) (e.g. butylated hydroxy anisole (BHA, CAS No. 25013-16-5), butylated hydroxytoluene (BHT, CAS No. 128-37-0), alkylphenol ethoxylates (APEOs) and other alkylphenol derivates (APD))		
Amphoacetates derivatives of N-hydroxyethyl imidazolines (EC No. 271-792-5, 271-794-6, 931-291-0,		
Aromatic solvents and carriers, incl. chlorotoluenes, chlorophenols and chlorobenzenes Solvents are defined in Directive 1999/13/EC: Organic substances with a vapour pressure of at least 0.01 kPa at 20 °C		
Benzalkonium chloride (CAS No. 8001-54-5)		
Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA for further EU regulatory risk management due to known or potential endocrine disruption or reproductive toxicity. EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylidenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS), 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA)		
Boric acid, borates, and perborates		
Endocrine disruptors, potential or identified, listed in "Endocrine Disruptor Lists" List I, II or III		

Does the product contain any of the following substances as ingoing substances or impurities?	Yes	No
Ethylenediamine tetraacetate (EDTA, CAS No. 60-00-4) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts		
Halogenated organic compounds		
Isothiazolinones (e.g. methylisothiazolinone (MIT), CAS No. 2682-20-4, metylchlorisothiazolinone (CMIT), C(M)IT/MIT (3:1), CAS No. 55965-84-9, CAS No. 26172-55-4, benzisothiazolinone (BIT), CAS No. 2634-33-5, octylisothiazolinone (OIT), CAS No. 26530-20-1 and dichlorooctylisothiazolinone (DCOIT), CAS No. 64359-81-5)		
Linear alkylbenzene sulphonates (LAS)		
Methyldibromo glutaronitrile (MG), CAS no. 35691-65-7		
Nanomaterials/-particles Defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01): 'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions: one or more external dimensions of the particle are in the size range 1 nm to 100 nm the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm		
Nitro musks and polycyclic musk compounds		
NTA (nitrilo triacetic acid, CAS-no. 139-13-9), and its salts		
Organic chlorine compounds, hypochlorites and hypochlorous acid		
PBT and vPvB as defined in REACH Annex XIII, including those under ECHA PBT assessment https://echa.europa.eu/da/pbt		
Per- and polyfluoroalkyl substances (PFAS) PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF ₃ -) or methylene (-CF ₂ -) carbon atom (without any H/Cl/Br/I attached to it)		
Phosphate, phosphonate, phosphonic acid and phosphoric acid		
Phthalates		
Quaternary ammonium compounds that are not readily aerobic biodegradable such as DTDMAC(CAS No. 61789-80-8), DSDMAC (CAS No. 107-64-2), DHTDMAC (CAS No. 61789-72-8) and DADMAC (CAS No. 7398-69-8)		
Siloxanes		
Silver, colloidal silver, or nanosilver		
Substances of Very High Concern on the REACH Candidate list of SVHC substances https://www.echa.europa.eu/candidate-list-table		
Volatile organic compounds (VOC)		

O7 Microplastics	Yes	No
Does the product contain polymers?		
<p>If yes, does the product contain polymers that are defined as microplastics*?</p> <p>If the product contains polymers that are not defined as microplastics*, please state how the polymers are excluded from the definition (please include test methods and results if relevant):</p> <hr/> <hr/> <p>* 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:</p> <p>a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles.</p> <p>b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:</p> <p>(i) all dimensions of the particles are equal to or less than 5 mm.</p> <p>(ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.</p> <p>The following polymers are excluded from this designation:</p> <p>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.</p> <p>b) polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006].</p> <p>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].</p> <p>d) polymers that do not contain carbon atoms in their chemical structure.</p> <p><i>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".</i></p>		
O9 Fragrances	Yes	No
Does the product contain fragrances (incl. plant extracts)?		
If "yes," please answer the following questions about fragrances:		
Have fragrances been added in line with IFRA guidelines? (IFRA, International Fragrance Association, www.ifraorg.org/)		
Does the fragrance contain BHT? (see O6)		
Does the product contain fragrance allergens that are judged to be sensitising with the hazard statement H317 and/or H334, or which are listed in Annex III of the Cosmetic Regulation? If yes, please send in perfume specifications.		
Does the product contain the fragrance allergens oak moss extract (<i>Evernia prunastri</i> , CAS No. 90028-68-5), tree moss extract (<i>Evernia furfuracea</i> , CAS No. 90028-67-4) or HICC (CAS No. 31906-04-4)?		
O10 Preservatives	Yes	No
Does the product contain preservatives?		
If yes, please state name and log Kow/BCF: _____		

O12 Long-term environmental effects	Yes	No
<p>Does the product contain substances classified as environmentally hazardous with H410, H411 and H412?</p> <p>If yes, please state the amount (% by weight) per classification, and for H410 substances also state the M-factor:</p> <p>_____</p>		
O17-O22 Packaging requirements	Yes	No
Do all parts of the packaging meet requirements O17-O22?		
<p>If the dispensing system contains small parts of materials other than PE, PP or PET:</p> <p>Is the dispensing system used on a PET bottle?</p> <p>If yes, do all small parts have a density < 1.0 g/cm³?</p>		
For labels on PET containers and/or fold-out labels of different material than the packaging: Does the label cover > 60% of the packaging surface? (O18)		
<p>For packaging other than flexible plastic pouches and cardboard packaging for liquid products:</p> <p>Is there any direct print on the container except for date codes, batch codes and UFI (Unique Formula Identifier)?</p>		
For cardboard packaging for liquid products: Are any labels added, other than removable covers/labels on the closure added to indicate that the product is not a food item?		
<p>Are label(s) printed internally at the production site or by an external printing company (other than the label supplier)?</p> <p>If yes, is the printing ink used for the plastic packaging compliant with EuPIA exclusion policy*?</p> <p>*https://www.eupia.org/wp-content/uploads/2024/03/20240313-EuPIA_Exclusion_Policy_for_Printing_Inks_and_Related_Products_-March-2024_6th-Edition-v1-1.pdf</p>		

If the answer to any of the questions in O5-O12 is Yes, please provide the following information for each relevant substance: CAS No. (where possible), chemical name, concentration (in ppm, % by weight or mg/kg). Also state whether the substance is present as an ingoing substance or impurity.

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If the product composition changes, a new declaration confirming compliance with the requirements must be submitted to Nordic Ecolabelling.

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

Appendix 2 Declaration from the manufacturer/supplier of the raw material to the cleaning product

To be used with an application for a licence for the Nordic Ecolabelling of cleaning products.
To be submitted with an application for a Nordic Swan Ecolabel licence.

This declaration is based on the best available knowledge at the time of the application, including test results. If new information or scientific findings become available, please inform Nordic Ecolabelling and submit an updated declaration. For suppliers: If you do not have knowledge about the complete composition of the raw material/ingredient, you are obliged to obtain this information from the manufacturer of the raw material/ingredient.

Manufacturer/supplier:
Trade name of the raw material:

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

- **Ingoing substances:** All substances* in the Nordic Swan Ecolabelled/chemical product regardless of amount, including additives (e.g. preservatives and stabilizers) from the raw materials. Substances released from ingoing substances (e.g. biocidal active substances generated by preservatives, such as formaldehyde) are also regarded as ingoing substances.

**N.B. the difference from the definition of substances in the REACH Regulation (EC) No 1907/2006. Whereas a REACH substance encompasses a chemical element or compound as well as its stabilising additives and process impurities, a substance here refers to each of the constituents separately. The constituents of a UVCB substance (Unknown or Variable composition, Complex reaction products or of Biological materials) are also regarded separately, and all known constituents must be regarded.*

- **Impurities:** Trace levels of pollutants, contaminants and residues from production, incl. production of raw materials, that remain in the chemical product in concentrations ≤ 100 ppm (≤ 0.0100 w%). For formaldehyde other than as a biocidal active substance and for arylamine, the corresponding concentration is ≤ 50 ppm (≤ 0.0050 w%).

Examples of impurities: Background environmental pollutants from feedstock, as well as contaminants and residues from production such as reactants (incl. monomers), reagents, catalysts, by-products, scavengers, detergents for production equipment, carry-over from other or previous production lines.

- **Impurities in the raw materials** in concentrations $\geq 10\ 000$ ppm (≥ 1.0000 w%) are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled/chemical product.

Additional information concerning definitions of ingoing substances and impurities

Limit values: The limit for excluded ingoing substances is 0 ppm (unless otherwise stated), while there's a specific defined limit for impurities. The impurity limit applies separately to each individual excluded substance, from each individual raw material. Concentrations of different impurities with the same excluded classification or substance group characteristics shall not be summed up to meet the impurity limit in the labelled product. Also, concentrations of an individual impurity, originating from different raw materials, shall not be summed.

UVCB substances: UVCB substances (Unknown or Variable composition, Complex reaction products or of Biological materials) have a composition of constituents that is not completely known or is variable from time to time. For UVCB substances, all constituents that are known must be declared in the Nordic Swan Ecolabel raw material appendix based on the best available knowledge. All constituents are considered individually and are subject to the chemical requirements, including for instance those on excluded substances and excluded classifications.

However, in the requirements O12 Long-term environmental effects, O13 Critical dilution volume (CDV) and O14 Content of substances which are not aerobically and/or anaerobically biodegradable, the UVCB substance can be considered as one ingoing substance and placed in a single row in the calculation sheet. If the UVCB substance can be assigned a DID-number, the data on the DID-list must be used. N.B. that for UVCBs that are perfumes, a specific approach applies regarding the requirement on environmentally hazardous substances, as described below.

Perfumes: Perfumes constitute a group of complex raw materials that are often, but not always, UVCBs. All perfume constituents must be declared the same way as described for UVCBs above. A perfume can also be placed in one row in the calculation sheet. However, for requirement O12 Long-term environment effects, a perfume must not be regarded as one ingoing substance, irrespective of whether the perfume is an UVCB or not. Instead, each constituent of the perfume mixture must be regarded in a calculation of the weighted sum of substances classified H410, H411 and H412. For perfumes, specific toxicity and biodegradability data can be used. If data is not available, the data on DID 2549 must be used.

Instructions:

Please list the ingoing substances in the raw material in the table below and indicate 'yes' or 'no' as to whether each substance is regarded as a UVCB substance.

If the raw material contains impurities that are listed under excluded substances or has any of the classifications mentioned in this appendix, write the amount in the box 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.

Name of raw material ingredient	Chemical name	CAS No.	Amount in weight %	Function of the raw material/ ingredient	Suggested DID No.	UVCB substance? State Yes/No

Please note that:

The DID-list (Detergents Ingredients Database) is available on the Nordic Ecolabelling websites.

Substances defined as surfactants according to the Detergent Regulation (EC) No 648/2004 and 2026/405, must always be reported with the function "surfactant."

The information provided in this declaration is shared internally with the Nordic Ecolabelling certification personnel for the purpose of evaluating license applications.

O4 Certified raw materials from oil palms	Yes	No
Mark your answers with an X in the relevant column. If the answer to all the questions below is No, put an X in the column to the right.		
Does the raw material contain palm oil or palm kernel oil? This includes by-products, residues, and waste fractions from palm oil industries, such as palm fatty acid distillate and palm effluent sludge. If yes, is this palm oil/palm kernel oil RSPO certified? Traceability: Mark traceability level below and state the certificate/licence number: _____		
No traceability		
Identity Preserved		
Segregated		
Mass Balance		
O5 Classification of ingoing substances	Yes	No
Does the raw material contain ingoing substances or impurities classified with any of the hazard codes below, including all classification variants (e.g. H350 also includes H350i)? If the answer to all the classifications below is No, put an X in the column to the right.		
H420 – Ozone		
H372 – STOT RE 1		
H334 – Resp. Sens. 1, 1A or 1B		
H317 – Skin Sens. 1, 1A or 1B		
H350 – Carc. 1A or 1B		
H351 – Carc. 2		
H340 – Muta. 1A or 1B		
H341 – Muta. 2		
H360 – Repr. 1A or 1B		
H361 – Repr 2		
H362 – Lact.		
EUH380 – ED HH 1		
EUH381 – ED HH 2		

Does the raw material contain ingoing substances or impurities classified with any of the hazard codes below, including all classification variants (e.g. H350 also includes H350i)?	Yes	No
EUH430 – ED ENV 1		
EUH431 – ED ENV 2		
EUH440 – PBT		
EUH441 – vPvB		
EUH450 – PMT		
EUH451 – vPvM		
O6 Excluded substances		
Does the raw material contain any of the following substances as ingoing substances or impurities?	Yes	No
Alkylphenols (AP) (e.g. butylated hydroxy anisole (BHA, CAS No. 25013-16-5), butylated hydroxytoluene (BHT, CAS No. 128-37-0), alkylphenol ethoxylates (APEOs) and other alkylphenol derivates (APD))		
Amphoacetates derivatives of N-hydroxyethyl imidazolines (EC No. 271-792-5, 271-794-6, 931-291-0,		
Aromatic solvents and carriers, incl. chlorotoluenes, chlorophenols and chlorobenzenes Solvents are defined in Directive 1999/13/EC: Organic substances with a vapour pressure of at least 0.01 kPa at 20 °C		
Benzalkonium chloride (CAS No. 8001-54-5)		
Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA for further EU regulatory risk management due to known or potential endocrine disruption or reproductive toxicity. EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylidenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS, 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA)		
Boric acid, borates, and perborates		
Endocrine disruptors, potential or identified, listed in "Endocrine Disruptor Lists" List I, II or III		
Ethylenediamine tetraacetate (EDTA, CAS No. 60-00-4) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts		
Halogenated organic compounds		
Isothiazolinones (e.g. methylisothiazolinone (MIT), CAS No. 2682-20-4, metylchloroisothiazolinone (CMIT), C(M)IT/MIT (3:1), CAS No. 55965-84-9, CAS No. 26172-55-4, benzisothiazolinone (BIT), CAS No. 2634-33-5, octylisothiazolinone (OIT), CAS No. 26530-20-1 and dichlorooctylisothiazolinone (DCOIT), CAS No. 64359-81-5)		
Linear alkylbenzene sulphonates (LAS)		
Methyldibromo glutaronitrile (MG), CAS no. 35691-65-7		

Does the raw material contain any of the following substances as ingoing substances or impurities?	Yes	No
<p>Nanomaterials/-particles</p> <p>Defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01): 'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50 % or more of these particles in the number-based size distribution fulfil at least one of the following conditions:</p> <p>one or more external dimensions of the particle are in the size range 1 nm to 100 nm</p> <p>the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm</p> <p>the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm</p>		
Nitro musks and polycyclic musk compounds		
NTA (nitrilo triacetic acid, CAS-no. 139-13-9), and its salts		
Organic chlorine compounds, hypochlorites and hypochlorous acid		
PBT and vPvB as defined in REACH Annex XIII, including those under ECHA PBT assessment https://echa.europa.eu/da/pbt		
<p>Per- and polyfluoroalkyl substances (PFAS)</p> <p>PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF₃-) or methylene (-CF₂-) carbon atom (without any H/Cl/Br/I attached to it)</p>		
Phosphate, phosphonate, phosphonic acid and phosphoric acid		
Phthalates		
Quaternary ammonium compounds that are not readily aerobic biodegradable such as DTDMAC (CAS No. 61789-80-8), DSDMAC (CAS No. 107-64-2), DHTDMAC (CAS No. 61789-72-8) and DADMAC (CAS No. 7398-69-8)		
Siloxanes		
Silver, colloidal silver, or nanosilver		
Substances of Very High Concern on the REACH Candidate list of SVHC substances https://www.echa.europa.eu/candidate-list-table		
Volatile organic compounds (VOC)		

O7 Microplastics	Yes	No
Does the raw material contain polymers?		
<p>If yes, does the raw material contain polymers that are defined as microplastics*?</p> <p>If the raw material contains polymers that are not defined as microplastics*, please state how the polymers are excluded from the definition (please include test methods and results if relevant):</p> <hr/> <hr/> <p>* 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:</p> <p>a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles.</p> <p>b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:</p> <p>(i) all dimensions of the particles are equal to or less than 5 mm.</p> <p>(ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.</p> <p>The following polymers are excluded from this designation:</p> <p>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.</p> <p>b) polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006].</p> <p>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].</p> <p>d) polymers that do not contain carbon atoms in their chemical structure.</p> <p><i>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".</i></p>		
O9 Fragrances	Yes	No
Does the raw material contain fragrances (incl. plant extracts)?		
If yes, please answer the following questions about fragrances:		
Have fragrances been added in line with IFRA guidelines? (IFRA, International Fragrance Association, www.ifraorg.org/)		
Does the fragrance contain BHT? (see O6)		
Does the raw material contain fragrance allergens that are judged to be sensitising with the hazard statement H317 and/or H334, or which are listed in Annex III of the Cosmetic Regulation? If yes, please send in perfume specifications.		
Does the raw material contain the fragrance allergens oak moss extract (Evernia prunastri, CAS No. 90028-68-5), tree moss extract (Evernia furfuracea, CAS No. 90028-67-4) or HICC (CAS No. 31906-04-4)?		
O10 Preservatives	Yes	No
Does the raw material contain preservatives?		
If yes, please state name and log Kow/BCF: _____		

O12 Long-term environmental effects	Yes	No
<p>Does the raw material contain substances classified as environmentally hazardous with H410, H411 and H412?</p> <p>If yes, please state the amount (% by weight) per classification, and for H410 substances also state the M-factor:</p> <p>_____</p>		

If the answer to any of the above questions is Yes, please provide the following information for each relevant substance: CAS No. (where possible), chemical name, concentration (in ppm, % by weight or mg/kg). Also state whether the substance is present as an ingoing substance or as an impurity.

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If the raw material composition changes, a new declaration confirming compliance with the requirements must be submitted to Nordic Ecolabelling.

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

Appendix 3 Analyses, test methods, and calculations

1A Requirements on the analysis laboratory for testing of ecotoxic effects, biodegradability, and inhalable aerosols

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

1B Requirements on the analysis laboratory for performance

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

The applicant's own laboratory, and external testing institutes that do not meet EN ISO/IEC 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 Approved test methods

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

3 Aquatic toxicity

For acute aquatic toxicity, test methods no. 201, 202, 203, and 212 in the OECD Guideline are used. For chronic aquatic toxicity test methods no. 210, 211, 215 and 229 in the OECD Guideline are used. OECD 201 can be used as chronic test if chronic endpoints are chosen.

4 Bioaccumulation

Unless otherwise proven, a substance is considered bioaccumulating if tested for bioaccumulation on fish according to method OECD 305 A-E or OECD 321 and its bioconcentration factor (BCF) is >100 . If no BCF value has been determined, a substance is considered bioaccumulating if its logKow value ≥ 3.0 according to method 107, 117 or 123 in the OECD Guidelines for the Testing of Chemicals or equivalent method. If the maximum measured BCF ≤ 100 , the substance is not considered bioaccumulating even if logKow ≥ 3.0 .

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

5 Aerobic biodegradability

For readily aerobic biodegradability test method no. 301 (A to F), 306 or 310 in the OECD Guidelines are used. For potential (inherently) biodegradability test method no. 302 (A to C) in the OECD Guidelines are used.

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

For anaerobic degradability test method no. 311 in the OECD Guidelines, ISO 11734, or ECOTOC no. 28 (June 1988) are used.

Substances that are not surfactants and which are not included in the DID-list or for which data is missing on DID-list list may be exempt from the requirements on anaerobic degradability if they fulfil all the following requirements:

- Not toxic to aquatic organisms (NOEC/EC_x > 0.1 mg/l or E/LC₅₀ > 10 mg/l)
- Readily aerobically biodegradable
- Have low adsorption (A $< 25\%$) or high desorption (D $> 25\%$) or are not bioaccumulating

Testing for adsorption/desorption can be carried out under OECD guidelines 106 or under ISO 18749 "Water quality - Adsorption of substances on activated sludge - Batch test using specific analytical methods".

7 DID list

The DID-list, Detergent Ingredient Database has been developed to facilitate the ecolabel application process and is a tool to rank chemicals and thus make it easier for licence holders and producers to choose less environmentally harmful chemicals in their products. The list contains information on toxicity and degradability of several substances that are used in chemical products.

The substances on the DID-list cannot be seen as an overview of substances that are contained in ecolabelled products, and the DID-list cannot be used to document the toxicity of the individual substances in connection with the classification rules. Here, information from safety data sheets, literature or the raw materials producer must be used.

The DID-list can be obtained from the ecolabelling organisation or the website of the respective country. If a substance is not included on the DID-list, or biodegradability data is missing, the methods described in part B of the DID-list must be used. For these criteria, the DID-list dated 2023 or later versions apply.

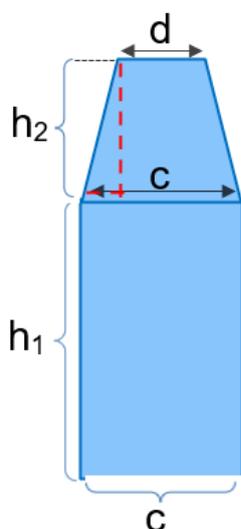
8 Calculation of coverage of label on plastic packaging

Below follows a description of how the calculation of coverage of labels on plastic containers should be carried out. The calculations can be done in Nordic Ecolabelling's calculation sheet for packaging.

Calculation for a non-cylindrical bottle:

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 the packaging are of different size, the maximum percentage shall be fulfilled for each side separately.

The illustration below shows an example of the measurements involved in the calculation of the total area of a non-cylindrical container:



The following formulas can be used to calculate the area:

$$\text{Area } A_1 = c \cdot h_1$$

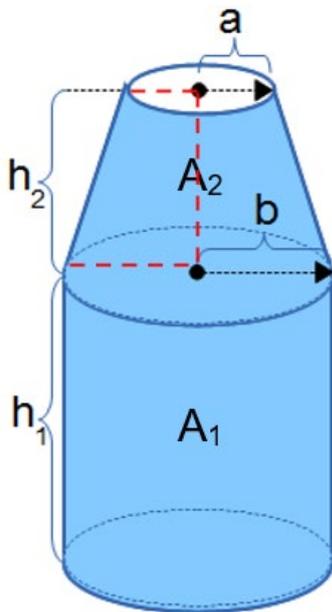
$$\text{Area } A_2 = \frac{h_2 \cdot (c + d)}{2}$$

$$\text{Total area } A = A_1 + A_2$$

Calculation for a cylindrical bottle:

For a cylindrical container, the calculation shall be based on the three-dimensional profile excluding the bottom and top of the container.

The illustration below shows the measurements involved in the calculation of the total area of a cylindrical container:



The following formulas can be used to calculate the area:

$$\text{Area } A_1 = 2 \cdot \pi \cdot b \cdot h_1$$

$$\text{Area } A_2 = \pi \cdot (b + a) \cdot \sqrt{h_2^2 + (b - a)^2}$$

$$\text{Total area } A = A_1 + A_2$$

Appendix 4 Declaration from the manufacturer of the primary packaging including 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.)

Plastic packaging (includes bottle) (O17)	Yes	No
For dispensing systems (e.g. a spray trigger): Does it contain small parts of other materials than PE (polyethylene), PP (polypropylene) or PET (polyethylene terephthalate)?		
If yes, does it contain PS, PVC or other halogenated plastics?		
Is the plastic packaging white or transparent?		
Is the plastic packaging coloured/tinted with carbon black?		
Has carbon black been added to the plastic packaging? 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.		
Are there metal coverings, metal seals or other metal parts?		
Are fillers used? If yes, state concentration and density of the plastic: _____		
Does the packaging contain post-consumer recycled/regrind material (PCR)? (O21) If yes, what is the content of recycled material (in %)? _____		

Label and shrink film label (O18)	Yes	No
Please specify the label material and density: _____		
Is there PS or PVC or plastics based on other types of halogenated plastics present in the label?		
Are there metal parts in the label such as metallized labels?		
Is the printing ink used compliant with EuPIA's exclusion policy*? * https://www.eupia.org/wp-content/uploads/2024/03/20240313-EuPIA_Exclusion_Policy_for_Printing_Inks_and_Related_Products_-March-2024_6th-Edition-v1-1.pdf		
Does the label contain post-consumer recycled/regrind material (PCR)? (O21) If yes, what is the percentage of PCR material? _____		
Plastic packaging: pouches (O19)	Yes	No
Is the packaging of monomaterial, i.e. not laminates with different material layers?		
Does the pouch valve contain parts of other materials than PE, PP or PET? If yes, does it contain parts of PS, PVC or other halogenated plastics?		
Is the pouch white or transparent?		
Is the pouch tinted/coloured with carbon black?		
Has carbon black been added to the pouch? 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.		
Are fillers used? If yes, state concentration and density of the plastic: _____		
Is there a barrier coating of EVOH (Ethylene vinyl alcohol) in the packaging? If yes, does the EVOH barrier coating constitute max 5% of the weight of the film?		
Does the packaging contain postconsumer recycled/regrind material (PCR)? (O21) If yes, what is the content of recycled material (in %)? _____		
Closure (includes cork / lid and mounted dosing devices / pumps)	Yes	No
Is there PS (Polystyrene) or PVC or plastics based on other types of halogenated plastics present in the closure? (O17 & O19)		
Is the closure black? (O17 & O19)		
Has carbon black been added to the closure? (O17 & O19) 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.		
Are there metal parts in the closure, such as metal in foam trigger? (O17) What is the density (g/cm ³) of the closure? _____		

Does the closure contain post-consumer recycled/regrind material (PCR)? (O21) If yes, what is the content of recycled material (in %)? _____		
If the closure is a trigger to a foam/spray product: Does it have a permanent aerosol reducing foaming nozzle? (O21) Permanent means that it is fixed in foaming position. Please describe the ingoing materials (in percentage) in the trigger: _____ _____ _____		
Cardboard packaging for liquid products: Design for recycling	Yes	No
Is at least 90% of the packaging made from bio-based material* of post-consumer/commercial recycled material (PCR) or a combination of these? Calculations to verify this can be done in the scheme below this table.		
Is halogenated plastics (e.g. PVC or PVDC), oxo-degradable plastic or biodegradable plastic used in the packaging?		
Is the component surface treated with PFAS (on the inside or outside)? PFAS is defined as any substance that contains at least one fully fluorinated methyl (CF3-) or methylene (-CF2-) carbon atom (without any H/Cl/Br/I attached to it).		
Is metal used in the packaging?		
Are labels/covers used on the packaging? If yes, is it removable labels/covers on the closure added to indicate, that the product is not a food item?		
Is the printing ink compliant with EuPIA's exclusion policy? https://www.eupia.org/wp-content/uploads/2024/03/20240313-EuPIA_Exclusion_Policy_for_Printing_Inks_and_Related_Products_-March-2024_6th-Edition-v1-1.pdf		
Paper/paperboard		
Does the wood raw material used in the paper/paperboard originate from forestry certified under the FSC (Forest Stewardship Council) or PEFC (Program for the Endorsement of Forest Certification) schemes? State % of FSC or PEFC certified content _____		
Does the wood raw material used in the paper/paperboard originate from PCR material? State % of the PCR material content: _____		
Is the remaining proportion of wood raw material, covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources)?		
Bio-based plastic		
Is palm oil incl. PFAD and POME, soy oil or soy flour used as raw material for the bio-based polymer?		
Is the origin of the bio-based raw materials verified as waste or residual products defined in accordance with (EU) Renewable Energy Directive 2018/2001?		

Is the origin of the waste certified by one of the following certification schemes: Bonsucro EU ISCC EU or ISCC Plus Others (please see Appendix 8 in the criteria for methods that meet Nordic Ecolabelling's requirements for raw material standards)? State certification scheme: _____		
If mass balance approach is used, is the traceability level based on book and claim?		
Paper or cardboard or packaging (other than cardboard packaging for liquid products)	Yes	No
Does the paper/carton/packaging contain postconsumer regrind/recycled material (PCR)? (O21) If yes, what is the content of recycled material (in %)? _____		

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 contains a description of how the performance test of cleaning products is to be carried out and how the result is to be documented to Nordic Ecolabelling.

Dose

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

The reference product

The reference product must be:

- Recently purchased, and
- Intended for the same area of use (e.g. kitchen, sanitary, window) and belong to the same product category (professional, consumer, RTU) as the product, and
- A product in a conventional format (e.g., liquid, gel, powder, tablet) that is well-established/well-known in the market.

The manufacturer can compare the product for which they apply the Nordic Swan Ecolabel with a self-produced product if the previously stated conditions are met.

Micro-organism-based products are to be compared to an equivalent product without micro-organisms.

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. The surfaces should be cleaned before taking the first measurement, to reduce background variability. Then the soil can be applied.

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 than those mentioned in the table must be tested for these areas of use and soil types, which may include soil types 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 (calcium deposits)
WC cleaner	Limescale (calcium deposits)
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.
Coffee machine cleaners	Coffee oil and limescale (calcium deposits)
Kitchen equipment cleaners	Fat
Dishwashing machines cleaners	Fat and limescale (calcium deposits)
Laundry machine cleaners	Limescale (calcium deposits), biological material*
Outdoor cleaners	Soot, fat, oil, asphalt (bitumen), biological material*
Products containing micro-organisms	Soils relevant to the area of use above. Also, test for degradation of protein, starch, fat/vegetable oil (see requirement O11)

**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.*

Method of cleaning

The method of cleaning shall be relevant to the product type. For cleaning products for machines, the product shall be tested in the machine if possible (e.g. a dishwashing machine). If it's not possible to test the product in the machine, soiled surface(s) shall be submerged in the diluted solution with minimal mechanical action (slow stirring of the solution).

The test shall be performed for the soil types specified in Table 1 that are relevant to the product's area of use and to any additional soil types for which the product is marketed.

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.

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 surfaces 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 surface and recorded in a table.

Calculation of the wash effectiveness index (EFF)

The wash effectiveness index is calculated using the following formula:

$$EFF = (R_c - R_b) / (R_a - R_b)$$

R_a = Reflectance before soiling (i.e. on a clean surface)

R_b = Reflectance after soiling

R_c = Reflectance after washing

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

The following must also be calculated:

EFF_p = Average EFF value for the product undergoing testing

EFF_r = Average EFF value for the reference product

EFF_w = Average EFF value for water

Requirement level

Cleaning effects must be demonstrated in accordance with one of the following requirements:

Alternative 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

Alternative B:

$$EFF_p \geq EFF_r$$

The following cleaning effects must be shown per product category (see Table 2):

Table 2 Cleaning effects per product category

Product/Area of use	Cleaning effect(s)
Sanitary cleaner	Removal of calcium and fat
WC cleaner	Removal of calcium
All-purpose cleaner and kitchen cleaner	Removal of fat
Wash polish/wash-and-wax care products	Removal of fat
Window and glass cleaner	Removal of fat and particulates
Oven cleaners	Removal of burned soil including fats, proteins and carbohydrates
Coffee machine cleaners	Removal of coffee oil and calcium
Kitchen equipment cleaners	Removal of fat
Dishwashing machines cleaners	Removal of fat and calcium
Laundry machine cleaners	Removal of calcium
Outdoor cleaners	Removal of soot, fat, oil, asphalt (bitumen) and biological material*
Products containing micro-organisms	Removal of soils relevant to the area of use above. Also, test for degradation of protein, starch, fat/vegetable oil (see requirement O11)

Wash effectiveness better than water

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

Irrespective of the method of evaluation (alternative A or B), the following shall be fulfilled:

$$EFF_p > EFF_w$$

Prolonged effectivity test for products containing micro-organisms

In addition to the applicable test for efficiency, it should also be demonstrated in a laboratory test that products containing micro-organisms degrade protein, starch, and fat/vegetable oil continuously over a prolonged period as claimed by the manufacturer, otherwise, 7 days (see requirement O11). Daily measurements should be recorded for 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.

Documentation

The entire test shall be reported in accordance with the framework specified above. The report must contain the following points:

- The formulation number providing linkage to the product name and the version of the recipe that is specified in the licence application.

- The applicant shall state the dose of the product and of the reference product.
- The applicant shall answer the following:
 - a) How long has the reference product been on the market?
 - b) What areas of application do the product and the reference product have in common?
 - c) Why was this product chosen as the reference product?
 - d) What type of surface was used in the test?
 - e) Why is this surface relevant?
 - f) Is the product gentle on this type of surface?
- State the formula for the soil
- State why the composition of the soil is relevant to the area of use of the product.
- Describe the method of cleaning and how this method is relevant.
- Describe how soiling, washing and measurement/detection were performed.
- Specify raw data from the weighing and values from the reflectance measurements.
- All raw data from all tests shall be submitted.
- Wash effectiveness EFF, stated to two significant figures, is calculated separately for each surface. An average is then calculated for the test product, reference product and water respectively.
- Calculations according to requirement level alternative A or B demonstrating that the requirement is fulfilled.
- The cleaning performance of the test product in comparison to water shall be specified.
- Final results based on this raw data (and, if applicable, a statistical evaluation of the data).
- Only for products containing micro-organisms: documentation of degradation over time of protein, starch, and fat/vegetable oil

Appendix 6 User test: Information and requirements

Professional cleaning products can fulfil the performance test requirement with a laboratory test or a user test. This appendix describes the way in which a user test for a professional cleaning product is to be performed.

Professional cleaning products for kitchen equipment and household machines (e.g. dishwashing machine and laundry machine) and all consumer products must be tested in a laboratory, see Appendix 5. Products containing micro-organisms must demonstrate residual cleaning effects via the laboratory test as instructed in Appendix 5.

These instructions apply to all professional cleaning product types except wash polish/wash-and-wax care products. The wash polish/wash-and-wax product user test does not use a reference product and therefore has separate user test instructions in Appendix 7.

The purpose of the test is to demonstrate whether 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 is abrasive to or otherwise harms the surfaces on which it is marketed for use.

Quality requirements

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

Test individuals

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

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.

Micro-organism based products are to be compared to an equivalent product without micro-organisms.

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

The questionnaire for the user test is found in Appendix 6a. Each test individual must complete all questions on the questionnaire. In the table for the assessment of the product, all general questions should be answered as well as any questions that are specific to the type of cleaner tested. One questionnaire shall be completed per product per user.

Responses shall be tabulated by the applicant in the "Summary of the results" form in this appendix.

The formulation of the test product at the time of the performance test must be the same as that submitted in the application to Nordic Ecolabelling.

Summary of the results for user test of cleaning 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: _____

Were all individuals carrying out the user test professional cleaning staff? (Note: this is a requirement.) _____

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. Collate answers for all the general questions plus any answers for specific cleaner types that apply.

	Poorer (%)	As good as (%)	Better (%)
General questions (answered for all cleaner types):			
How do you consider the test product's ability to remove soils 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?			
WC / Sanitary cleaners			
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?			
Window / glass cleaners			
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 streaks or residue on the surface to a greater extent than the control product?			

	Poorer (%)	As good as (%)	Better (%)
Products with microorganisms			
How do you consider the products residual cleaning effects, i.e., the ability to degrade fat, starch and protein continuously over a prolonged period as claimed by the manufacturer, otherwise, 7 days?			
Outdoor cleaners			
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?			
Textile floor cleaners			
How do you consider the test product's ability to remove stains on the surface 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 6a Performance test by professional users of cleaning products

To be completed by the professional cleaning staff who is testing the product.

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): _____

Producer/brand of reference product: _____

Dosing of reference product: _____

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

Tables: _____

Fixtures/furnishings: _____

Walls: _____

Ceilings: _____

Wash basin: _____

Bathroom cabinets: _____

Bathroom tiles: _____

WC: _____

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

Textile floors: _____

Windows: _____

Mirrors: _____

Other glass surfaces: _____

Kitchen equipment: _____

Dishwashing machine: _____

Laundry machine: _____

Outdoor wooden terrace: _____

Outdoor stone floor: _____

Outdoor wooden facade: _____

Outdoor stone facade: _____

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? _____

UseHow has the product been used (manually, 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, outdoors)?

_____Which types of soils have been most problematic in this area (e.g., calcium deposits, soap, oil, fat, 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. Answer all the general questions plus any of the questions for specific cleaner types that apply.

	Poorer	As good as	Better
General questions (answered for all cleaner types):			
How do you consider the test product's ability to remove soils 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?			
WC / Sanitary cleaners			
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?			
Window / glass cleaners			
How do you rate the test product's ability to remove dirt (mainly fine particles) compared to the control product?			

	Poorer	As good as	Better
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 streaks or residue on the surface to a greater extent than the control product?			
Products with microorganisms			
How do you consider the products residual cleaning effects, i.e., the ability to degrade fat, starch and protein continuously over a prolonged period as claimed by the manufacturer, otherwise, 7 days?			
Outdoor cleaners			
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?			
Textile floor cleaners			
How do you consider the test product's ability to remove stains on the surface 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 test 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:

Was the user test performed by professional cleaning staff? _____

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

Signature or Stamp of company performing the user test:

Appendix 7 User test for wash polish/wash-and-wax care products

This section applies only to professional wash polish/wash-and-wax care products.

(See Appendix 6 for user test instructions and forms for all other professional cleaning products.)

Products containing micro-organisms must demonstrate residual cleaning effects via the laboratory test as instructed in Appendix 5.

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 substrates 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 test results are recorded by the user in Appendix 7a. No reference product is required for this test.

Test individuals

Test individuals must be professional cleaning staff. At least five professional users shall test the product and fill out the test results in Appendix 7a. The five individuals shall be randomly chosen and shall come from at least five different companies/organisations/institutions.

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 at least 3 must be given by 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. Table 1 shall be used by the applicant to summarize test results.

Summary of the results for user test of 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: _____

Were all individuals carrying out the user test professional cleaning staff? (Note: this is a requirement.) _____

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			
Only for products with micro-organisms: How do you consider the products residual cleaning effects, i.e., the ability to degrade fat, starch and protein continuously over a prolonged period as claimed by the manufacturer, otherwise, 7 days?			
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

Test period:
Floor type/substrate:
Are polishing machines used?
Comments on overall assessment:

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.

Signature or Stamp of company performing the user test:

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Appendix 8 Directions for raw material standards and certification schemes

This appendix is relevant only for requirement O20 Cardboard packaging for liquid products: Design for recycling

Nordic Ecolabelling sets requirements on the standards to which feedstock is certified. These requirements are described below. Each individual raw material/feedstock standard or certification scheme is reviewed by Nordic Ecolabelling as to fulfilment of the requirements. When a raw material/feedstock standard is revised, it is reviewed again by Nordic Ecolabelling.

Requirements on raw material standards

The standard must balance economic, ecological and social interests and comply with the Rio Declaration's forestry principles, Agenda 21 and the Forest Principles, and respect relevant international conventions and agreements.

The standard must contain absolute requirements and promote and contribute towards sustainable cultivation of raw materials. Nordic Ecolabelling places special emphasis on the standard including effective requirements to protect the forest from illegal felling and that the requirements protect the biodiversity of the forest.

The standard must be available to the general public. The standard must have been developed in an open process in which stakeholders with ecological, economic and social interests have been invited to participate.

The requirements related to standards are formulated as process requirements. The basis is that if stakeholders agree on the economic, social and environmental aspects of the forestry/feedstock standard, this safeguards an acceptable requirement level.

If a standard is developed or approved by stakeholders with ecological, economic and social interests, the standard may maintain an acceptable standard. Accordingly, Nordic Ecolabelling requires that the standard balances these three interests and that representatives from all three areas are invited to participate in development of the standard.

The standard must set absolute requirements that must be fulfilled for the certification of the feedstock. This ensures that the forest management fulfils an acceptable level regards the environment. When Nordic Ecolabelling requires that the standard shall "promote and contribute towards sustainable cultivation", the standard must be assessed and revised regularly to initiate process improvement and successively reduce environmental impact.

Requirements on certification system

The certification system must be open, have significant national or international credibility and be able to verify that the requirements in the forestry standard are fulfilled.

Requirements on certification body

The certification body must be independent, credible and capable of verifying that the requirements of the standard have been fulfilled. The certification body must also be able to communicate the results and to facilitate the effective implementation of the standard.

The purpose of certification is to ensure that the requirements regarding raw material/feedstock standards are fulfilled. The certification system must be designed to verify that the requirements of the forest standard are fulfilled. The method used for certification must be repeatable and applicable to relevant feedstock/forestry. Certification must be in respect to a specific raw material standard. The forest must be inspected prior to certification.

Requirements on Chain of Custody (CoC) certification

Chain of Custody certification must be issued by an accredited, competent third party (as for forest certification).

The system shall stipulate requirements regarding the chain of custody that assure traceability, documentation and controls throughout the production chain.

Documentation

Copy of raw material standard, name, address and telephone number to the organization who has worked out the standard and audit reports.

References to persons who represents stakeholders with ecological, economic and social interests who have been invited to participate.

Nordic Ecolabelling may request further documents to examine whether the requirements of the forestry standard and certification system in question can be approved.