

Nordic Ecolabelling for Hand dishwashing detergents



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Contact information

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

Denmark

Ecolabelling Denmark
www.svanemaerket.dk

Iceland

Ecolabelling Iceland
www.svanurinn.is

Finland

Ecolabelling Finland
<https://joutsenmerkki.fi>

Norway

Ecolabelling Norway
www.svanemarket.no

Sweden

Ecolabelling Sweden
www.svanen.se

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1 Environmental communication guideline for Nordic Swan Ecolabel hand dishwashing detergent

Nordic Swan Ecolabel hand dishwashing detergent has reduced environmental impact throughout its life cycle. It meets strict requirements for chemicals which make it a better choice for the environment as well as health. In addition, there are requirements for design of the packaging to promote circular economy.

Nordic Swan Ecolabel hand dishwashing detergents:

- Meet strict environmental requirements for chemicals to prevent long-term, negative effects on nature (biodegradability) and to avoid substances that are toxic to aquatic life, such as fish and crustaceans (ecotoxicity)
- Meet strict health requirements for chemicals, including a ban on 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
- Have packaging that contributes to a circular economy, for example through design and material composition that promote recycling
- Clean effectively

The overall environmental impact in the lifecycle of this product group and Nordic Swan Ecolabel identification of where ecolabelling can have the greatest effect is described in “Environmental impact of hand dishwasher detergents”.

2 What can carry the Nordic Swan Ecolabel?

Liquid hand dishwashing detergents for consumer use or for professional use are eligible for the Nordic Swan Ecolabel, i.e. products that are marketed and designed to be used to wash by hand items such as glassware, crockery and kitchen utensils.

Mix-it-yourself hand dishwashing products (such as tablets) that are to be diluted at least 10 times by the user to form the final product, are also covered by the product group.

The primary function of the product must be as a hand dishwashing detergent. Products are considered for the professional market if more than 80% of sales are to professional users.

Ready-to-use products, pre-soaks, or products intended to disinfect or inhibit the growth of microorganisms (e.g. bacteria) are not covered by the product group.

3 How to read this criteria document

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

The text describes how the applicant must demonstrate fulfilment of each requirement. There are also icons in the text to make this clearer. Those icons are:

↑ Upload

🔍 Requirement checked on site

To be awarded a Nordic Swan Ecolabel licence:

- All obligatory requirements must be fulfilled.

Before a license is issued, the Nordic Ecolabelling organization will normally pay an inspection visit to the applicant and/or the manufacturer. If necessary, multiple inspection visits can be made.

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 and justification of these

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, unless stated otherwise in the requirement. Ingoing substances and impurities are defined as in the definitions section, unless stated otherwise in the requirements.

4.1 Definitions

For the purposes of the criteria for hand dishwashing detergents, the following definitions apply.

Terms	Definition
Hand dishwashing detergent for consumer use	Products that are marketed towards retailers and/or consumers. Products are considered for consumer use if 20% or more of sales are to consumers.
Hand dishwashing detergent for professional use	Products that are marketed for use in professional contexts such as institutions, catering kitchens, restaurants and within the public sector. Products are considered for the professional market if more than 80% of sales are to professional users.
Ingoing substances	All substances* in the hand dishwashing detergent including additives (e.g. preservatives and stabilisers) 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. <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</i>

	<i>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.</i>
Impurities	<p>Trace levels of pollutants, contaminants and residues from production, incl. production of raw materials that remain in the hand dishwashing detergent 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%).</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, 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 Nordic Swan Ecolabelled product.</p>
DID-list	The DID-list (Detergent Ingredient Database) part A contains information on toxicity and degradability of several substances that are used in hand dishwashing detergents. 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.
Sales packaging	In accordance with Regulation (EU) 2025/40 on Packaging and Packaging Waste (PPWR), the term "sales packaging" is defined as packaging conceived so as to constitute a sales unit consisting of products and packaging to the end user at the point of sale.
Sales packaging component	Sales packaging component is a component that is easily separable from other components without the use of tools. Examples are containers, bottles, closures and labels. A component is also characterized by having its own identification reference to which appendices, purchase no., technical drawing etc. apply.
Container	Bottles, spray bottles and similar.
Closure	Caps/lids, dosage equipment, pumps and spray triggers mounted on the packaging.
Label	Traditional label and shrink film label/sleeve.
Concentrated product, main packaging	Packaging containing the undiluted concentrated product, which is to be diluted with water in a refill packaging.
Concentrated product, refill packaging	Packaging in which the concentrated product is diluted with water and thus refilled multiple times.
Post-consumer/commercial recycled material	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.

Bio-based material for packaging	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.
Waste and residual products for packaging	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 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.

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 O11 Long-term environmental effects, O12 Critical dilution volume (CDV) and O13 Surfactants – aerobically and 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 O11 Long-term environment effect, 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.

4.2 General requirements

O1 Description of the products

The applicant must give detailed information on the hand dishwashing detergent to which the application relates. The following information is required:

- Description of the product.
- The product must carry information on the recommended dosing on the sales packaging:
 - The recommended dosing for a normal degree of soiling must be clearly and simply stated on the label/packaging.
 - For consumer products, the dosing must be stated as X number of millilitres to Y litres of water or as Z teaspoons* 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.
 - For hand dishwashing tablets intended to use as sprays, dosage must be given both for washing a single item (e.g. dish, pan etc.) as well for preparing a full kitchen-sink of hand dishwashing solution.
- A complete recipe for the product. Foil that is not removed before use, and that is water soluble is considered part of the recipe. The recipe must, if possible, include for each ingoing substance:
 - Trade name
 - Chemical name
 - Amount (both with and without solvents, e.g. water)
 - CAS No. and/or EC number
 - DID no. for substances that can be placed in the DID-list 2023 or later versions**
 - Function

**1 teaspoon equals 5 ml*

***DID-list: "Detergents Ingredients Database" list, see Appendix 3 for further details*

- ↑ Description of the product, e.g. label or product data sheet that includes dosing instructions. The information on labels and/or product data sheets must be in the languages in which the product is marketed.
- ↑ A complete recipe with information as set out in the requirement. Nordic 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 (EC) No 1907/2006.

O2 Classification of the product

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

Table 1 Excluded hazards

Classification	Hazard class and category	Hazard code
Hazardous to the aquatic environment	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410
	Aquatic Chronic 2	H411
	Aquatic Chronic 3	H412
	Aquatic Chronic 4	H413
Hazardous to the ozone layer	Ozone	H420
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 RE 1	H372
	STOT RE 2	H373
Skin corrosion/irritation	Skin Corr. 1A, 1B or 1C	H314
Aspiration hazard	Asp. Tox. 1	H304
Respiratory or skin sensitisation	Resp. Sens. 1, 1A or 1B	H334
	Skin Sens. 1, 1A or 1B	H317 EUH208 "Contains (name of sensitising substance). May cause an allergic reaction."
Carcinogenicity*	Carc. 1A or 1B	H350
	Card. 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

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

- † The hand dishwashing detergent's safety data sheet (SDS), prepared in accordance with Annex II to REACH Regulation (EC) No 1907/2006.
- † Appendix 1 or equivalent, completed and signed.

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 hand dishwashing detergent. The supply chain policy and code of conduct must be both public and communicated to the supply chain. Licence holders that are micro companies with maximum 10 employees are exempted.

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 compose of biomass and that can be continually replenished for example wood, crops, marine products, organic waste or be recycled raw materials*

- † 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

If renewable 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. 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 hand dishwashing detergent.

- † 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 hand dishwashing detergent.
- † By request, the manufacturer of the hand dishwashing detergent must present invoices/delivery notes/order confirmation that the palm oil purchased is RSPO certified and information about traceability system (Mass Balance, Segregated or Identity Preserved accepted).
- † By request, the manufacturer of the hand dishwashing detergent 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 hand dishwashing detergent(s).

O5 Classification of ingoing substances

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

Table 2 Excluded hazards

Classification	Hazard class and category	Hazard code
Hazardous to the ozone layer	Ozone	H420
Carcinogenicity*	Carc. 1A or 1B Carc. 2	H350 H351
Germ cell mutagenicity*	Muta. 1A or 1B Muta. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact.	H360 H361 H362
Respiratory or skin sensitisation**	Resp. Sens. 1, 1A or 1B Skin Sens. 1, 1A or 1B	H334 H317
Specific target organ toxicity, repeated exposure	STOT RE 1	H372
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

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

** Exemptions from H317/H334:

Fragrance can be included in the consumer products according to the fragrance requirement O8 Fragrance allergens.

Amidoamines in betaine raw materials, such as cocamidopropyl betaine (CAPB): Max. 1% of the betaine active content in the raw material, e.g. for raw materials with 30% betaine active content max. $1\% \cdot 30\% = 0.3\%$ amidoamine in the raw material.

- † Safety data sheets (SDS) for each raw material in line with prevailing legislation in the country of application, e.g., Annex II to REACH Regulation (EC) No 1907/2006.
- † Appendix 1 or equivalent declaration completed and signed.
- † Appendix 2 or equivalent declaration completed and signed by all raw material manufacturers/suppliers.

O6 Microplastics

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

Nordic Ecolabelling reserves the right to change the requirement when more guidance from the EU on the restriction of synthetic polymer microparticles in REACH is published.

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

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

The following polymers are excluded from this designation:

- c) *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.*
- d) *polymers that are biodegradable as proved in accordance with Appendix 15 [to REACH, Regulation (EC) No 1907/2006].*
- e) *polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16 [to REACH, Regulation (EC) No 1907/2006].*
- f) *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".

See more information concerning test methods for microplastics in Appendix 3.

- † Appendix 1 or equivalent declaration completed and signed.

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

O7 Excluded substances

The following substances or substance groups must not be present as ingoing substances in the hand dishwasher detergent.

- 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)
Exemption: BHT in fragrances in quantities of ≤100 ppm, on condition that the concentration is ≤ 1 ppm in the hand dishwasher detergent.
- Amphoacetate derivatives of N-hydroxyethyl imidazolines (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)
- Benzalkonium chloride, such as CAS No. 8001-54-5 and CAS No. 63449-41-2
- Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA¹ for further EU regulatory risk management due to known or potential endocrine disruption reproductive toxicity
- Ethylenediamine tetraacetate (EDTA, CAS No. 60-00-4) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts
- Linear alkylbenzene sulphonates (LAS)
- Methyldibromo glutaronitrile (MG), CAS No. 35691-65-7
- Nanomaterials/-particles*
- Nitro musks and polycyclic musk compounds
- Nitrilo triacetic acid (NTA, 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)**
- Phosphate, phosphonate, phosphonic acid and phosphoric acid
- Potential or identified endocrine disruptors, listed in any of the following "Endocrine Disruptor Lists" List I, II and III

Note: Substances moved to "Substances no longer on list" and not present on List 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.

¹ 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).

- 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)
- Substances on the REACH Candidate list of SVHC substances
<https://www.echa.europa.eu/candidate-list-table>

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

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

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

****According to test method 301 (A-F) or 310 in OECD guidelines for testing of chemicals or other equivalent methods evaluated by an independent body and controlled by Nordic Ecolabelling.*

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

O8 Fragrance allergens

All fragrance substances, including fragrance substance in plant extracts in the hand dishwashing detergent must live up to the following requirements:

- Fragrances must not be present in professional products, see definitions section.
- Fragrances in consumer products must be added in line with IFRA's guidelines. The IFRA's (International Fragrance Association) 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) in consumer products.
- The following fragrance allergens are prohibited: Oak moss extract (*Evernia prunastri*, CAS No. 90028-68-5), tree moss extract (*Evernia furfuracea*, CAS 90028-67-4), and HICC (CAS No. 51414-25-6/31906-04-4).

- † 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.

O9 Preservatives

Preservatives included in the product or ingoing substances must not be bioaccumulative. Preservatives are judged not to be bioaccumulative if $BCF < 100$ or $\log K_{ow} < 3$. If both values are available, the value for the highest measured BCF is to be used. See appendix 3 for more information.

↑ Appendix 1 or equivalent declaration completed and signed.

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

4.3 Dosing, ecotoxicity and biodegradability

O10 Maximum dosing

The dosing is calculated as the recommended dose in grams per litre of water.

The recommended dose must not exceed **1.0 grams per litre of water**.

For density calculations, the density at room temperature must be used. If the dosage is given as a range, the highest value in the interval must be applied in the dosing calculation for this requirement, as well as in requirement O19 Weight-Utility Ratio (WUR).

For mix-it-yourself hand dishwashing products (such as tablets), the dosage must be calculated based on in-use solution prepared according to the manufacturer's instructions, assuming use for a full kitchen sink.

↑ Calculation of dose per litre of water and a product label or draft label with the specified dose.

O11 Long-term environmental effects

Content of ingoing substances classified as hazardous to the environment according to CLP Regulation (EC) No 1272/2008 (C_{total}) in the hand dishwashing product is limited as follows:

$C_{total} \leq 0.17$ grams/litre in-use solution.

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 at a dose of 0.60 grams / litre in-use solution, if the indicated dose on the label is less than or equal to 0.6 g / l. For products with dosage above 0.60 g / litre in-use solution, the highest indicated dosage is used.*

See information concerning calculations with UVCB substances and perfumes in section 5.2 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.

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

O12 Critical dilution volume (CDV)

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

A product's critical dilution volume is calculated at a dose of 0.60 g/l of in-use solution, if the stated dose is less than or equal to 0.60 g/l. If the recommended dose exceeds 0.60 g/l, the recommended dose itself is used in the calculations. The recommended dose, however, cannot exceed 1.0 g/l, as stated in requirement O10 Maximum dosage.

The product's critical dilution volume (CDV) must not exceed the following limit value for **CDV_{chronic}: ≤ 1500 litres**

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

$$CDV_{chronic} = \sum CDV(i) = \sum \left(dosage(i) \cdot 1000 \cdot \frac{DF_i}{TF_{chronic}(i)} \right)$$

where

dosage(i) is the weight (g) of the substance (i) in use solution

DF(i) is the degradation factor for the substance (i)*

TF_{chronic}(i) is the chronic toxicity factor for the substance (i)*

* 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 5.2 Additional information concerning definitions of ingoing substances and impurities.

- † 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.

O13 Surfactants – aerobically and anaerobically biodegradable

All surfactants in the hand dishwashing detergent, irrespective of their function in the product must be readily aerobic 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.

See information concerning calculations with UVCB substances and perfumes in section 5.2 Additional information concerning definitions of ingoing substances and impurities.

- † Documentation in accordance with the DID-list and appendix 3, showing that all surfactants are readily aerobic and anaerobic biodegradable. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.

4.4 Performance

Under this requirement, a product must be at least as good as or better than the product with which it is being compared (the reference product).

O14 Performance test

Performance is measured as the product's cleaning ability (ability to remove soiling/make dishes clean), and its cleaning capacity (how long the product lasts), and it is compared with a reference product.

The product must be as good as or better than the reference. This entails that one of the following two alternatives is fulfilled:

1. At least 80% of the testing rounds (e.g. 4 out of 5) must yield a positive result for the test product (as good as or better than the reference product) in order for the test product to be considered in compliance with the performance requirement
2. By the use of statistical methods, using a one-sided 95% confidence interval, it is shown that the test product is as good as or better than the reference product in at least 80% of the testing rounds.

The performance test must be performed by a laboratory that meets the requirements concerning test laboratories in Appendix 3.

The performance test must be performed in accordance with the test framework described in Appendix 5, where information about choice of reference detergent, product dosage, washing conditions and report setup are also stated.

- † Documentation on the test laboratory, in accordance with Appendix 3.
- † Test report showing that the product is as good as or better than the reference product, in accordance with Appendix 5.

4.5 Packaging

The packaging requirements target the sales packaging and its' recyclability. All requirements below relate to the entire sales packaging, including bottles, containers, pouches, cardboard packaging etc. inclusive closures and labels (unless otherwise mentioned). For definitions of sales packaging components, see definitions section 5.1.

The packaging requirements are: O15 Rigid plastic packaging: Design for recycling, O16 Labels and print for rigid plastic packaging: Design for recycling of packaging, O17 Flexible plastic pouches: Design for recycling, and O18 Carboard packaging for liquid products:

Design for recycling. There are no specific requirements for other types of biobased packaging like paper or cardboard packaging, as the relevance of this is low due to the limited use in this product group. O19 Weight-Utility-Ratio (WUR) applies to all products, including refill containers and aims to minimize the amount of packaging per functional dose of hand dishwashing detergent.

Mix-it-yourself hand dishwashing products (such as tablets) must be diluted at least 10 times by the user to the finished product with a certain amount of water. If they are sold with a refill container, both the tablet packaging and the refill container must meet the packaging requirements. If spray bottles are used, they must have a permanent aerosol reducing foaming nozzle.

O15 Rigid plastic packaging: Design for recycling

The sales packaging* must have a design that enables material recovery. This means that all sales packaging components*, except labels, must meet the requirements below. For label requirements, see O16.

PE and PP containers

- The container must be made from > 99% polyethylene (PE) or > 95% polypropylene (PP). The remaining material must not be biodegradable or of any other material than PE or PP.
- Fillers (such as CaCO_3) cannot be included in PE or PP containers at a level that the density of the plastic exceeds 0.995g/cm^3 .
- Metal is not allowed in the container
- The container must be white or uncoloured and must not contain carbon black pigments.
 - Exemption: Containers containing recycled plastic (Post Consumer/commercial Recycled, PCR*) may be coloured/tinted. The colouration may not include carbon black. However, recycled plastic may contain small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the container/bottle to the correct plastic fraction.

PET containers

- The container must be made from > 98% polyethylene terephthalate (PET).
- Metal is not allowed in the container
- The container must be white or uncoloured and must not contain carbon black pigments.
 - Exemption: Containers containing recycled plastic (PCR) may be coloured/tinted. The colouration may not include carbon black. However, recycled plastic may contain small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the container/bottle to the correct plastic fraction.

Closures

- The closure must be made from > 99% polyethylene (PE) or > 95% polypropylene (PP), or > 98% polyethylene terephthalate (PET).

- Exemption: Spray devices which may contain the following plastics in small technical details: polyoxymethylene (POM), expanded polyethylene (EPE), ethylene-butyl acrylate copolymer (EBA), synthetic rubber copolymer of acrylonitrile and butadiene (NBR), and up to 6% Ethylene vinyl acetate (EVA).
- PS (polystyrene) and PVC (polyvinylchloride) or plastics based on other types of halogenated plastics must not be present in the closure.
- Metal is not allowed in closures.
 - Exemption: Small metal parts in pumps
- Fillers (such as CaCO_3) cannot be included in closures of PE or PP at a level that the density of the plastic exceeds 0.995g/cm^3 .
- Closures must not contain carbon black pigments.
 - 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 to the correct plastic fraction.
- Closures must not contain silicone.
 - Exemption: Closures on PET upside down squeeze bottles: Closures may include a membrane composed of floating silicon with a density of less than 0.95 g/cm^3 (containing less than 1000 ppm of D4, D5, and D6). The sales packaging* must attain a minimum recyclability score of B, as verified by a recyclability rate certificate by RecyClass.
- Spray devices must have a permanent aerosol reducing foaming nozzle.

Compatibility between closure and container

Container and closures must be compatible with each other, in accordance with the following:

For PE containers:

- PP/OPP-closures: The following text or similar must be stated on the packaging:
Take the cap off prior to recycling to improve recycling.

For PET containers:

- Closures must have a density of $< 1.0\text{ g/cm}^3$.

**See list of definitions in section 5.1 of the document.*

- † Packaging specifications or certificate for sales packaging components, showing the materials used, density of PE or PP components, use of carbon black and the colour of the container. Appendix 4 can be used.
- † Closure on PET squeeze bottle with membrane of silicone:
 - Documentation showing that the density of the silicone is less than 0.95 g/cm^3 for containers of PET or more than 1.0 g/cm^3 for containers of PE or PP, and that the total content of D4, D5 and D6 is less than 1000 ppm. Appendix 1 and 4 can be used.
 - Recyclability rate certificate from RecyClass showing that the sales packaging is fully recyclable with a minimum recyclability score of B.

- ↑ For mix-it-yourself hand dishwashing products that are diluted in spray bottles: Documentation from the manufacturer of the spray trigger, stating that it has a permanent foaming nozzle. Appendix 4 or can be used
- ↑ For PE containers with PP/OPP closure: Label showing text regarding instruction to remove the cap before recycling.

O16 Labels and print for rigid plastic packaging: Design for recycling of packaging

To enable recycling of the packaging, labels* and print on rigid plastic packaging must meet the requirements below.

Label material

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

- The label must be of the same material as the packaging (PP/PE) and the polymer composition of the label (excluding adhesive and print) must consist of either > 95% polypropylene (PP) or > 99% polyethylene (PE). The total density of the label must be <1 g/cm³.
 - Exemption: Fold-out (cross-over) labels of PP on PE packaging, 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 (excluding adhesive and print) must be of either > 95% polypropylene (PP) or > 99% polyethylene (PE). The total density of the label must be < 1 g/cm³.
- The label must not cover more than 60% of the packaging surface**.

Print

- Printing inks 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).

*See list of definitions in section 5.1 of the document.

**See instructions and example calculation in section 8 in appendix 3.

***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 label materials used and density. Appendix 4 can be used.
- ↑ For labels on PET packaging and fold-out (cross-over) labels of PP on PE packaging: Calculation of label size compared to the surface of the container. Nordic Ecolabelling's calculation sheet can be used and can be obtained from Nordic Ecolabelling's websites.
- ↑ Documentation showing that printing inks is compliant with EuPIA policy. Appendix 1 and 4 can be used.

- † Declaration from the applicant that direct print is not used except for date codes, batch codes and UFI. Appendix 1 can be used.

O17 Flexible plastic pouches: Design for recycling

The sales packaging* must have a design that enables material recovery. This means that flexible plastic pouches must meet the requirements below.

- The pouch and closure must be made from either $\geq 99\%$ polyethylene (PE), $\geq 95\%$ polypropylene (PP) or $\geq 98\%$ polyethylene terephthalate (PET).
 - Exemption: Barrier coatings made from EVOH (Ethylene vinyl alcohol) in maximum amounts of 5% related to the total weight.
- 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.
 - Exemption is made for text and pictograms.
 - Exemption is also made for small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the pouch to the correct plastic fraction
- Carbon black pigments cannot be added to the closures.
 - Exemption is made for small amounts of carbon black used in other colours than black. It must then be documented that the NIR sensor reads and sorts the closure to the correct plastic fraction.
- Fillers (such as CaCO_3) cannot be included in PE or PP packaging and closures at a level that the density of the plastic exceeds $0.995\text{g} / \text{cm}^3$.

The packaging includes pouches or other plastic "bags". Closures include caps/lids, dosage equipment and pumps and spray triggers mounted on the packaging.

**See list of definitions in section 5.1 of this document.*

- † Packaging specifications or certificate for sales packaging components (including pouch, labels, and closures) showing the materials used, density and use of carbon black. Appendix 4 can be used.

O18 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

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):
 - a) 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.
 - b) 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.
 - 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 5.1 of this document.*

*** 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).*

****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.

O19 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 limit values are:

Product type	Limit value
Liquid hand dishwashing detergents	0.1 g packaging/litre in-use solution
Mix-it-yourself hand dishwashing detergents (e.g. tablets)	30 g packaging/litre in-use solution

Mix-it-yourself hand dishwashing detergent (e.g. tablets): In-use solution is here defined as the tab diluted in the bottle following the manufacturer's instruction.

The exemptions from WUR requirement are:

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

* See list of definitions in section 5.1 of this document.

** 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:

$$WUR = \sum \frac{(2 \cdot V_i - 2.5 \cdot R_i)}{D_i} \leq \text{limit value}$$

V_i = Weight of sales 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 post-consumer/commercial material* in the packaging component (i) in grams.

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

If the sales 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)).

For concentrated products sold as refills, both the main dispensing packaging and the refill packaging must be included in the WUR calculation. If the packaging format, in which the product is to be diluted, is not specified then the WUR requirements only apply to the main packaging of the concentrated product. For a definition of “main packaging” and “refill packaging”, please see the definitions section.

- † Declaration/documentation from the packaging manufacturer stating the type of material in the packaging components (e.g. closure (cap, spray nozzle etc.), bottle and labels), and the proportion of recycled material used. 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
- † Exemption for post-consumer/commercial material: Documentation showing that the packaging is made from more than 80% post-consumer/commercial material. Appendix 4 can be used.
- † Exemption for take-back systems: Documentation showing that the packaging is part of a take-back system for the product

4.6 Licence maintenance

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

O20 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 must be in a Nordic language or in English.

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

O21 Traceability

The licensee must be able to trace the Nordic Swan Ecolabel products in the production (line/chain). A manufactured / sold product must 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 must 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 hand dishwashing detergents 5 December 2025. The criteria are valid until 28 February 2031.

6 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 must 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 licence.

On-site inspection

In connection with handling of the application, Nordic Ecolabelling normally conduct on-site inspection visit/-s to ensure adherence to the requirements. Scope and timing of on-site inspection is evaluated per product group and adapted to the specific application situation.

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 must 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 hand dishwashing detergent

To be submitted with an application for a Nordic Swan Ecolabel license of hand dishwashing detergents.

This declaration is based on the 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:	
Type of product:	
Professional product <i>Products that are marketed for use in professional contexts such as institutions, catering kitchens, restaurants and within the public sector. Products are considered for the professional market if more than 80% of sales are to professional users.</i>	<input type="checkbox"/>
Consumer product <i>Products that are marketed towards retailers and/or consumers. Products are considered for consumer use if 20% or more of sales are to consumers</i>	<input type="checkbox"/>

Where there is any confusion about whether a product is for professionals or consumers, Nordic Ecolabelling may require documentation explaining where the product is intended to be sold.

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the hand dishwashing product. Impurities are not regarded as ingoing substances and are exempt from the requirements. Ingoing substances and impurities are defined as below, unless stated otherwise in the requirements.

- **Ingoing substances:** All substances* in the hand dishwashing detergent including additives (e.g. preservatives and stabilisers) 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 hand dishwashing detergents 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 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 O11 Long-term environmental effects, O12 Critical dilution volume (CDV) and O13 Surfactants – aerobically and 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 O11 Long-term environment effect, 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.

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

O4 Certified raw materials from oil palms		Yes	No
Does the product contain renewable raw materials from palm oil or palm kernel oil, that are not RSPO certified (Identity Preserved, Segregated or Mass Balance)? This includes by-products, residues, and waste fractions from palm oil industries, such as palm fatty acid distillate and palm effluent sludge.	<input type="checkbox"/>	<input type="checkbox"/>	
Is the manufacturer of the hand dishwashing detergent RSPO Supply chain certified? If yes, state the certificate/license number: _____	<input type="checkbox"/>	<input type="checkbox"/>	
O5 Classifications according to CLP Regulation (EC) 1272/2008			
Does the product contain ingoing substances or impurities classified with any of the hazard codes below? Incl. all classification variants. For example, H350 also covers classification H350i.	Yes	No	
H420 – Ozone	<input type="checkbox"/>	<input type="checkbox"/>	
H372 – STOT RE 1	<input type="checkbox"/>	<input type="checkbox"/>	
H334 – Resp. Sens. 1, 1A or 1BB	<input type="checkbox"/>	<input type="checkbox"/>	
H317 – Skin Sens. 1, 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>	
H350 – Carc 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>	
H351 – Carc 2	<input type="checkbox"/>	<input type="checkbox"/>	
H340 – Muta 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>	
H341 – Muta 2	<input type="checkbox"/>	<input type="checkbox"/>	
H360 – Repr 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>	
H361 – Repr 2	<input type="checkbox"/>	<input type="checkbox"/>	
H362 – Lact.	<input type="checkbox"/>	<input type="checkbox"/>	
EUH380 – ED HH 1	<input type="checkbox"/>	<input type="checkbox"/>	
EUH381 – ED HH 2	<input type="checkbox"/>	<input type="checkbox"/>	
EUH430 – ED ENV 1	<input type="checkbox"/>	<input type="checkbox"/>	
EUH431 – ED ENV 2	<input type="checkbox"/>	<input type="checkbox"/>	
EUH440 – PBT	<input type="checkbox"/>	<input type="checkbox"/>	
EUH441 – vPvB	<input type="checkbox"/>	<input type="checkbox"/>	
EUH450 – PMT	<input type="checkbox"/>	<input type="checkbox"/>	
EUH451 – vPvM	<input type="checkbox"/>	<input type="checkbox"/>	
O6 + O7: Excluded substances			
Does the product contain any of the following 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)	<input type="checkbox"/>	<input type="checkbox"/>	
Amphoacetate derivatives of N-hydroxyethyl imidazolines (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)	<input type="checkbox"/>	<input type="checkbox"/>	
Benzalkonium chloride, such as CAS No. 8001-54-5 and CAS No. 63449-41-2	<input type="checkbox"/>	<input type="checkbox"/>	
Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA for further EU regulatory risk management due to known or potential endocrine disruption reproductive toxicity.	<input type="checkbox"/>	<input type="checkbox"/>	

Hand Dishwashing Detergents

Organic chlorine compounds, hypochlorites and hypochlorous acid	<input type="checkbox"/>	<input type="checkbox"/>
PBT and vPvB as defined in REACH Annex XIII, including those under ECHA PBT assessment https://echa.europa.eu/da/pbt	<input type="checkbox"/>	<input type="checkbox"/>
Per- and polyfluoroalkyl substances (PFAS) <i>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)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Phosphate, phosphonate, phosphonic acid and phosphoric acid	<input type="checkbox"/>	<input type="checkbox"/>
Potential or identified endocrine disruptors, listed in any of the following "Endocrine Disruptor Lists" List I, II and III	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>
Substances on the REACH Candidate list of SVHC substances https://www.echa.europa.eu/candidate-list-table	<input type="checkbox"/>	<input type="checkbox"/>
O8 Fragrance allergens	Yes	No
Does the product contain fragrances (incl. plant extracts)? If yes, please answer the questions below	<input type="checkbox"/>	<input type="checkbox"/>
Have fragrances been added in line with IFRA guidelines? (IFRA, International Fragrance Association, www.ifraorg.org/)	<input type="checkbox"/>	<input type="checkbox"/>
Does the fragrance contain BHT? (see O7) If yes, please state the amount (ppm or % by weight): _____	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
Does the product contain the fragrance allergens oak moss extract (Evernia prunastri, CAS No. 90028-68-5), tree moss extract (Evernia furfuracea, CAS 90028-67-4) or HICC (CAS No. 51414-25-6/31906-04-4)? If yes, please send in perfume specifications.	<input type="checkbox"/>	<input type="checkbox"/>
O9 Preservatives	Yes	No
Does the product contain preservatives? If yes, please state name and log Kow/BCF: _____	<input type="checkbox"/>	<input type="checkbox"/>
O11 Long-term environmental effects	Yes	No
Does the product contain ingoing substances classified as environmentally hazardous with H410, H411 and H412? If yes, please state the amount (% by weight) per classification, and for H410 also state the M-factor: _____	<input type="checkbox"/>	<input type="checkbox"/>
O15-O18 Packaging requirements	Yes	No
Are all parts of the packaging compatible in regards of O15-O18?	<input type="checkbox"/>	<input type="checkbox"/>
If the closure contains silicone: Is the closure used on a PET squeeze bottle? Does the packaging have a recyclability rate certificate by RecyClass with a score of minimum B?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
If mix-it-yourself products are sold with a spray bottle: Does the bottle have a permanent aerosol reducing foaming nozzle?	<input type="checkbox"/>	<input type="checkbox"/>
For fold-out (cross-over) labels of PP on PE containers: Does the label cover ≤ 60% of the packaging surface?	<input type="checkbox"/>	<input type="checkbox"/>
For labels on PET containers: Does the label cover > 60% of the packaging surface?	<input type="checkbox"/>	<input type="checkbox"/>
For packaging other than flexible plastic pouches and cardboard packaging for liquid products:	<input type="checkbox"/>	<input type="checkbox"/>

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Is there any direct print on the container except for date codes, batch codes and UFI?		
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?	<input type="checkbox"/>	<input type="checkbox"/>
Are labels printed internal at the production site, or by an external printing company (other than the label supplier)?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is the printing ink used for plastic packaging compliant with EuPIA 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	<input type="checkbox"/>	<input type="checkbox"/>

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

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

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

Appendix 2 Declaration from the manufacturer/supplier of the raw material to the hand dishwashing detergent

To be submitted with an application for a licence for the Nordic Ecolabel license of hand dishwashing detergents.

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.

Manufacturer/Supplier
Trade name of the raw material:

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the hand dishwashing product. Impurities are not regarded as ingoing substances and are exempt from the requirements. Ingoing substances and impurities are defined as below, unless stated otherwise in the requirements.

- **Ingoing substances:** All substances* in the hand dishwashing detergent including additives (e.g. preservatives and stabilisers) 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 hand dishwashing detergent 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 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 O11 Long-term environmental effects, O12 Critical dilution volume (CDV) and O13 Surfactants – aerobically and 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 O11 Long-term environment effect, 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.

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 is available from the Nordic Ecolabelling web pages,

DID-list Part A: https://www.svanen.se/49baaa/siteassets/att-svanenmarka/kriterier/did-listan/did_list_2023.pdf

DID-list part B: https://www.svanen.se/49bfd4/siteassets/att-svanenmarka/kriterier/did-listan/didlist_2023_partb.pdf

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

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

O4 Certified raw materials from oil palms	Yes	No
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.	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is this palm oil/palm kernel oil RSPO certified? What is the traceability level? Tick below and state the certificate/licence number: _____	<input type="checkbox"/>	<input type="checkbox"/>
No traceability		<input type="checkbox"/>
Identity Preserved		<input type="checkbox"/>
Segregated		<input type="checkbox"/>
Mass Balance		<input type="checkbox"/>
O5 Classification of ingoing substances	Yes	No
Does the raw material contain ingoing substances or impurities classified with any of the hazard phrases below? Incl. all classification variants. For example, H350 also covers classification H350i.		
H420 – Ozone	<input type="checkbox"/>	<input type="checkbox"/>
H372 – STOT RE 1	<input type="checkbox"/>	<input type="checkbox"/>
H334 – Resp Sens. 1, 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>
H317 – Skin Sens. 1, 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>
H350 – Carc 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>
H351 – Carc 2	<input type="checkbox"/>	<input type="checkbox"/>
H340 – Muta 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>
H341 – Muta 2	<input type="checkbox"/>	<input type="checkbox"/>
H360 – Repr 1A or 1B	<input type="checkbox"/>	<input type="checkbox"/>

H361 – Repr 2	<input type="checkbox"/>	<input type="checkbox"/>
H362 – Lact.	<input type="checkbox"/>	<input type="checkbox"/>
EUH380 – ED HH 1	<input type="checkbox"/>	<input type="checkbox"/>
EUH381 – ED HH 2	<input type="checkbox"/>	<input type="checkbox"/>
EUH430 – ED ENV 1	<input type="checkbox"/>	<input type="checkbox"/>
EUH431 – ED ENV 2	<input type="checkbox"/>	<input type="checkbox"/>
EUH440 – PBT	<input type="checkbox"/>	<input type="checkbox"/>
EUH441 – vPvB	<input type="checkbox"/>	<input type="checkbox"/>
EUH450 – PMT	<input type="checkbox"/>	<input type="checkbox"/>
EUH451 – vPvM	<input type="checkbox"/>	<input type="checkbox"/>
O6 + O7: Excluded substances		
Does the raw material contain any of the following 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)	<input type="checkbox"/>	<input type="checkbox"/>
Amphoacetate derivatives of N-hydroxyethyl imidazolines (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)	<input type="checkbox"/>	<input type="checkbox"/>
Benzalkonium chloride, such as CAS No. 8001-54-5 and CAS No. 63449-41-2	<input type="checkbox"/>	<input type="checkbox"/>
Bisphenols and bisphenol derivatives, defined as 34 bisphenols identified by ECHA for further EU regulatory risk management due to known or potential endocrine disruption reproductive toxicity. <i>EC/List No. 201-245-8 (BPA), 201-025-1 (BPB), 401-720-1 (4,4'-Isobutylethylidenediphenol), 216-036-7 (BPAF) and its 8 salts (278-305-5; 425-060-9; 443-330-4; 468-740-0; 469-080-6; 479-100-5; 943-265-6; 947-368-7), 201-250-5 (BPS), 201-240-0 (BPC), 204-279-1 (TBMD), 201-618-5 (6,6'-di-tert-butyl-4,4'-butylidenedi-m-cresol), 242-895-2, 248-607-1, 405-520-5 (D8), 217-121-1 (DAB), 227-033-5 (TMBPA), 210-658-2 (BPF), 411-570-9, 277-962-5 (contains BPS), 500-086-4 (contains BPA), 500-263-6 (contains BPA), 500-607-5 (contains BPA), 701-362-9, 904-653-0 (contains BPA), 908-912-9 (contains BPF), 926-571-4 (contains BPA), 931-252-8 (contains BPA), 941-992-3 (contains BPS), 943-503-9 (contains BPA)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Ethylenediamine tetraacetate (EDTA, CAS No. 60-00-4) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Linear alkylbenzene sulphonates (LAS)	<input type="checkbox"/>	<input type="checkbox"/>
Methyldibromo glutaronitrile (MG, CAS No. 35691-65-7)	<input type="checkbox"/>	<input type="checkbox"/>
Microplastics Does the raw material contain polymers? Does the raw material contain polymers that are defined as microplastics? If the raw material contains polymers that are not defined as microplastics, please state how the polymers are excluded from the definition (include test methods and results if relevant): <i>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:</i> <i>a) are contained in particles and constitute at least 1% by weight of those particles; or build a continuous surface coating on particles.</i> <i>b) at least 1% by weight of the particles referred to in point (a) fulfil either of the following conditions:</i> <i>(i) all dimensions of the particles are equal to or less than 5 mm.</i>	<input type="checkbox"/>	<input type="checkbox"/>

<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>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".</p>		
<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>a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;</p> <p>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;</p> <p>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.</p>	<input type="checkbox"/>	<input type="checkbox"/>
Nitro musks and polycyclic musk compounds	<input type="checkbox"/>	<input type="checkbox"/>
Nitrilo triacetic acid (NTA, CAS-no. 139-13-9), and its salts	<input type="checkbox"/>	<input type="checkbox"/>
Organic chlorine compounds, hypochlorites and hypochlorous acid	<input type="checkbox"/>	<input type="checkbox"/>
PBT and vPvB as defined in REACH Annex XIII, including those under ECHA PBT assessment https://echa.europa.eu/da/pbt	<input type="checkbox"/>	<input type="checkbox"/>
Per- and polyfluoroalkyl substances (PFAS)	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>
Phosphate, phosphonate, phosphonic acid and phosphoric acid	<input type="checkbox"/>	<input type="checkbox"/>
Potential or identified endocrine disruptors, listed in any of the following "Endocrine Disruptor Lists" List I, II and III	<input type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>
Substances on the REACH Candidate list of SVHC substances https://www.echa.europa.eu/candidate-list-table	<input type="checkbox"/>	<input type="checkbox"/>
O8 Fragrance allergens	Yes	No
Does the raw material contain fragrances (incl. plant extracts)?	<input type="checkbox"/>	<input type="checkbox"/>
Have fragrances been added in line with IFRA guidelines? (IFRA, International Fragrance Association, www.ifraorg.org/)	<input type="checkbox"/>	<input type="checkbox"/>
Does the fragrance contain BHT? (see O7) If yes, please state the amount (ppm or % by weight): _____	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>

Does the raw material contain the fragrance allergens oak moss extract (Evernia prunastri, CAS No. 90028-68-5), tree moss extract (Evernia furfuracea, CAS 90028-67-4) or HICC (CAS No. 51414-25-6/31906-04-4)?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please send in perfume specifications.		
O9 Preservatives	Yes	No
Does the raw material contain preservatives?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please state name and log Kow/BCF: _____		
O11 Long-term environmental effects	Yes	No
Does the raw material contain ingoing substances classified as environmentally hazardous with H410, H411 and H412?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please state the amount (% by weight) per classification, and for H410 also state the M-factor: _____		

If the answer to any of the above questions regarding ingoing substances or impurities 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 raw material composition changes, a new declaration confirming compliance with the requirements must be submitted to Nordic Swan 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 ecotoxic effects and biodegradability

The analysis laboratory must 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 must 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 hand dishwashing detergents, 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.

For biodegradability in relation to microplastics, please refer to section 8 Microplastic.

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.

For biodegradability in relation to microplastics, please refer to section 8 Microplastic.

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 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 CD 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 Microplastics

Microplastics, i.e. solid, synthetic polymer microparticles, can be proven to fall outside the scope of the microplastics definition if they pass the following tests for either biodegradability or water solubility.

Biodegradability

Test methods, test conditions and pass criteria as described in Appendix 15 in Annex XVII in the Regulation (EC) No 1907/2006 must be used.

In addition, note that these test methods and conditions are different from those referred to in above points 5. Aerobic biodegradation and 6. Anaerobic biodegradability.

Other test methods than those described in the Appendix 15 cannot be used. Read-across methodologies are not accepted.

Read the full Appendix 15 here:

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006R1907-20250901#anx_XVII.app_15

Water solubility

Water solubility must be proven to be > 2 g/L according to Appendix 16 in Annex XVII in the Regulation (EC) No 1907/2006. This means that the solubility must be tested according to either OECD 105 or OECD 120 under the following test conditions: Temperature = 20 °C, pH = 7, loading = 10 g/L and test time = 24 h.

Read the full Appendix 16 here:

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006R1907-20250901#anx_XVII.app_16

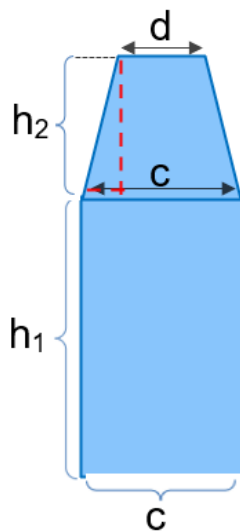
9 Calculation of coverage of label on plastic packaging

Below follows a description of how the calculation of coverage of labels on plastic containers must 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 must 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/ must 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 must 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:

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

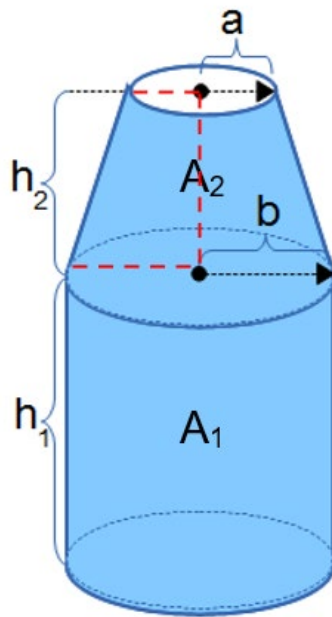
$$\text{Area } A_2 = \frac{h_2 \cdot (c + d)}{2}$$

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

Calculation for a cylindrical bottle:

For a cylindrical container, the calculation must 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 sales packaging component

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of hand dishwashing detergents. Only questions related to the provided sales packaging component needs to be answered.

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.

Manufacturer/supplier
Packaging name and/or item number (write all the names/numbers this declaration covers)
What is the provided packaging component (container, closure, label)?
What is the weight of the packaging component?
What material is the packaging component made of (type of plastic (PE, PP, PET), cardboard etc.)? List all materials included in the packaging component and the percentage of each material. OBS: For cardboard packaging for liquid products, the table at the end of the appendix can be filled instead.

O15 Rigid plastic packaging: Containers	Yes	No
Is the container made from either > 99% polyethylene (PE), > 95% polypropylene (PP) or > 98% polyethylene terephthalate (PET)?	<input type="checkbox"/>	<input type="checkbox"/>
For PE and PP containers: Is any remaining plastic type non-biodegradable PE or PP?	<input type="checkbox"/>	<input type="checkbox"/>
Are there metal coverings, seals or other metal parts?	<input type="checkbox"/>	<input type="checkbox"/>
Are fillers used?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, state concentration and density of the plastic component:_____		
Is the bottle white or uncoloured?	<input type="checkbox"/>	<input type="checkbox"/>
Is the bottle coloured/tinted with Carbon black?	<input type="checkbox"/>	<input type="checkbox"/>

Does the bottle contain post-consumer/commercial recycled material (PCR)? If yes, state is the content of recycled material (in w%): _____	<input type="checkbox"/>	<input type="checkbox"/>
O15 Rigid plastic packaging: Closures (cork/lid, mounted dosing devices/pumps/spray triggers)	Yes	No
Does the closure contain other plastic types than > 99% polyethylene (PE), > 95% polypropylene (PP) or > 98% polyethylene terephthalate (PET)? Please specify closure material and density _____	<input type="checkbox"/>	<input type="checkbox"/>
Is the closure a spray trigger?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is the plastic one or more of the following plastics: polyoxymethylene (POM), expanded polyethylene (EPE), ethylene-butyl acrylate copolymer (EBA), synthetic rubber copolymer of acrylonitrile and butadiene (NBR), and up to 6% Ethylene vinyl acetate (EVA)?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, does it have a permanent aerosol reducing foaming nozzle?	<input type="checkbox"/>	<input type="checkbox"/>
Are there metal parts in the closure?	<input type="checkbox"/>	<input type="checkbox"/>
Are there PS, PVC or plastics based on other types of halogenated plastics present in the closure?	<input type="checkbox"/>	<input type="checkbox"/>
Are fillers used?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, state the density of the plastic component: _____		
Is the closure coloured with the use of carbon black?	<input type="checkbox"/>	<input type="checkbox"/>
Does the closure contain silicone?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, state the density of the silicone _____		
If yes, does the silicone contain less than 1000 ppm of D4, D5 and D6?		
Does the closure contain post-consumer/commercial recycled material (PCR)? If yes, state the content of recycled material (in w%): _____	<input type="checkbox"/>	<input type="checkbox"/>
O16 Labels and print for rigid plastic packaging	Yes	No
Is the label made from either > 99% polyethylene (PE), > 95% polypropylene (PP) or > 98% polyethylene terephthalate (PET)? Please specify the label material and density: _____	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
Does the label contain post-consumer/commercial recycled material (PCR)? If yes, state the content of recycled material (in w%): _____	<input type="checkbox"/>	<input type="checkbox"/>
O17 Flexible plastic pouches	Yes	No
Is the pouch made from either > 99% polyethylene (PE), > 95% polypropylene (PP) or > 98% polyethylene terephthalate (PET)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the pouch have a barrier coating of EVOH (Ethylene vinyl alcohol) constituting more than 5% of the weight of the packaging?	<input type="checkbox"/>	<input type="checkbox"/>
Does the pouch have a closure or label containing silicone, PS, PVC or other types of halogenated plastics?	<input type="checkbox"/>	<input type="checkbox"/>
Is the pouch or closure coloured/tinted with Carbon black, other than for text and pictograms?	<input type="checkbox"/>	<input type="checkbox"/>
Are fillers used in the pouch or closure?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, state the density of the plastic component: _____		
Does the packaging contain post-consumer/commercial recycled material (PCR)? If yes, state the content of recycled material (in w%): _____	<input type="checkbox"/>	<input type="checkbox"/>

O18 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.	<input type="checkbox"/>	<input type="checkbox"/>
Is halogenated plastics (e.g. PVC or PVDC), oxo-degradable plastic or biodegradable plastic used in the packaging?	<input type="checkbox"/>	<input type="checkbox"/>
Is the component surface treated with PFAS (on the inside or outside)? <i>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).</i>	<input type="checkbox"/>	<input type="checkbox"/>
Is metal used in the packaging?	<input type="checkbox"/>	<input type="checkbox"/>
Are labels/covers used on the packaging?	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is it removable labels/covers on the closure added to indicate, that the product is not a food item?	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
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: _____	<input type="checkbox"/>	<input type="checkbox"/>
Does the wood raw material used in the paper/paperboard originate from PCR material? State % of the PCR material content: _____	<input type="checkbox"/>	<input type="checkbox"/>
Is the remaining proportion of wood raw material, covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources)?	<input type="checkbox"/>	<input type="checkbox"/>
Bio-based plastic		
Is palm oil incl. PFAD and POME, soy oil or soy flour used as raw material for the bio-based polymer?	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
Is the origin of the waste certified by one of the following certification schemes: <ul style="list-style-type: none"> Bonsucro EU ISCC EU or ISCC Plus Others? State certification scheme _____ 	<input type="checkbox"/>	<input type="checkbox"/>
If mass balance approach is used, is the traceability level based on book and claim?	<input type="checkbox"/>	<input type="checkbox"/>
Paper and cardboard packaging (other than cardboard packaging for liquid products)	Yes	No
Does the packaging contain post-consumer/commercial recycled material (PCR)? If yes, state the content of recycled material (in w%): _____	<input type="checkbox"/>	<input type="checkbox"/>

The following table is only to be filled out for cardboard packaging for liquid products:

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

* 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.

** 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.

If the composition of the packaging component changes, a new declaration confirming compliance with the requirements must be submitted to Nordic Swan Ecolabelling.

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

Appendix 5 Performance test

This appendix contains a description of how the performance test of hand dishwashing detergents is to be carried out and how the result is to be documented to Nordic Ecolabelling.

The purpose of the performance test is to demonstrate the satisfactory ability and capacity of an ecolabelled hand dishwasher detergent. The test procedure compares the test product (subject of the application) and a reference product with respect to cleaning ability and capacity. The use of test results in marketing should be avoided (and only used if the test method is specified in detail).

The framework allows for a wide range of test procedures as long as the requirements below are a part of the test procedure. In the test, washing-up may be done by hand, or a machine may be responsible for the mechanical work. Alternatively, the test may include no mechanical processing. The test is based on the washing of crockery (e.g. plates).

Framework

The test must be performed according to the following framework. At least five repetitions must be performed in which the test and reference products are compared with one another. Each repetition must comprise two subtests – one for the test product and one for the reference product. The reference product and the test product must be anonymous to the tester.

The elements and stages included in each repetition must be decided in advance and must be identical for each repetition (e.g. application of soil, processing and possible rinsing). The temperature and relative humidity of the room must be measured and kept reasonably constant in all repetitions (measured at beginning and end of test).

Reference product

The reference product is defined as a product that at the time is one of the most well established/market-leading hand dishwashing detergents in a Nordic country or in the countries in which the product will be sold.

The reference product must be a product other than the product that is set to be ecolabelled. The reference product must be made by a manufacturer other than the one that produces the applicant product.

The reference product must be purchased specifically for the test. Products for the professional market are to be tested against another professional product, and similarly a consumer product must be compared against another consumer product. If the product is marketed to both the professional and consumer markets, the test is performed against a professional product.

Water test

In addition to the 10 subtests, a further test must be performed in the same way as the other subtests but that uses water alone (no detergent). The water test must demonstrate that the chosen test method is suitable for testing the cleaning performance of the hand dishwashing detergent. If the test demonstrates that water cleans equally as well as the hand dishwashing detergents, the test is unsuitable. The water test must be performed after

testing the test product and reference product respectively. The test is to be performed on the same number of plates as the capacity test. For example, if the average capacity of the reference product is 20 plates and that of the test product is 22 plates, 21 plates must be used for the water test.

Soil selection and preparation

The soil must primarily consist of animal and vegetable fats. It must also contain proteins and carbohydrates (e.g. egg and flour). This means that soil must primarily contain fats. The origin or chemical composition of the soil must be described in detail (e.g. olive oil or animal fat). The soil must be homogenous and of even consistency. Enough soil for all 11 subtests must be prepared in one batch.

Water

The water hardness and the calcium-magnesium-ratio must be known. The calcium-magnesium-ratio can be determined using deionised/distilled water that is then hardened with known quantities of calcium. The test must be performed using water of a typical hardness for the area in which the product is to be sold. Justification must be provided for the selection of water hardness.

Water hardness must be specified in whole German degrees of hardness (°dH).

1°dH = 10 mg CaO or 7.19 mg MgO (0.179 mmol metal ions/litre) or equivalent quantity of other metal oxides per litre of water.

Preparation of washing water

The volume of water must be determined in litres to one decimal point. The same volume of water must be used in all repetitions. The temperature of the water must be measured in Celsius at the start and must be the same for all repetitions. The temperature must be measured at the start and end of the washing cycle.

The test and reference detergent must be dosed according to the lowest dosage recommended for each product respectively. If there are no dosing instructions for the reference, the dose is set at the same as for the test product. The dosage must be measured to one decimal point and must be the same in all repetitions. The detergent must be mixed and completely dissolved in the water.

Hand dishwashing tablets must be tested as in-use solution, when the detergent is used for a full kitchen-sink, following the instructions.

Test procedure

The quantity of soil must be weighed in grams (or smaller unit) to two significant figures for each repetition.

The soil must be introduced in the same way in each repetition via the crockery to be washed. All processing must be performed in a predetermined, controlled fashion for all tests, preferably with 20 circular movements on the front and 6 circular movements on the back of the plates. If a different method of processing is used, a description and justification of this must be provided.

Assessment of cleaning capacity

The test must be capable of generating results that provide a measure of capacity, i.e. how long the dishwashing detergent lasts. The test is then stopped at predetermined conditions. The recommended conditions are when there is no more foam, but other indicators may be used. If a different indicator than “no foam” is chosen, this must be described and justified. The number of plates is determined when the predetermined conditions are reached. Either the total number of plates or the number of clean plates can be counted.

Assessment of cleaning ability

The test must be capable of generating results that provide a measure of cleaning ability. This may be through visual, optical, gravimetric or some other relevant method of analysis. The method of analysis and units of measure must be determined in advance and specified. Visual inspection can be performed using a rating scale.

The following rating scale can be used: Evaluation must be performed by two people using the same lighting conditions (preferably a 1000-1500 lux lamp). Both the front and reverse of the plate must be evaluated together:

5 = Completely clean

4 = 1-10 small fat droplets/spots with a maximum combined surface area of 4 mm²

3 = More than 10 small fat droplets/spots with a combined surface area of 4-50 mm²

2 = Fatty coating of 50-200 mm²

1 = Fatty coating of more than 200 mm²

Results

The cleaning ability and capacity of the reference product and test product must be documented for each test repetition. A positive result of a test round is obtained when the cleaning ability and capacity is as good or better for the test product compared with the reference product.

The test product is considered to have fulfilled the performance requirements when positive results are obtained in at least 80% of the test rounds (e.g. 4 out of 5). As an alternative, the applicant may use statistical methods and demonstrate with a one-sided 95% confidence range that the test product is as good as or better than the reference product in at least 80% of test rounds.

Documentation

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

- Specification of the temperature and humidity in the test room and details describing how the test person(s) ensured that these conditions were kept constant in all repetitions.
- Description of the composition of the soil and of the procedure used to ensure that the soil was of a homogenous and even consistency.
- Specification of the hardness of the water, and how it was achieved, and specification of the calcium-magnesium ratio.
- Specification of the quantity of water used in each part of the test.

- Water temperature at the start and end of the test.
- Specification of the results of the weighing of the hand dishwashing detergent (test product and reference product) in each repetition and description of the procedure for dissolving the product in the water.
- Specification of the results of the weighing of the soil in each repetition and a description of how the procedure for apply the soil to the plates.
- Description of how the products are kept anonymous from the test individuals.
- Description of the other steps and stages in each individual repetition.
- Description of how cleaning capacity is evaluated / determined.
- Description of how cleaning ability is measured and/or evaluated.
- The partial results from all five repetitions stated in terms of cleaning capacity and ability, including all raw data.
- Results of the water test in which no detergent was used.
- Final results based on this raw data (and, if applicable, a statistical evaluation of the data).