Nordic Ecolabelling for

Industrial cleaning and degreasing agents

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Nordic Ecolabelling

Content

065 Industrial cleaning and degreasing agents, version 3.4, 10 October 2023

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

Addresses

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

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What is a Nordic Swan Ecolabelled industrial cleaning and degreasing agent?

Industrial cleaning and degreasing agents should be able to remove oil residues, wax, grease, dirt, dust and any rust from surfaces, machine parts, tools and pipe systems made from substances such as steel, aluminium, concrete and plastic.

Areas of use may include cleaning and degreasing of floors and walls in production premises, machinery and machine parts, production equipment and metal parts in industry, tanks/cargo holds on ships, ship decks and decks on oil platforms, pipe systems (CIP cleaning) and façades, removing cooling and cutting oil and cleaning water cooling systems.

Nordic Swan Ecolabelled industrial cleaning and degreasing agents:

- Have the ability to remove oil, grease and dirt while also being gentle on the environment.
- Are biodegradable, do not bioaccumulate and limit emissions of toxic substances into the aquatic environment.
- Are performance tested and are as good as comparable products.

Ecolabelling of industrial cleaning and degreasing agents will help reduce emissions of environmental hazardous substances, both to the water and to the sewer system.

Nordic Ecolabelling applies the precautionary principle and therefore sets strict requirements concerning chemicals that are harmful to health and the environment, and encourages technology that replaces such chemicals.

Industrial cleaning and degreasing agents must, however, be effective – an important factor for industry in minimising downtime and thus reducing costs – and it is also important for the environment that the products are of sufficient quality with regard to the areas of use. Ecolabelling of the products therefore also needs to include requirements concerning performance/quality.

Why choose the Nordic Swan Ecolabel?

- The manufacturer may use the Nordic Swan Ecolabel trademark for marketing. The Nordic Swan Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Swan Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- Environmental issues are complex. It can take a long time and extensive resources to gain an understanding of a specific area. Nordic Swan Ecolabelling can be seen as aid in this work.

- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Swan Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Swan Ecolabel?

The main function of industrial cleaning and degreasing agents is to remove soiling such as oil residues, wax, grease, dust and other dirt from surfaces, machine parts, tools and pipe systems made from substances such as steel, aluminium, concrete and plastic.

The areas of use are many and varied for the products in this product group. They include:

- degreasing floors and walls in production facilities
- cleaning and degreasing metal parts in industry, machinery and machine parts, and production equipment
- façade cleaning in the sense of graffiti removal and cleaning for maintenance purposes
- cleaning and degreasing floors, decks and oily/greasy equipment offshore (on oil platforms)
- cleaning decks, tanks and cargo holds on ships
- cleaning water cooling systems and water treatment plants (not water treatment chemicals)
- cleaning pipe systems (CIP – cleaning in place)
- cleaning agents for cleaning of liquid damaged electronics

The products may only be marketed to professional users in industry.

The criteria do not cover car and boat care products, products specifically for use in the food industry, and universal and sanitary cleaning agents, since there are separate criteria for these product types.

Products containing microorganisms, water treatment chemicals and products for the pharmaceutical industry also cannot be Nordic Swan Ecolabelled.

Disinfectant products cannot carry the Nordic Swan Ecolabel due to restrictions arising from the Biocidal Products Directive.

Nordic Ecolabelling has criteria for other types of cleaning agent. For products that cannot be Nordic Swan Ecolabelled under this document, see the other Nordic Ecolabelling documents. Contact us for more information, addresses can be found on page 2.

How to apply

Application and costs

For information about the application process and fees for this product group, please refer to the respective national web site. For addresses see page 2.

What is required?

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

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

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

✉ Enclose

🔑 The requirement checked on site

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

Licence validity

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

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

On-site inspection

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

Queries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 2 for addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

1 Environmental requirements

Environmental requirements are divided into four sections: general environmental requirements, requirements concerning specific substances, performance and packaging and user information. All product types must meet all requirements.

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

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

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

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

Impurities in the raw materials exceeding concentrations of 1,0 % / 0,10 % are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

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

1.1 General environmental requirements

O1 Information about the product

Applicants must provide detailed information about the products included in the application. The following details are to be given:

- Description of the product (production site(s), function and area(s) of use)
- A complete formulation with information on all constituent substances. The formulation for each constituent substance must include:
    - trade name
    - chemical name
    - quantity (% by weight)
    - CAS no. and/or EINECS no.
    - DID no.
    - function

If the raw materials contain several substances, this must be stated.

The DID number is the number an ingredient has on the DID List, which is to be used when calculating the environmental requirements. The DID list can be found on the Nordic Ecolabelling website, see addresses on page 2. See Appendix 5 for more information on the DID list.

☒ Description of the product in line with the definition under "What can carry the Nordic Swan Ecolabel?".

☒ Complete formulation in compliance with the requirement.

☒ Safety data sheet in line with prevailing legislation in the country of application, e.g. Annex II to REACH (Regulation 1907/2006/EC) for each product and each constituent substance in the product.

O2 Classification of the product

The product must not be classified in any of the hazard categories set out in Table O2 below. The classification shall be in accordance with the current legislation (CLP Regulation 1272/2008).

Table O2 – Classification of the product

CLP Regulation 1272/2008:		
Hazard class	**Signal words, Category code**	**Hazard code**
Hazardous to the aquatic environment	Warning, Aquatic acute 1 Warning, Aquatic chronic 1 Warning, Aquatic chronic 2 -, Aquatic chronic 3 -, Aquatic chronic 4 -, Ozone	H400 H410 H411 H412 H413 H420
Carcinogenic	Danger, Carc. 1A or 1B Warning, Carc. 2	H350 H351
Germ cell mutagenicity	Danger, Muta. 1A or 1B Warning, Muta. 2	H340 H341
Reproductive toxicity	Danger, Repr. 1A or 1B Warning, Repr. 2 -	H360 H361 H362
Acute toxicity	Danger, Acute Tox. 1 or 2 Danger, Acute Tox. 1 or 2 Hazardous, Acute Tox. 1 or 2 Danger, Acute Tox. 3 Danger, Acute Tox. 3 Danger, Acute Tox. 3 Warning, Acute Tox. 4 Warning, Acute Tox. 4 Warning, Acute Tox. 4	H300 H310 H330 H301 H311 H331 H302 H312 H332
Specific target organ toxicity	Danger, STOT SE 1 Warning, STOT SE 2 Danger, STOT RE 1 Warning, STOT RE 2	H370 H371 H372 H373
Aspiration hazard	Hazardous, Asp. Tox. 1	H304
Sensitisation on inhalation or skin contact	Hazardous, Resp. sens. 1 Warning, Skin sens. 1 or products labelled "Contains (name of sensitising substance). May cause an allergic reaction".	H334 H317
Flammable aerosols and liquids	Flam. Aerosol 1 Flam. Liq. 1	H222 H224

Please note that the manufacturer is responsible for the classification.

☒ Label and safety data sheet for the product in line with prevailing legislation in the country of application, e.g. Annex II to REACH (Regulation 1907/2006/EC).

O3 Classification of constituent substances in the product.

The product and raw materials must not contain substances that are or may degrade into substances that are classified as carcinogenic (Carc), mutagenic (Mut), reprotoxic (Rep), or sensitising on inhalation or skin contact according to CLP Regulation (No) 1272/2008.

Constituent substances in the products must also not be classified in any of the hazard categories in table O3.

Table O3 – Prohibited classifications for constituent substances in the product

Hazard class in accordance with CLP Regulation	CLP Regulation 1272/2008
Carcinogenic Category Carc 1A/1B/2	H350 H351*
Germ cell mutagenicity Category Muta 1A/1B/2	H340 H341
Reproductive toxicity Category Repr 1A/1B/2	H360 H361 H362
Sensitisation on inhalation or skin contact Resp. Sens. 1 Skin Sens. 1	H334** H317**

** An exemption is made for NTA as an impurity. Complexing agents of the type MGDA and GLDA may contain NTA as an impurity in the raw material in concentrations below 1.0%, as long as the concentration in the product remains below 0.1%.*

*** The following substances are exempt from the requirement:*

- *Enzymes (including stabilisers and preservatives in the enzyme raw material) may be included in liquid form or as coated granules.*
- *<0.01% by weight of preservative classified as sensitising: Resp. sens 1, 1a or 1b H334 or Skin sens. 1, 1a or 1b H317 may be included in the end product. See requirement O5 for further requirements concerning preservatives. MIT (CAS 2682-20-4) is considered to be classified as sensitising.*

☒ Safety data sheet in line with prevailing legislation in the country of application, e.g. Annex II to REACH (Regulation 1907/2006/EC).

☒ Documentation showing the concentration of preservatives classified as sensitising.

☒ Safety data sheet or similar showing that any enzymes are in liquid form or in the form of non-dust-forming granules.

☒ Declaration from the manufacturer (Appendix 1).

☒ Declaration from the raw material producer/supplier (Appendix 2).

O4 Environmentally harmful substances

No constituent substances with the following environmental hazard classification (in accordance with the CLP Regulation (EC) No 1272/2008) may occur in the product in quantities that exceed the stated limit.

$100*C_{H410} + 10*C_{H411} + C_{H412} \leq 1\%$ in the product

where

C_{H410} *is the concentration of substances classified as H410 in percent*

C_{H411} *is the concentration of substances classified as H411 in percent*

C_{H412} *is the concentration of substances classified as H412 in percent*

Surfactants classified as H411 and H412 are exempt from the requirement, as long as they are readily degradable* and anaerobically degradable**.

** In accordance with the DID list or with test method no. 301 A-F, no. 310 or no. 306 (for offshore) in the OECD guidelines for testing of chemicals or other equivalent test methods.*

*** In accordance with the DID list or ISO 11734, ECETOC no. 28 (June 1988), OECD no. 311 or equivalent test methods, where at least 60% degradability is achieved under anaerobic conditions.*

If information about the substance's harmfulness to the environment is not available, the substance is assumed to be environmentally harmful H410.

✉ Report on surfactants that are to be exempted from the requirement (quantity, classification, degradability).

✉ Summary of the product's content of H410, H411 and H412 classified compounds per product, plus calculations showing that the requirement is fulfilled.

✉ Declaration from the manufacturer (Appendix 1).

✉ Declaration from the raw material producer/supplier (Appendix 2).

1.2 Requirements concerning specific substances

O5 Preservatives

- Preservatives may be added to liquid products as long as the preservative is not bioaccumulative. Compounds are considered not to be bioaccumulative if BCF < 500 or logKow < 4.0. If there is data on both BCF and logKow, the value for the highest BCF measured shall be used.
- The concentration of preservative must be optimised in relation to the volume of the product and this must be documented with a Challenge Test (Appendix 5) or equivalent showing this.
- Preservatives are only permitted to preserve the product or raw material, not to provide a disinfecting effect or antimicrobial function.

✉ Documentation that none of the added preservatives are bioaccumulative, cf. OECD test method no. 305 A-E or 107, 117.

✉ Declaration from the manufacturer (Appendix 1).

✉ Declaration from the raw material producer/supplier (Appendix 2).

✉ Test report from the completed Challenge Test or equivalent showing that an optimum concentration of the preservative is used in the product. See Appendix 5 for the requirements concerning the test laboratory, and for information about the Challenge Test.

O6 Dyes

Dyes included in products or in constituent substances must not be bioaccumulative.

Dyes are considered to be bioaccumulative if BCF < 500 or logKow < 4.0. If there is data on both BCF and LogKow, the value for the highest BCF measured shall be used. See Appendix 5 for more information on bioaccumulation. Dyes with an E-number that are approved for use in food are accepted.

✉ Documentation that none of the added dyes are bioaccumulative, cf. OECD test method no. 305 A-E or 107, 117 or state E-number.

O7 Volatile organic compounds (VOC)

Solvent-based products:
Only volatile organic compounds* with a vapour pressure < 2.5 kPa at 20°C and that meet all other requirements in the criteria may be used.

These may only be marketed and sold for degreasing metal components, machinery and tools which cannot tolerate water.

Such products must be accompanied by health and safety instructions about the importance of ventilation when using the product.

Note that requirement O2 prohibits products classified as environmentally harmful, requirement O6 prohibits halogenated and aromatic solvents and requirement O11 limits the quantity of aerobically and anaerobically non-biodegradable substances.

Other products:
Volatile organic compounds* may account for 1% by weight of the in-use solution at the maximum recommended dosage.

** Volatile organic compounds (VOC) are defined under the VOC Directive 1999/13/EC as follows: Volatile organic compounds (VOC) are organic substances with a vapour pressure > 0.01 kPa at 20°C.*

✉ Declaration from the manufacturer (Appendix 1).

✉ Declaration from the raw material producer/supplier (Appendix 2).

✉ Solvent-based products: Documentation showing the vapour pressure of all solvents, plus a label or product data sheet showing the area of use and the health and safety instructions. Solvents must also meet all other requirements in the criteria.

✉ Other products: Calculation of the VOC content of the product.

O8 Phosphorus

Phosphorus must not be included in products for outdoor use. The exception is products for use offshore* which may contain 0.5 g P per litre of solution in use.

Phosphorus in products for indoor use must not amount to more than 0.5 g P per litre of in-use solution.

** Products for offshore use that are approved in the green or yellow category under HOCNF (Harmonised Offshore Chemicals Notification Format), but not products for use in coastal areas, watercourses and lakes, including freshwater and brackish areas such as the Baltic Sea.*

Be aware of national legislation on phosphorus where the product will be sold/marketed. In Norway, phosphorus is regulated in sections 2-12 and 2-14 of the "Regulation limiting the use of chemicals and other products that are harmful to health and the environment (The Product Regulation)".

✉ Declaration from the manufacturer (Appendix 1).

✉ Declaration from the raw material producer/supplier (Appendix 2).

✉ Calculation of the quantity of phosphorus added (calculated as elementary phosphorous, P) per litre in-use solution.

✉ For products for offshore use that contain phosphorus: Documentation showing that the products are approved in the green or yellow category under HOCNF, procedures that describe how it is ensured that these products are not used in coastal areas, water-courses and lakes, including freshwater and brackish areas such as the Baltic Sea, plus the label and user information clearly indicating the area of use and that these products must not be used in coastal areas, watercourses and lakes, including freshwater and brackish areas such as the Baltic Sea.

O9 Substances that must not be present in the products

The following compounds must not be present in the product:

- APEO and APD (alkylphenol ethoxylates and alkylphenol derivatives)

- EDTA (ethylene diamine tetra acetate and salts thereof) and DTPA (diethylenetriamine penta acetate)
- Organic chlorine compounds and hypochlorite
- Halogenated and aromatic solvents

Solvents defined in line with the VOC Directive 1999/13/EC: organic substances with a vapour pressure > 0.01 kPa at 20°C.

- Phthalates
- Fragrance
- Quaternary ammonium compounds that are not degradable
- Benzalkonium chloride
- Substances on the Candidate List*
- Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH (Regulation 1907/2006/EC).
- Substances considered to be potential endocrine disruptors in category 1 or 2 on the EU's priority list of substances that are to be investigated further for endocrine disruptive effects. See following link:

http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf

- Nanoparticles (from nanomaterials**)

** The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table*

*** The definition of a nanomaterial follows the European Commission's definition of nanomaterials from 18 October 2011, with the exception that the limit for the particle size distribution is reduced to 1%: "A natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate, where at least 1% of the particles have one or more external dimensions in the size range 1-100 nm." Examples include ZnO, TiO_2, SiO_2, Ag and laponite with particles of nanosize in concentrations above 1%. Polymer emulsions are not considered to be a nanomaterial.*

✉ Declaration from the manufacturer (Appendix 1), declaration from the raw material producer/supplier (Appendix 2).

O10 Surfactants, readily aerobically and anaerobically degradable

All surfactants must be readily aerobically degradable in accordance with test method no. 301 A-F or no. 310 in the OECD guidelines for testing of chemicals or other equivalent test methods.

For products for use offshore, i.e. products that risk running directly into the ocean, the surfactants must also be readily degradable in accordance with OECD 306.

All surfactants must be anaerobically degradable, which means at least 60% degradability under anaerobic conditions, in accordance with ISO 11734, ECOTOC no. 28, OECD 311 or equivalent test methods.

Documentation shall, in the first instance, refer to the DID list dated 2014 or later. For surfactants not covered by the list and for the requirement concerning offshore products with regard to OECD 306, other documentation such as test reports or literature references may be used (see Appendix 5).

✉ Documentation is required for each surfactant, showing that the surfactant is readily biodegradable and anaerobically degradable in line with the requirements above.

O11 Aerobic degradability, aNBO and Anaerobic degradability, anNBO

The quantity of organic substances that are aerobically non-biodegradable (aNBO), in accordance with the DID list, must not exceed 0.6 g/litre of in-use solution.

The quantity of organic substances that are anaerobically non-biodegradable (anNBO), in accordance with the DID list, must not exceed 0.6 g/litre of in-use solution.

Note that all surfactants must be aerobically and anaerobically degradable in accordance with O10.

For substances that are not on the DID list or do not have data on anaerobic degradability, other documentation in accordance with Appendix 5 may be submitted.

✉ Calculation of total quantity of organic substances that are aerobically non-biodegradable (aNBO) and calculation of total quantity of organic substances that are anaerobically non-biodegradable (anNBO) in the in-use solution in accordance with the DID list. For substances not on the DID list, other documentation in accordance with Appendix 5 may be submitted. The parameters and calculation formulas needed for documentation of the requirement can be found in Appendix 5.

DID list: Detergents Ingredients Database.

O12 CDV (critical dilution volume)

The product's critical dilution volume (CDV) must not exceed the maximum values stated in the table below.

Table O12 – CDV (critical dilution volume)

Product type	Requirement CDV chronic (litres/in-use solution)
Water-based degreasers (surfaces, metal/engine cleaning)	1,000,000
CIP, component cleaning agents	100,000
Pre-painting cleaners, façade cleaners	50,000
Solvent-based products (Ready-to-use, RTU)	500,000
Offshore	1,000,000

CDV chronic is calculated using the formula below and is calculated for all substances in the product.

$CDV_{chronic} = \sum (dose_i \times DF_i \times 1000 / TF_{chronic})$

Where:

$dose_i$ = the quantity of the individual substance $_i$ used in g/litre of in-use solution

DF_i = degradability factor for substance $_i$ as stated in the DID list

TF_{acute} = chronic toxicity factor for substance $_i$ as stated in the DID list.

The calculation of CDV is applied to the highest stated in-use solution (g/litre of in-use solution).

Hydrochloric acid, HCl, is exempt from the calculation.

Documentation shall, in the first instance, refer to the DID list dated 2014 or later. For substances not covered by the list, the parameters must be calculated using the guidance in part B of the DID list, and the associated documentation is to be submitted.

✉ Calculation of $CDV_{chronic}$ for the product based on all constituent substances. Nordic Ecolabelling's websites provide a calculation sheet that may be used for the calculation.

1.3 Performance

The performance of the product must be satisfactory for the area of the product. This can be documented either by user reports (O13) or a laboratory test (O14) for each area of use.

O13 Performance test – user reports

The performance of the product must be documented by means of user reports (see Appendix 3). The product must be used by at least five relevant industrial users within the area of use of the product for a period of time that is representative of the frequency of use of the product, (i.e. the product must be used repeatedly).

✉ A minimum of five user reports (as formulated in Appendix 3) must be submitted by at least five relevant industrial users of the product. The user reports must show that at least 80% of the users are satisfied with the product.

O14 Performance test – laboratory test

The product's performance must be tested using a test method that meets the conditions set out in Appendix 4. Assessment and documentation of the product's performance must show that the product performs better than or as well as the product it is being compared with, and better than water.

✉ Laboratory test documenting satisfactory performance (assessment of performance, description of test method and test results) in accordance with the conditions set out in Appendix 4.

1.4 Packaging and user information

O15 PVC in packaging

PVC and other halogenated plastics shall not be part of the primary packaging or packaging components (including caps, lids, pumps and labels).

✉ Declaration from the manufacturer. Packaging overview stating packaging type.

O16 Labelling of packaging

The plastic packaging must carry information on the components and materials from which the packaging is made and how these should be sorted. It may be marked in accordance with European standards (e.g. DIN 6120 part 2), recommendations from national waste collection agencies or equivalent.

Caps, lids and pumps are exempted from this requirement.

✉ Picture of the product's labelling or data sheet showing the labelling. The labelling may also be indicated by the label, if this is accompanied by documentation for the type of plastic from the packaging manufacturer.

O17 Information for users

A technical description of the product or information in all relevant Nordic languages that accompanies the product, which must contain the following information:

- Product type and area of use.
- Recommended dosage for normal use and normal soiling (applies to products that have to be diluted before use).

Recommended dosage may be stated as no. of dl, pumps or caps, for example.

- Description of how the user avoids contact with the product, by using personal protective equipment, for instance.

The information text on the packaging/product data sheet must comply with the EU's regulation on the declaration of contents (Regulation (EC) No 648/2004, Appendix VII).

The product's area of use must match the area of use for which the product was tested.

If, after use, the product is considered environmentally harmful waste (like brush cleaner, for example), the label must state that the product should be disposed of as environmentally harmful waste.

✉ Technical description, safety data sheet, product sheet and label showing the information text.

2 Quality and regulatory requirements

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

If licence holder's environmental management system is certified to ISO 14 001 or EMAS, and the following procedures implemented, it is sufficient for the accredited auditor to certify that the requirements are observed.

O18 Licence administrators

The company shall appoint an individual responsible for ensuring the fulfilment of the Nordic Ecolabelling requirements, and a contact person for communications with Nordic Ecolabelling.

✉ Organisational chart showing who is responsible for the above.

O19 Documentation

The licensee must be able to present a copy of the application and factual and calculation data supporting the documents submitted on application (including test reports, documents from suppliers and suchlike).

🔑 Checked on site.

O20 Quality of the cleaning agent

The licensee must guarantee that the quality of the production of the Nordic Swan Ecolabelled industrial cleaning and/or degreasing agent is maintained throughout the validity period of the licence.

✉ Procedures for collating and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Swan Ecolabelled industrial cleaning and degreasing agent.

O21 Planned changes

Written notice of planned product and marketing changes that affect the Nordic Ecolabelling requirements must be given to Nordic Ecolabelling.

✉ Procedures detailing how planned changes are dealt with.

O22 Unplanned non-conformities

Unforeseen non-conformities that affect the Nordic Ecolabelling requirements must be reported to Nordic Ecolabelling in writing and logged.

✉ Procedures detailing how unforeseen non-conformities are handled.

O23 Traceability

The licensee must have a traceability system for the production of the Nordic Swan Ecolabelled product.

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

O24 Take-back system

The Nordic Ecolabelling's Criteria Group decided on the 9 October 2017 to remove this requirement.

O25 Laws and regulations

The licensee must ensure compliance with the applicable legislation on health and safety, environmental legislation and installation-specific terms/permits at all the production sites for the Nordic Swan Ecolabelled product.

Documentation is not required. However, Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.

Regulations for the Nordic Ecolabelling of products

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

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

Follow-up inspections

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

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

Criteria version history

Nordic Ecolabelling adopted the criteria for industrial cleaning and degreasing agent on 10 June 2015. The criteria are valid until 30 June 2020.

On 9 October 2017 Nordic Ecolabelling's Criteria Group decided to remove O24 Take-back system. Nordic Ecolabelling decided on 8 October 2019 to prolong the criteria to 30 June 2022. At the same time the definition of ingoing substances has been clarified. The new version is called 3.1.

On 19 January 2021 Nordic Ecolabelling decided to prolong the validity of the criteria until 31 December 2023. On 9 March 2021 Nordic Ecolabelling decided to include cleaning agents for cleaning of liquid damaged electronics in the section "What can carry the Nordic Swan Ecolabel". The new version is called 3.2.

On 18 January 2022 Nordic Ecolabelling decided to prolong the validity of the criteria to the 31 December 2024. Nordic Ecolabelling decided on 29 March 2022 to adjust requirement O4 by also exempting H411 classified surfactants from the requirement. The new version is called 3.3.

On 10 October 2023 Nordic Ecolabelling decided to prolong the validity of the criteria to the 30 June 2026. The new version is called 3.4.

New criteria

In future criteria (next revision), the following points should be reviewed:

- CDV requirement
- VOC requirement
- Requirements regarding preservatives
- Requirements regarding raw material production
- Possibility of setting differentiated requirements for environmentally harmful substances
- Possibility of strengthening the requirement concerning information on use of the product
- Possibility of expanding the product group to include cleaning systems.

Terms and definitions

Term	Explanation or definition
aNBO	Aerobically non-biodegradable substances
anNBO	Anaerobically non-biodegradable substances
BCF	Bioconcentration factor
CDV	Critical Dilution Volume
CMR	Substances classified as either Carcinogenic, germ stem Mutagenic or Reprotoxic
PBT / vPvB	Persistent, Bioaccumulative, Toxic/very Persistent and very Bioaccumulative
SVHC	Substances of Very High Concern
VAH	Volatile Aromatic Compounds, which are a subset of VOC
VOC	Volatile Organic Compounds
DID list	Detergents Ingredients Database list, dated 2014

Appendix 1 Declaration from the manufacturer of the industrial cleaning and degreasing agent

For use in applications for the Nordic Swan Ecolabel licence for industrial cleaning and degreasing agent. To be able to complete the following declaration requires completed declarations for all ingredients (Appendix 2 or equivalent).

This declaration is based on best knowledge at the time of application, based on the test and/or declarations from the manufacturer of raw materials. With reservations for developments and new scientific findings. If such new knowledge should be made available, the undersigned is required to submit an updated declaration to Nordic Ecolabelling.

Product name: _____

Product type: _____

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

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

Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100 ppm (0,0100 w-%, 100 mg/kg) in the Nordic Swan Ecolabelled product. Impurities in the raw materials exceeding concentrations of 1,0 % / 0,10 % are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

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

Does the product contain any of the following?

If yes specify the name and concentration on page 2.

		Yes	**No**
Substances classified as:		☐	☐
Carcinogenic Category Carc 1A/1B/2	H350 H351		
Germ cell mutagenicity Category Muta 1A/1B/2	H340 H341		
Reproductive toxicity Category Repr 1A/1B/2	H360 H361 H362		
Sensitisation on inhalation or skin contact Resp. Sens. 1 Skin Sens. 1	H334 H317		
Substances classified as H410, H411 or H412		☐	☐
Preservatives If yes, state BCF or log KOW: _____		☐	☐
Dyes If yes, state BCF, log KOW or E-number: _____		☐	☐

	Yes	No
Volatile organic compounds (VOC, organic substances with a vapour pressure > 0.01 kPa at 20°C.)	☐	☐
Phosphorus	☐	☐
APEO or APD (alkylphenol ethoxylates or alkylphenol derivatives)	☐	☐
EDTA (ethylene diamine tetra acetate and salts thereof) and DTPA (diethylenetriamine penta acetate)	☐	☐
Organic chlorine compounds and reactive chlorine	☐	☐
Halogenated and aromatic solvents (Solvents defined as in the VOC Directive 1999/13/EC: organic substances with a vapour pressure > 0.01 kPa at 20°C)	☐	☐
Phthalates	☐	☐
Fragrance	☐	☐
Quaternary ammonium compounds that are not degradable	☐	☐
Benzalkonium chloride	☐	☐
Substances on the Candidate List (The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table)	☐	☐
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH (Regulation 1907/2006/EC).	☐	☐
Substances considered to be potential endocrine disruptors in category 1 or 2 on the EU's priority list of substances that are to be investigated further for endocrine disruptive effects. See following link: http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf	☐	☐
Nanoparticles (from nanomaterials) The definition of a nanomaterial follows the European Commission's definition of nanomaterials from 18 October 2011, with the exception that the limit for the particle size distribution is reduced to 1%: "A natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate, where at least 1% of the particles have one or more external dimensions in the size range 1-100 nm."	☐	☐

If the answer is yes to any of the above questions, specify the following

Name of the substance:

_____

_____

Concentration (percentage of weight):

_____

Location and date:	Company name:
Responsible (signature):	
Name of contact person:	Phone number and email:

Appendix 2 Declaration from the manufacturer of the raw material/ingredient

For use in applications for the Nordic Swan Ecolabel licence for industrial cleaning and degreasing agent.

This declaration is based on best knowledge at the time of application, based on the test and/or declarations from the manufacturer of raw materials. With reservations for developments and new scientific findings. If such new knowledge should be made available, the undersigned is required to submit an updated declaration to Nordic Ecolabelling.

Raw material name: _____

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

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

Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the in the Nordic Swan Ecolabelled product in concentrations less than 100 ppm (0,0100 w-%, 100 mg/kg) in the Nordic Swan Ecolabelled product. Impurities in the raw materials exceeding concentrations of 1,0 % / 0,10 % are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

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

Does the raw material / ingredient contain any of the following?
If yes specify the name and concentration on page 2.

		Yes	No
Substances classified as: Carcinogenic Category Carc 1A/1B/2 Germ cell mutagenicity Category Muta 1A/1B/2 Reproductive toxicity Category Repr 1A/1B/2 Sensitisation on inhalation or skin contact Resp. Sens. 1 Skin Sens. 1	 H350 H351 H340 H341 H360 H361 H362 H334 H317	☐	☐
Substances classified as H410, H411 or H412		☐	☐
Preservatives If yes, state BCF or log KOW: _____		☐	☐
Dyes If yes, state BCF, log KOW or E-number: _____		☐	☐
Volatile organic compounds (VOC, organic substances with a vapour pressure > 0.01 kPa at 20°C.)		☐	☐
Phosphorus		☐	☐

	Yes	No
APEO or APD (alkylphenol ethoxylates or alkylphenol derivatives)	☐	☐
EDTA (ethylene diamine tetra acetate and salts thereof) and DTPA (diethylenetriamine penta acetate)	☐	☐
Organic chlorine compounds and reactive chlorine	☐	☐
Halogenated and aromatic solvents (Solvents defined as in the VOC Directive 1999/13/EC: organic substances with a vapour pressure > 0.01 kPa at 20°C)	☐	☐
Phthalates	☐	☐
Fragrance	☐	☐
Quaternary ammonium compounds that are not degradable	☐	☐
Benzalkonium chloride	☐	☐
Substances on the Candidate List (The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table)	☐	☐
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), in accordance with the criteria in Annex XIII of REACH (Regulation 1907/2006/EC).	☐	☐
Substances considered to be potential endocrine disruptors in category 1 or 2 on the EU's priority list of substances that are to be investigated further for endocrine disruptive effects. See following link: http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf	☐	☐
Nanoparticles (from nanomaterials) The definition of a nanomaterial follows the European Commission's definition of nanomaterials from 18 October 2011, with the exception that the limit for the particle size distribution is reduced to 1%: "A natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate, where at least 1% of the particles have one or more external dimensions in the size range 1-100 nm."	☐	☐

If the answer is yes to any of the above questions, specify the following

Name of the substance: _____

_____

Concentration (percentage of weight): _____

_____

Purpose of adding the substance: _____

_____

Location and date:	Company name:
Responsible (signature):	
Name of contact person:	Phone number and email:

Appendix 3 Performance test: User reports (O13)

Information about the product

Full name of the product:	
Manufacturer:	
Area of application:	
Product type:	
Water-based degreasers (surfaces, metal/engine cleaning)	☐
CIP, component cleaning agents	☐
Pre-painting cleaners, façade cleaners	☐
Solvent-based products (Ready-to-use, RTU)	☐
Offshore	☐
Other (specify)	☐

User report of the product

The product is tested within the area of use of the product for a period of time that is representative of the frequency of use of the product.

Dosage (unit g/l in-use solution)	(g/l in-use-solution)
Dosage in accordance with the manufacturer's recommendation?	Yes ☐ No ☐
Test period	Start date: End date:
How many times has the product been tested in the stated test period?	

Performance of the product

The product is assessed visually after completion of test period (defined above). The products performance is considered to be:

Not satisfactory	☐
Satisfactory	☐
Very satisfactory	☐
Other comments to the assessment of the product:	

Information about the site of testing performance

Company:	
Address:	
Contact person:	Title:
Phone number:	Email:
Place and date:	Signature:

Appendix 4 Performance test (O14)

This document describes the framework for a laboratory test for industrial cleaning and degreasing agents. Other tests can be used if they are well described and documented and approved by Nordic Ecolabelling.

The purpose of the laboratory test is to show whether the test product is better or as good at cleaning / degreasing as a reference product * and better than water, and that the test product does harm the surfaces that it aims to make clean (plastic, metal, concrete).

** With reference product is meant a product that is already established on the market and has the same uses as the product to be tested.*

Industrial cleaning and degreasing agent must meet the requirements of effectiveness test according to the specifications in this appendix.

Laboratory Test
Product, reference product and water are to be tested with the same test method, temperature and soil type that are relevant for product.

The test shall be conducted by at least 5 parallels of the test product, reference product (established product on the market) and water.

The test should show that the test product is better or as good as the reference product and better than water

Reference Product
Test product and reference product shall be tested by the same method. Both products should be having the same function and uses. Reference product should be a product that is established on the market. Reference product must have the same uses as the product to be tested.

Dosage

The test shall be conducted at the lowest recommended dosage for normal soil. This applies to both test product and reference product.

Dirt

The dirt used should be relevant to the product's intended area of use.

Surfaces

The surfaces on which the products are tested must be relevant to the area of use in respect of which the product is marketed

Performing the test

The same number of repetitions shall be performed for the test product, reference product and water (at least 5 per product). Relevant contamination is applied to the test surface before test product, reference product and water is applied.

Evaluated according to specified duration according to option 1) or 2) specified under "Duration of the test."

Duration of the test

Duration of the test should be selected from one of the alternatives below:

1. Time stated by the manufacturer in relation to the dosage. After the time recommended by manufacturer the product's effectiveness is assessed.

or

2. The effect of the products is assessed on an ongoing basis (for instance after 1 min, 3 min, 5 min, 7 min and so on) and it should be recorded whether the test product is better or as good as the reference product during the whole test. When the test product or reference product exhibits a desired effect, the assessment and time (number of minutes) is recorded.

Assessment of product

After performing the test the effect of the test product should be assessed against the reference product and water. The assessment can be based on visual or instrumental (reflection/gravimetric) measurement.

If the test product proves not to be as good as the reference product after the scheduled assessment period (for example after x number of minutes), the product shall be considered to be "less good than the reference product" and thus not satisfactory.

If another evaluation method is more relevant for the product than continuous evaluation or assessment after a specific duration it may be used. It should be explained why the assessment method is more appropriate, and the method shall be described clearly.

Requirements for laboratory by efficiency test

The laboratory must meet the general requirements in accordance with standard EN ISO 17025 or be an officially GLP-approved analysis laboratory.

The applicant's analysis or measurement laboratory may be approved to conduct analyses and measurements if:

- The manufacturer has a quality system incorporating sampling and analyses, and which is certified in accordance with ISO 9001 or ISO 9002
- Test method for effectiveness test is included in the quality system.
- The samples must be de-identified for the test laboratory
- The ecolabelling organisation must have access to all data of the effectiveness test

Tables to be filled in connection with the laboratory test:

Information about the product

Full name of the product:	
Manufacturer:	
Area of application:	
Product type:	
Water-based degreasers (surfaces, metal/engine cleaning)	☐
CIP, component cleaning agents	☐
Pre-painting cleaners, façade cleaners	☐
Solvent-based products (Ready-to-use, RTU)	☐
Offshore	☐
Other (specify)	☐

Test conditions

Description of the test conditions used during testing of the efficacy of the product.

Test method:	❒ As described in this appendix. ❒ Other method. Specify:
Performing the test:	Describe how the test is performed:
Reference product:	
- Name:	
- Area of use:	
- Lowest recommended use:	
- Time:	❒ Recommended by producer: _____ minutes ❒ Ongoing
Test product:	
- Area of use:	
- Lowest recommended use:	
- Time:	❒ Recommended by producer: _____ minutes ❒ Ongoing
Soil (description):	
Test surface:	

Test results - assessment of project effectiveness

Description of how the product's effectiveness is evaluated.

Assessment method:	❒ As described in this appendix. ❒ Other method. Specify:

	Motivation for using other method than the one described in this appendix:
Time:	Product was assessed after: ❒ _____ minutes (time recommended by manufacturer) ❒ _____ minutes (number of minutes when test or reference product exhibit the desired effect).

Is the test product considered to be more effective than water at all reviews?	❒ Yes ❒ No

Assessment - visual:					
Conducted tests (parallels):	1	2	3	4	5
Not satisfactory (not as good as the reference product)					
Satisfactory (as good as the reference product)					
Very satisfactory (better than the reference product)					
Other comments to the assessment of the product:					

Assessment according to another method (specified above):
Assessment of the test product:
❒ Not satisfactory (not as good as the reference product)
❒ Satisfactory (as good as the reference product)
❒ Very satisfactory (better than the reference product)
❒ Other assessment – specify:

Information on the test laboratory

Company:	
Address:	
Contact person:	Title:
Phone number:	Email:
Place and date:	Signature:

Appendix 5 Analysis and test laboratories

Requirements concerning the analysis laboratory

The following requirements apply tests regarding eco-toxicological effects and Challenge-tests.

The analysis laboratory must meet the general requirements in accordance with standard EN ISO 17025 or be an officially GLP-approved analysis laboratory.

The applicant's analysis or measurement laboratory may be approved to conduct analyses and measurements, including Challenge test, if:

- the authorities monitor the sampling and analysis process, or
- the manufacturer has a quality system incorporating sampling and analyses, and which is certified in accordance with ISO 9001 or ISO 9002, or
- the manufacturer can show that the manufacturer's own tests are in agreement with those of an impartial test institution, as certified through a parallel test, and that the manufacturer takes samples in accordance with a prescribed sampling plan.

The manufacturer's test laboratory can be approved to conduct testing to document effectiveness if the following additional requirements are met:

- The manufacturer has a quality system incorporating sampling and analyses, and which is certified in accordance with ISO 9001 or ISO 9002
- Test method for effectiveness test is included in the quality system.
- The samples must be de-identified for the test laboratory
- The ecolabelling organisation must have access to all data of the effectiveness test

Ecotoxicology testmethods

International test methods (OECD Guidelines for Testing of Chemicals, ISBN 92-64-1222144) or other equivalent methods shall be used for documentation. If equivalent methods are used, these must be evaluated by an independent body to ensure that the results are equal. The relevant test methods to be used are given below. The methods available at: http://puck.sourceoecd.org/vl=31948566/cl=20/nw=1/rpsv/periodical/p15_about.htm?jnlissn=1607310x

Acute/chronic aquatic toxicity

Use test methods 201, 202 and 203 in the OECD guidelines for testing of chemicals, or equivalent method to test acute aquatic toxicity.

Use test methods 210, 211, 215 and 229 in the OECD guidelines for testing of chemicals, or equivalent method to test chronic aquatic toxicity.

Bioaccumulation

To gain an understanding of a substance's ability to accumulate in organisms bioconcentration factor (BCF) for fish or distribution factor octanol / water (POW or KOW) is determined.

These methods should be used: OECD 107, 117 or 305, and classification shall take place according to the following:

Classification	OECD 107 or 117	OECD 305
Not bioackumulating	logKow < 4,0	BCF < 500
Bioackumulating	logKow > 4,0	BCF ≥ 500

OECD test method 107 cannot be used for surfactant since they have both grease and water soluble properties. For these substances it must be displayed with a high degree of certainty that they and their degradation products do not pose any risk to aquatic organisms in the longer term.
Computer models (such as BioWIN) accepted, but if the results of the model calculations are near the limits or if Ecolabelling organization has contradictory data, additional documentation is required.
If there is information on both BCF and logKow, the value for the maximum measured BCF used.

Aerobic degradation

Use test method 301 (A to F) or 310 in the OECD guidelines for testing of chemicals (or equivalent method to test aerobic degradation.

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

Anaerobic degradation

Use ISO 11734, OECD 311, ECOTOC no. 28 (June 1988) or equivalent test method to determine anaerobic degradation. The minimum requirement to be considered as anaerobically degradable is > 60% mineralization after maximum 56 days (ECETOC nr 28, juni 1988), 60 days (ISO 11734) and 60 days (OECD 311).

The following exceptions from anaerobic degradation for non-surfactants that are not on the DID-list can be made for substances that are aerobically degradable and not toxic to the aquatic environment (LC50/EC50/IC50>10 mg/l) and if one of the following is fulfilled:

- Ready biodegradability and low adsorption (A < 25%), or
- Ready biodegradability and high desorption (D > 75%), or
- Ready biodegradability and not bioaccumulating.

Adsorption/desorption can be tested according to OECD guidelines 106 or ISO CD 18749 ”Water quality - Adsorption of substances on activated sludge - Batch test using specific analytical methods”.

Inherent biodegradability

Test method 302 (A to C) in the OECD Guidelines for the Testing of Chemicals (ISBN 92641222144) should be used to test inherent biodegradability. For a constituent substance to be considered inherently biodegradable a mineralisation of >70% after 28 days is required (>70% BOD/DOC/COD reduction).

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

Potential for endocrine disruption

A potential endocrine disrupter is an exogenous substance or mixture that alters function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub)populations.

Nordic Ecolabelling includes all substances that the European Commission considers potential endocrine disrupters (classes 1 and 2). 'Category 1 - evidence of endocrine disrupting activity in at least one species using intact animals'; 'Category 2 - at least some in vitro evidence of biological activity related to endocrine disruption'). In case the European Commission lists are amended, the latest updated reports shall apply. The latest reports are available to be viewed at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final_report_2007.pdf and the Access database, in which all evaluated substances are listed, is available for download at http://ec.europa.eu/environment/chemicals/endocrine/strategy/index_en.htm.

Challenge test

Challenge-test is a term for mass tests to determine the right/necessary amount of preservatives in products. This is done by adding various concentrations (2%, 1 %, 0.5 % and 0.25 %) preservatives to a series of samples and a sample with no added preservative. The samples are added a mixture of bacterial blood, yeasts and moulds, and are tested for growth of these organisms. The period for which the test is in progress may vary dependent on what you want to test and at which test conditions the test is carried out by, that the organisms being tested on (depends on how the product is used in the final stages), pH, temperature and so on (such parameters are not specified in the Challenge-test).

The lowest concentration of preservatives where there is no growth is the optimal amount of preservatives for the product. Different manufacturers and distributors of preservatives have different Challenges tests/methods that they use to decide the right content of preservatives, such as Koko Test (Test Method SM 021), USP Challenge Test (US Pharmacopoeia) and CTFA Challenge Test (Cosmetics Toiletries and Fragrance Association).

DID-list

The DID-list is common to the EU Ecolabel and Nordic Ecolabelling. The list has been established in collaboration with stakeholders from industry, consumer organisations and environmental bodies. The list contains information on the toxicity and degradability of substances that may be used in chemical products. The DID-list does not show which substances can be used in ecolabelled products.

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

The DID-list is available from the ecolabelling body in each country and their websites.

Valid for these criteria is the DID-list dated January 2014.

Critical dilution volume (CDV)

The critical dilution volume (CDV) is calculated in accordance with the following formula:

CDV= 1000 * Σdose (i) * DF(i)/TF(i)

Dosage (i) = Dosage of component $_i$, expressed in g/litre in-use-solution

DF(i) = Degradation factor for component $_i$.

TF(i) = Toxicity factor for component $_i$.

Method for determining parameter values for components not on the DID List
The specified parameter values must be used for all components on the 'Detergent Ingredients Database' (version 30 June 2004, Part A) chemicals list, i.e. the DID List and reference to the list should be specified. However, an exception is made for colouring agents, where additional test results are approved (see the footnote in Part A). If the substance is not on the DID List the parameters are to be calculated based on section B of the DID List, and documentation of the background to the calculations is to be submitted with the application.

The following method must be used for components not on the DID List:

Toxicity in aquatic environment
In Nordic Ecolabelling, CDV is calculated on the basis of the acute or chronic toxicity factor and the safety factor.

Acute toxicity factor (TF_{acute})

- Calculate the median value for each trophic level (fish, crustaceans or algae) on the basis of validated test results concerning acute toxicity. If there are a number of test results for the same species at a certain trophic level, the median value for the species must be calculated first. These median values are then used to calculate the median level for the trophic level.
- The acute toxicity factor (TF_{acute}) is the lowest calculated acute median value for the trophic levels divided by the acute safety factor (SF_{acute}).
- TF_{acute} must be used to calculate the critical dilution volume.

Chronic toxicitity factor ($TF_{chronic}$) Calculate the median value for each trophic level (fish, crustaceans or algae) on the basis of validated test results concerning chronic toxicity. If there are a number of test results for the same species at a certain trophic level, the median value for the species must be calculated first. These median values are then used to calculate the median level for the trophic level.

The chronic toxicity factor ($TF_{chronic}$) is the lowest calculated chronic median value for the trophic levels divided by acute safety factor SF_{acute}.

$TF_{chronic}$ is used to calculate the critical dilution volume.

Safety factor
The safety factor (SF_{acute}) depends on how many trophic levels are tested and whether or not there are test results for chronic toxicity. The acute safety factor (SF_{acute}) and the acute toxicity factor (TF_{acute}) are determined as follows:

Data	Safety factor (SF_{acute})	Toxicity factor (TF_{acute})
A short-term LC50 (or LE50)	10 000	Toxicity / 10 000
Two short-term LC50 (or LE50) from species representing two trophic levels (fish and/or crustaceans and/or algae)	5 000	Toxicity / 5 000
At least one short-term LC50 (or LE50) from each of the trophic levels	1 000	Toxicity / 1 000
One long-term NOEC (fish or crustaceans)	100	Toxicity / 100
Two long-term NOEC from species representing two trophic levels (fish and/or crustaceans and/or algae)	50	Toxicity / 50
Long-term NOEC from at least three species (fish, crustaceans and algae) representing three trophic levels	10	10

Degradation factor
The degradation factor is defined as follows:

Degradation factor (DF)

	DF
Readily biodegradable (*)	0.05
Readily biodegradable (**)	0.15
Potentially degradable	0.5
Persistent	1.0

(*) All surface-active substances or other components that consist of a series of homologues and that meet the requirement for ready degradation in the test must be included in this class regardless of whether they meet the criterion of a 10-day window.

(**) The criterion of a 10-day window is not met.

In the case of inorganic components, DF is determined on the basis of the observed degradation rate. If the component is degraded within 5 days: DF = 0.05; within 15 days: DF = 0.15; or within 50 days: DF = 0.5.

- For every substance in the product, it must be clearly apparent which substance from the list has been used.
- Presentation of the calculations of the CDV formula for every ingredient and CDV for complete product.

For substances not on the DID List, it must be clearly apparent which values are used in the CDV formula.

Aerobic non-biodegradable substances, aNBO
Aerobic non-biodegradable substances, aNBO, are organic substances that do not meet the criteria for ready degradability. The aNBO value is expressed as the total quantity of non-readily degradable substances in g/litre in-use-solution.

In the chemicals list (the DID List), the substances are divided into the following classes:

Category	Code
Readily biodegradable	R
Potentially biodegradable, but not readily biodegradable	I
Persistent	P
Not tested for biodegradability under aerobic conditions.	O

Organic substances that are classified as I and P or O are regarded as aNBO, unless the result of degradation tests for untested substances is presented.

The limit values for whether a substance is to be classified as readily or potentially degradable are shown below:

Classified	***Test method**	**BOD or CO_2**	**COD**
Readily degradable	301 A-F	≥ 60%	≥ 70%
Potentially degradable	302 A-C		≥ 70%

BOD (Biological oxygen demand)

COD (Chemical oxygen demand)

Anaerobic non-biodegradable substances, anNBO

Anaerobic non-biodegradable substances, anNBO, are organic compounds that are not degraded under oxygen-deficient conditions. The anNBO value is expressed as the total quantity of anaerobic non-degradable organics in g/litre in-use-solution.

In the DID List, substances are divided into the following classes:

Category	**Code**
Non-biodegradable under anaerobic conditions, i.e. tested and found not to be degradable	N
Biodegradable under anaerobic conditions, i.e. tested and found to be degradable, or degradability established via analogy comparisons.	Y
Not tested for biodegradability under anaerobic conditions	O

All organic substances with a classification of N and O on the DID list are regarded as anNBO unless otherwise shown by the results of anaerobic degradation tests for untested substances.

If the substance is not on the DID List, anaerobic degradation of the substance must be documented. All substances that are not anaerobically degradable in accordance with ISO 11734, ECETOC no. 28 June 1988 or some other scientifically accepted method are classed as anNBO. The requirement is a minimum of 60% degradability under anaerobic conditions.

In the absence of documentation in accordance with the above requirements, a substance other than a surfactant may be exempted from the requirement for anaerobic degradability if one of the following three alternatives is fulfilled:

Readily degradable and has low adsorption (A < 25%) or

Readily degradable and has high desorption (D > 75%) or

Readily degradable and non-bioaccumulating.

Testing for adsorption/desorption may be conducted in accordance with OECD Guidelines no. 106.