Nordic Ecolabelling of

Dishwasher detergents and Rinsing agents



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Draft for consultation

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

Addresses

In 1989, the Nordic Council of Ministers decided to introduce a voluntary official ecolabel, the Swan. 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
Danish Standards Foundation
Kollegievej 6
DK-2920
CHARLOTTENLUND
Tel: +45 72 300 450
Fax: +45 72 300 451
info@ecolabel.dk
www.ecolabel.dk

Norway
Ecolabelling Norway
Tordenskiolds gate 6 B
NO-0160 OSLO
Tel: +47 24 14 46 00
Fax: +47 24 14 46 01
info@svanemerket.no
www.svanemerket.no

Finland
Ecolabelling Finland
Box 489
FI-00101 HELSINKI
Tel +358 424 2811
Fax +358 424 281 299
joutsen@motiva.fi
www.ecolabel.fi

Sweden
Ecolabelling Sweden
SE-118 80 STOCKHOLM
Tel: +46 8 55 55 24 00
Fax: +46 8 55 55 24 01
svanen@ecolabel.se
www.ecolabel.se

Iceland
Ecolabelling Iceland
Umhverfisstofnun
Suðurlandsbraut 24
IS-108 REYKJAVIK
Tel: +354 591 20 00
Fax: +354 591 20 20
svanurinn@ust.is
www.svanurinn.is

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It may be quoted from provided that Nordic Ecolabelling is stated as the source.

What is a Nordic Ecolabelled Dishwasher detergent?

Nordic Ecolabelled dishwasher detergents and/or Nordic Ecolabelled rinsing agents are amongst the least environmentally harmful dishwasher detergents / rinsing agents. The substances they contain have the lowest impact on the environment possible. There are strict requirements on the ingoing substances regarding environment and health. Amongst the environmental requirements there are strict requirements regarding environmentally harmful substances and substances that are not readily biodegradable.

Account is also taken of health factors; for example the content of fragrance, preservatives and other allergenic substances is restricted.

The dishwasher detergents / rinsing agents are discharged into water after use. Properties such as biodegradability, bioaccumulation and toxicity to aquatic organisms are accordingly key considerations with regard to all constituent components.

The effect of the dishwasher detergents / rinsing agents on the environment will also depend on the way in which they are used. Accordingly, there are requirements on dosing instructions and performance testing at low temperature to show that the product is performing well at the recommended dosage. Furthermore, packaging requirements are imposed in order to reduce the quantity of packaging used and to optimize the fill ratio of the packaging.

Nordic Ecolabelled cleaning products:

- Contain low levels of substances that are harmful to health and the environment
- Clean effectively even at low temperatures
- Have optimised and well-filled packaging

Why choose the Nordic Ecolabel?

- Environmental issues are complex. It can take a long time and extensive resources to gain an understanding of a specific area. Nordic Ecolabelling can be seen as aid in this work.
- The Nordic Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- Reducing environmental impact often creates scope for lowering costs, such as by cutting the consumption of energy and reducing amounts of packaging and waste.
- The Nordic 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 Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Ecolabel?

The document relates to dishwasher detergents and rinsing agents for household machines. The rinsing agent may be integrated into the product or it may be a separate product.

Dishwasher detergents for professional use cannot be labelled under these criteria. See the requirements for dishwasher detergents for professional use instead. Cleaning agents for dishwashers cannot be labelled under these criteria.

How to apply

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

Icons in the text

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

🕮 Enclose procedure in environmental and quality management system

Application

Applications are made to the national ecolabelling organisation and the application is valid for 12 months. Applications may be processed by another ecolabelling organisation according to agreement between the organisations. The applicant is notified of this. Companies located outside the Nordic countries make applications to the national ecolabelling organisation of the primary market.

The application must consist of a completed application form together with all of the documentation required to demonstrate compliance with the requirements specified in the criteria document (this is specified for each requirement). The application form must specify in which Nordic countries the products in question are to be sold and the estimated turnover from the products in each country.

Further information and assistance may be available. Visit the relevant national website for information.

Sales in the Nordic region

Once granted, a licence is valid throughout the Nordic region. The licence document specifies in which Nordic countries the products are sold according to the information provided on the application. The products are published on Nordic Ecolabelling's website(s). The licensee undertakes to inform Nordic Ecolabelling of any changes as to where the product is sold. If the product is to be sold in other Nordic countries than those initially specified in the application, the licensee must provide written notification

of this and submit any extra documentation required to Nordic Ecolabelling in the country that issued the license.

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.

Costs

An application fee is charged to companies applying for a licence. There is an additional annual fee based on the turnover of the Nordic Ecolabelled XX.

Enquiries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 2 for addresses.

What are the requirements of the Nordic Ecolabelling?

To be awarded a Nordic Ecolabel licence, all requirements must be fulfilled.

1 Obligatory requirements on products and constituent substances

The term constituent substance refers to all substances in the product, including additives in the ingredients (such as preservatives and stabilisers) but does not include impurities from primary production. Impurity refers to residues from primary production which may be found in the finished product at concentrations below 0.0100% (100 ppm), but not substances that have been added to a raw material actively and for a particular purpose. Impurities of over 1.0% concentration in the raw material are, however, regarded as constituent substances. Substances known to be liberated by the constituent substances are also themselves considered to be constituent substances.

The criteria for dishwasher detergents allow licence applications for dishwasher detergent and/or rinsing agent. In applications for rinsing agents, an amount of 3 ml is to be used for calculations.

Dishwasher detergents in which rinse aid and/or salt are included are considered to be multifunctional products. Dishwasher detergents where salt and/or rinse aid is added as a separate product are considered to be singel function products.

Foil that is not removed before use of the product is counted as part of the formulation/ingredients.

1.1 General requirements

O1 Formulation/composition

The applicant must provide detailed information on the composition of the dishwasher detergent, and enclose a safety data sheet for each ingredient. The information on the composition must include:

- Trade name
- Chemical name
- Constituent amounts of each ingredient (also applies to any fragrances in the packaging)
- CAS number
- DID number for each ingredient
- The function of each ingredient must be stated
- Recommended dose in grams
- Description of the product type (multifunction or single function product or rinsing agent) and product form (powder, liquid or tablet).

The DID number is the number an ingredient has on the DID list, which is to be used when calculating chemical requirements. The DID list can be obtained from Nordic Ecolabelling, see addresses on page 2. See Appendix 2 for more details on the DID list.

✉ A complete declaration of the composition of the product with information as set out in the requirement.

✉ Safety data sheets for each ingredient in line with prevailing European legislation.

O2 Classification of the product

Products must not have a classification as listed in Table 1 below, following the regulations in the Nordic countries or the EU's Dangerous Substances Directive 67/548/EEC as amended and/or CLP Regulation (EC) No 1272/2008 as amended. For a transitional period, i.e. until the products are classified under the CLP Regulation (no later than 1 June 2015), classification under the Dangerous Substances Directive or the CLP Regulation may be used. After the transitional period, only classification under the CLP Regulation applies (see Table 1 below):

Table 1. Classification of the product

Classification	**Hazard symbols and risk phrases/Hazard class, hazard category and hazard phrase**	
	CLP Regulation 1272/2008	**EU's Dangerous Substances Directive 67/548/EEC**
Toxic to the environment	Toxic to aquatic organisms: H400 – acute hazard, category: acute 1 H410 – risk of damaging long-term effects, category: chronic 1 H411 – risk of damaging long-term effects, category: chronic 2 H412 – risk of damaging long-term effects, category: chronic 3 H413 – risk of damaging long-term effects, category: chronic 4	N with R50, R50/53 or R51/53. R52, R53 or R52/53 without N
Very toxic	H300 – Acute oral toxicity, hazard category 1 and 2 H310 – Acute dermal toxicity, hazard category 1 and 2 H330 – Acute inhalation toxicity, hazard category 1 and 2 H370 – Specific target organ toxicity – single exposure, hazard category 1	Tx (T+ in Norway) with R26, R27, R28 and/or R39
Toxic	H301 – Acute oral toxicity, hazard category 3 H311 – Acute dermal toxicity, hazard category 3 H330 – Acute inhalation toxicity, hazard category 2 H331 – Acute inhalation toxicity, hazard category 3 H372 – Specific target organ toxicity – repeated exposure, hazard category 1	T with R23, R24, R25, R39 and/or R48
Carcinogenic	H350 – Carcinogenic, hazard category 1A and 1B H351 – Carcinogenic, hazard category 2	Carc with R40, R45 and/or R49
Mutagenic	H340 – May cause genetic defects, hazard category 1A and 1B H341 – May cause genetic defects, hazard category 2	Mut with R46 and/or R68
Toxic for reproduction	H360 – Toxic for reproduction, hazard category 1A and 1B H361 – Toxic for reproduction, hazard category 2 H362 – Toxic for reproduction – effects on or through breastfeeding (supplementary category)	Repr with R60, R61, R62, R63 and/or R64
Harmful to health	H304 – Aspiration hazard, hazard category 1	Xn with R20, R21, R48, R65 and/or R68

	H312 – Acute dermal toxicity, hazard category 4 H332 – Acute inhalation toxicity, hazard category 4 H371 – Specific target organ toxicity – single exposure, hazard category 2 H373 – Specific target organ toxicity – repeated exposure, hazard category 2	
Skin or respiratory sensitisation	H317 – Skin sensitisation, hazard category 1/1A/1B H334 – Respiratory sensitisation, hazard category 1/1A/1B	Xi with R43 Xn with R42
Corrosive	H314 – Skin corrosion/irritation, hazard category 1A/1B/1C	C with R34 or R35

Note that responsibility for classification lies with whoever places the product on the market.

✉ Safety data sheet/product sheet in line with prevailing European legislation.

O3 Substances that are carcinogenic, mutagenic or toxic for reproduction (CMR)

Substances in the product or in the raw materials that make up the product must not be classified as shown in Table 2 below under applicable regulations in the Nordic countries. They must also not be classified as shown in Table 2 under CLP Regulation No 1272/2008 or the EU's Dangerous Substances Directive 67/548/EEC:

Table 2 Classification of constituent substances

Classification	**Hazard class, hazard category and hazard phrase**	**Hazard symbols and risk phrases**
	CLP Regulation 1272/2008	**EU's Dangerous Substances Directive 67/548/EEC**
Carcinogenic	H350 – Carcinogenic, hazard category 1A and 1B H351* – Carcinogenic, hazard category 2	Carc with R40, R45 and/or R49
Mutagenic	H340 – May cause genetic defects, hazard category 1A and 1B H341 – May cause genetic defects, hazard category 2	Mut with R46 and/or R68
Toxic for reproduction	H360 – Toxic for reproduction, hazard category 1A/1B H361 – Toxic for reproduction, hazard category 2 H362 – Toxic for reproduction – effects on or through breastfeeding (supplementary category)	Repr with R60, R61, R62, R63 and/or R64

** Complexing agents of the type MGDA and GLDA may, however, contain a maximum of 1.0% NTA in the raw material as long as the level in the end product is lower than 0.1%.*

✉ Duly completed and signed declaration that the requirement has been fulfilled, Appendices 3 and 4 may be used.

O4 Sensitising substances

The product must not contain substances that are classified as sensitising – H334 (R42) and/or H317 (R43). The following substances are exempted from the requirement:

- Enzymes
- Fragrances (see O10)

These exempted substances must, however, not occur at levels* that trigger the following warning on the end product's packaging: "Contains (name of sensitising substance). May cause an allergic reaction."

** When the CLP enters into force for products in June 2015, if a substance has the classification resp sens 1A, H334 or skin sens 1A, H317 and appears in the product at a concentration of at least 0.01% (100 ppm), the CLP requires this warning to be printed on the packaging. For categories 1 and 1B for both resp sens and skin sens, the trigger value for the warning is 0.1% (1000 ppm).*

✉ Duly completed and signed declaration from the manufacturer of the dishwashing detergent (Appendix 3), declaration from the raw material manufacturer/supplier (Appendix 4) and safety data sheets for each constituent substance (see O1) in accordance with European legislation.

O5 Enzymes

Enzymes must be liquid or in the form of non-dust producing granules.

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

O6 Environmentally harmful substances

This requirement applies to substances that are in the product or that are intentionally released during the use of the product. In fragrance mixtures, all the fragrance substances are to be included in the calculation of environmentally harmful substances.

Substances classified as environmentally harmful are limited as follows:

- Substances classified as H410 – Highly toxic to aquatic organisms with long-term effects (R50/53 – Highly toxic to aquatic organisms, and may cause damaging long-term effects in an aquatic environment) are not permitted.
- Substances classified as H411 (R51/53) and/or H412 (R52/53) are restricted under the following formula:
- Dose (g/wash) * $(10*_{conc}H411+_{conc}H412) \leq 0.10$ g/wash
- Or
- Dose (g/wash) * $(10*_{conc}R51/53+_{conc}R52/53) \leq 0.10$ g/wash

Surfactants classified as H412 are exempted from the requirement, on condition that they are readily degradable* and anaerobically degradable**.

** In accordance with the DID list. If the substance is not on the DID list, the substance is documented in line with test method no. 301 A-F or no. 310 in the OECD guidelines for testing chemicals or other equivalent test methods.*

*** In accordance with the DID list. If the DID list lacks the relevant data for surfactants, data may be taken from the safety data sheet on condition that the data is reliable and that the test methods are in agreement with Appendix 2. Section B of the DID list shows how to make the calculations of the various factors. It is also permitted to refer to analogous observations, as long as they are carried out by a competent third party, and refer to relevant data from literature that has been subjected to scientific scrutiny.*

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

✉ Duly completed and signed declaration that the requirement has been fulfilled (Appendices 3 and 4 may be used). Also attach a report on the total quantity of H411 (R51/53) and H412 (R50/53). If data is not available, the substance is assessed according to a worst case scenario.

1.2 Requirements for particular substances

O7 Quantity of phosphorus

The total level of phosphorus must not exceed the following:

Dishwasher detergents ≤ 0.20 g P/wash.

Rinsing agents ≤ 0.10 g P/wash

National legislation takes precedence over this requirement.

✉ To be made clear in the formulation plus a report on the total quantity of phosphorus.

O8 Substances that must not be included in the end product or exist as actively added substances in the ingredients

The following substances must not be included in the end product or exist as actively added substances in the ingredients:

- EDTA
- DTPA
- Reactive chlorine compounds
- Alkylphenol ethoxylates (APEO)
- Alkylphenol derivatives (APD)
- Nitro musks and polycyclic musk compounds
- 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. The list can be read in its entirety at http://ec.europa.eu/environment/endocrine/documents/final_report_2007.pdf (Appendix L, page 238 onwards)
- 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. See e.g. http://esis.jrc.ec.europa.eu/index.php?PGM=pbt
- Substances on the Candidate List*.

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

✉ Duly completed and signed declaration that the requirement has been fulfilled (Appendices 3 and 4 may be used).

1.3 Fragrances, colourants and preservatives

O9 Fragrances

- The constituent substances added to the end product as a fragrance must be produced and/or handled in line with the guidelines of the International Fragrance Association (IFRA). The manufacturer (of the fragrance and the dishwasher detergent) must comply with the stated requirements in the IFRA standard concerning prohibition, restricted use and specified purity criteria for materials.
- The fragrances (127 substances) included in the "SCCS Opinion on Fragrance allergens in cosmetic products" must not be included in the product at levels > 100 ppm (>0.010%) per substance.
- The fragrances classified as H317 (R43) and/or H334 (R42) must not be included in the product at levels > 100 ppm (>0.010%) per substance.
- Fragrances that are constituent substances of the packaging must comply with the following:

  - The fragrances used to fragrance the packaging must not contain CMR substances.

  - The fragrance in the packaging must be produced and/or handled in line with the guidelines of the International Fragrance Association (IFRA). The manufacturer (of the fragrance and the dishwasher detergent) must comply with the stated requirements in the IFRA standard concerning prohibition, restricted use and specified purity criteria for materials.

** The 127 fragrances are listed in Appendix 6*

☒ Duly completed and signed declaration from the dishwasher detergent /rinsing agent manufacturer and the fragrance manufacturer showing that the fragrance has been handled and/or manufactured in line with IFRA's guidelines. Appendices 3 and 4 can be used.

☒ Duly completed and signed declaration from the fragrance manufacturer on the content of the relevant fragrance substances in the fragrance (e.g. analysis certificate for the 127 allergens) plus information on substances classified as H334 and/or H317. Appendix 4 or equivalent documentation can be used.

☒ Calculation of the quantity of the 127 allergens (SCCS) and/or the substances classified as H317 (R43) and/or H334 (R42) in the end product.

☒ Duly completed and signed declaration that the fragrances used in the packaging do not contain CMR substances, and have been handled in line with IFRA's guidelines, covering questions O3 and O9 in appendix 4.

O10 Approved colourants

All organic colourants that appear in the product as an ingredient or in a raw material must meet the following requirement:

The colourant must be approved for use in food or not be bioaccumulative, having a logKow < 4.0 or a BCF < 500.

☒ Duly completed and signed declaration that the requirement has been fulfilled (Appendices 3 and 4 may be used).

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

O11 Preservatives

Preservatives that are used in the end product or one of the constituent substances must not be bioaccumulative. Preservatives are judged not to be bioaccumulative if BCF < 500 or logKow < 4. If both values are available, the values for the highest measured BCF are to be used.

✉ Documentation of BCF or logKow (e.g. safety data sheet, see O1).

1.4 Degradability and CDV

O12 Surfactants

- All surfactants must be readily degradable (aerobically).
- All surfactants must be anaerobically degradable.

✉ Reference to the DID list dated 2007. If the DID list lacks the relevant data for surfactants, data may be taken from the safety data sheet on condition that the data is reliable and that the test methods are in agreement with Appendix 2. Section B of the DID list shows how to make the calculations of the various factors. It is also permitted to refer to analogous observations, as long as they are carried out by a competent third party, and refer to relevant data from literature that has been subjected to scientific scrutiny.

O13 Anaerobic degradability

The content of organic non-anaerobically degradable substances in the dishwasher detergent (multifunction and singefunction products) and rinsing agent must not exceed:

Dishwasher detergent ≤ 1.2 g/wash

Rinsing agent ≤ 0.5 g/wash

The calculation for rinsing agent uses a dose of 3 ml.

Iminodisuccinate (DID 148) and cumene sulphonates (DID 139) can be omitted from the calculation of anDEG.

✉ Documentation referring in the first instance to the DID list dated January 2007. For substances not covered by the list, other documentation such as test reports or copies of references in literature may be used. For test methods, see Appendix 2.

O14 CDV (Critical Dilution Volume)

The critical dilution volume (CDV) is to be calculated for all the chemicals included in the dishwasher detergent and/or rinsing agent. CDV is a theoretical value that takes account of each substance's toxicity and degradability in the environment.

The critical dilution volume, $CDV_{chronic}$, must not exceed the following:

Table 3. CDV limits

	$CDV_{chronic}$
Dishwasher detergents	35,000 litres/wash

(multifunction)	
Dishwasher detergents (single function)	25,000 litres/wash
Rinsing agents	10,000 litres/wash

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

where

$dose_i$ = dose of component i, expressed in g/wash

DF_i = degradation factor for substance i

$TF_{chronic}$ = chronic toxicity factor

When calculating $CDV_{chronic}$ for rinsing agents, a dose of 3 ml is used.

✉ Calculations of $CDV_{chronic}$ for the dishwasher detergent and/or rinsing agent showing that the requirement has been fulfilled. Documentation of each substance shall refer to the DID list dated January 2007. Part B of the DID list is to be used for calculating substances not on the DID-list.

1.5 Dosing, packaging and consumer information

O15 Dosing

The maximum dose per wash must not exceed the following limit values in Table 4.

Table 4. Limit values for dosing

Dishwasher detergents	**dose g/wash**
Singlefunction products	18
Multifunctional products	20

Rinsing agent is exempted from this requirement.

✉ Must be specified in the formulation (in line with O1).

O16 Dosing instructions

The recommended dose is only to be given for soft water (0-6 dH), and the stated dose is to be the same as that used in the performance test.

For hard water a recommendation is to be given to use water softener in the dishwasher. Exceptions:

- If multifunction products meet the performance requirement without added salt in the machine, the recommendation does not need to be given.
- The text on water softener is not required in Norway.
- The requirement does not apply to rinsing agents.

✉ Sample label.

O17 Information on phosphates

If the product contains phosphates, the product must display the following or equivalent text:

"Products that contain phosphates should only be used by households that are connected to mains drainage."

This requirement does not apply to sales in Norway, which has its own rules on labelling products containing phosphorus.

✉ Sample label.

O18 WUR (weight-utility ratio)

The product's weight-utility ratio (WUR) must not exceed

Table 5. Limit values for WUR

	WUR
Dishwasher detergents (multifunctional and singlefunctional)	2.5 g/wash
Rinsing agents	1.5 g/wash*

* Rinsing agent is calculated at a dose of 3 ml.

To calculate the product's weight-utility ratio (WUR) see Appendix 2.

✉ Calculation of WUR for the product.

✉ Declaration of how much recycled material the packaging contains.

O19 Fill ratio

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

Fill ratio ≥ 22 doses/litre

Rinsing agent is exempted from this requirement.

✉ Calculation of the fill ratio.

O20 Plastic packaging

PVC and other chlorinated plastics must not be used for packaging.

Plastic packaging must be marked with the polymer type and corresponding symbol according to DIN 6120, section 2, or equivalent.

✉ Duly completed and signed declaration that the requirement is fulfilled. Appendix 3 can be used.

O21 Take-back system

National regulations, legislation and/or agreements within the sector regarding the recycling systems for products and packaging (such as REPA in Sweden, PYR in Finland, Grøn Punkt in Norway) shall be met in the Nordic countries in which the company markets its dishwasher detergent.

✉ Copy of documents from the applicant regarding affiliation to existing recycling/processing agreements plus Appendix 3 or an equivalent declaration for all Nordic countries where the product will be sold.

2 Performance

O22 Dishwasher detergent performance

- At the recommended dose, the dishwasher detergent must perform as well as or better than the reference detergent (IEC-D) at 50˚C in all four soil categories (bleachable, burnt-on, amylase-specific, protease-specific).
- Cleaning performance is to be tested in accordance with the standard test for dishwasher detergents developed by IKW (Association of German Detergent Manufactures e V /Industrieverband Körperpflege und Waschmittel e.V.), with the following amendments:

  - Wash temperature 50˚C for the test product and 55˚C for the reference
  - Water hardness 6 dH
  - Reference detergent IEC-D is to be used at a dose of 20 g
  - Reference rinsing agent (formula III)* at dose setting of between 2 and 3.
- The results for the rinsing agent in combination with the reference detergent (IEC-D) must be as good as or better than the results for the reference rinsing agent* in combination with the reference detergent (IEC-D) when it comes to avoiding watermarks and food residues on the dishwasher load. The test is to be conducted in the same way as for dishwasher detergents.

** The reference rinsing agent is "formula III" as specified in Appendix D of the standard EN 50242:2008.*

- Other claims concerning the product's performance must also be tested and proven (short programmes, lower temperatures, specific stains and so on).

✉ Complete test report (results are to be reported in line with Appendix 5) including test results, conclusions and a description of the test.

✉ Test proving any functional claims made on the packaging.

3 Quality and regulatory requirements

If the producer'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.

O23 Laws and regulations

The licensee must guarantee adherence to applicable safety regulations, working environment legislation, environmental legislation and conditions/concessions specific to the operations at all sites where the Nordic Ecolabelled dishwasher detergent is manufactured.

✉ Duly signed application form.

O24 Licence administrators

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

🕮 Organisational chart showing the responsible contacts.

O25 Documentation

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

🔑 On-site inspection

O26 Changes and nonconformities

Written notice must be given to Nordic Ecolabelling of planned product and marketing changes and unforeseen nonconformities that have a bearing on Nordic Ecolabelling requirements.

🕮 Procedures detailing how product and marketing changes and unforeseen nonconformities are handled.

O27 Traceability

The licensee must have a traceability system for the production of the Nordic Ecolabelled dishwasher detergent/rinsing agent.

✉ Description of/procedures for fulfilment of the requirement.

O28 Marketing

Marketing of Nordic Ecolabelled dishwasher detergent must comply with the "Regulations for the Nordic Ecolabelling of Products" dated 22 June 2011 or later versions.

✉ Duly completed Appendix 1.

Marketing

The Nordic Ecolabel is a very well-known and well-reputed trademark in the Nordic region. Nordic Ecolabelled products and services may be marketed using the Nordic Ecolabel so long as the associated licence is valid.

The label must be positioned so that there is no doubt as to what the label refers and so that it is clear that the dishwasher detergent or the rinsing agent is ecolabelled.

More information on marketing can be found in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

Design of the Nordic Ecolabel

Design of the Nordic Ecolabel:



Each licence has a unique six-figured licence number that must be displayed along with the label.

More information on the design of the label can be found in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

Follow-up inspections

Nordic Ecolabelling may decide to check whether the dishwasher detergent / the rinsing agent fulfils Nordic Ecolabel 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 dishwasher detergent /rinsing agent does not meet the requirements.

Random samples may also be taken in-store and analysed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licensee.

How long is a licence valid?

Nordic Ecolabelling adopted the criteria for XX on DAY MONTH YEAR. The criteria are valid until DAY MONTH YEAR.

The 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.

New criteria

- Assess the possibility of setting requirements for renewable raw materials.
- Assess test methods at even lower washing temperatures.

- Assess the possibility of prohibiting phosphorus.
- Consider further tightening the requirements concerning fill ratio and WUR

Appendix 1 Marketing of Nordic Ecolabelled Dishwasher detergent / rinsing agent

We hereby certify that we are well acquainted with the regulations governing the use of the Nordic Ecolabel, as detailed in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions. We agree to follow these regulations when marketing the Nordic Ecolabelled dishwasher detergent / rinsing agent.

Further, we confirm that we are familiar with the criteria document regarding the Nordic Ecolabelling of dishwasher detergent / rinsing agent.

We undertake to advise those individuals within the company involved in marketing the Nordic Ecolabelled dishwasher detergent / rinsing agent of the criteria for the Nordic Ecolabelling of dishwasher detergent and rinsing agents and "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

Date and place	Company
Signature, contact person	
Clarification of name	Phone
Signature, marketing director	
Clarification of name	Phone

In case of a change in personnel, a new declaration must be submitted to Nordic Ecolabelling.

Appendix 2 Analysis and test laboratories

1. **Requirements on the analysis laboratory**

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

The applicant's analysis laboratory/test procedure may be approved for analysis and testing such as performance tests if:

- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 900.
- The testmethod is implemented in the quality system.
- Nordic Ecolabelling must have access to all raw data from the test.

2. CDV calculation

The critical dilution volume (CDV) is calculated as follows:

$CDV_{chronic} = 1000 * \Sigma dosage(i) * DF(i)/TF(i)$

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

DF(i) = Degradation factor for component i.

TFchronic(i) = Toxicity factor for component i.

DF(i) and TF(i) are specified in the DID-list. Reference shall be made to the DID-list. If the substance is listed on the DID-list, the parameters shall be calculated in accordance with the guidelines in section B of the DID-list. Documentation providing a background to the calculations shall be enclosed with the application.

3. Weight-utility ratio (WUR)

WUR is calculated for primary packaging only:

$WUR = \Sigma [(W_i + N_i)/(D_i * t_i)]$, where

W_i = weight (g) of packaging component (i) including label.

N_i = weight (g) of non-recycled (virgin) material in packaging component (i). If the proportion of recycled material in the packaging component is 0%, $N_i = W_i$.

D_i = number of standard recommended dosages that packaging (i) contains.

t_i = the number of times packaging component (i) is used for the same purpose through a return or refill system (r=1 if the packaging is not reused for the same purpose).

4. Acute 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.

5. Bioaccumulation

If nothing else is proven, the substance is classified as bioaccumulating if logKow ≥ 4.0 in accordance with OECD guidelines 107, 117 or equivalent. Such a substance can be tested on fish according to OECD test method 305 A-E. If the substance's biologic concentration factor (BCF) is ≥ 500, the substance is deemed bioaccumulating. If the substance has a BCF, this determines the substance's bioaccumulation potential.

6. Aerobic degradation

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

7. Anaerobic degradation

Use ISO 11734, 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 60 days (equivalent to >60 % ThOD/ThCO_2 or > 70 % DOC reduction).

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”.

8. 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 2007.

Appendix 3 Declaration from the manufacturer of the dishwasher detergents and rinsing agents

For use in applications for the Nordic Ecolabel licence for dishwasher detergents / rinsing agents. To be able to complete the following declaration requires completed declarations for all ingredients (Appendix 4 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: _____

The term constituent substance refers to all substances in the product, including additives in the ingredients (such as preservatives and stabilisers), with the exception of impurities from primary production. Impurities are defined as residual products from primary production that can be found in the product in concentrations below 0.010% (100 ppm). Substances that are actively added to an ingredient or product for a particular purpose are not considered to be impurities, irrespective of quantity. Impurities of over 1.0% concentration in the primary product are regarded as constituent substances. Substances/products known to be liberated by a constituent substance (e.g. formaldehyde and arylamine) are also themselves considered to be constituent substances.

	Yes	No
O3: Does the product contain any substances classified as carcinogenic, mutagenic and/or reproductive toxic with the following classifications or combinations of them?		
H350 – Carcinogenic, hazard category 1A and 1B H351 – Carcinogenic, hazard category 2 Carc with R40, R45 and/or R49		
H340 – May cause genetic defects, hazard category 1A and 1B H341 – May cause genetic defects, hazard category 2 Mut with R46 and/or R68		
H360 – Toxic for reproduction, hazard category 1A and 1B H361 – Toxic for reproduction, hazard category 2 H362 – Toxic for reproduction – effects on or through breastfeeding (supplementary category) Repr with R60, R61, R62, R63 and/or R64		
O4: Does the product contain any substances classified as sensitizing with the following classifications or combinations of them?		
H334 - Resp. Sens. 1/1A/1B (R42)		
H317 - Skin sens 1/1A/1B (R43)		

O6: Does the product contain any substances classified as toxic to the environment with the following classifications or combinations of them?		
H410 (R50/53) - Aquatic Chronic 1		
H411 (R51/53) - Aquatic Chronic 2		
H412 (R52/53) - Aquatic Chronic 3		
O8: Does the product contain any of the following substances?		
EDTA (ethylene diamin tetraacetate) and/or its salts		
DTPA (diethylene triamine pentaacetic acid, CAS 67-43-6)		
Reactive chloro-compounds		
Alkylphenolethoxylates (APEO))		
Alkylphenol derivatives (APD)		
Nitromusks and polycyclic musks		
Substances with potential for endocrine disruption of Category 1 or 2 in accordance with official EU lists. The EU report on endocrine disrupters can be read in full at http://ec.europa.eu/environment/endocrine/documents/final_report_2007.pdf (Appendix L, from page 238)		
Substances that have been evaluated in the EU to be PBT (Persistent, bioaccumulable and toxic) or vPvB (very persistent and very bioaccumulable) in accordance with Annex XIII of REACH. See for example http://esis.jrc.ec.europa.eu/index.php?PGM=pbt		
Substances on the candidate list http://echa.europa.eu/candidate-list-table		
O9: Does the product contain fragrance?		
If fragrance is included answer the following 3 questions:		
Is the fragrance handled in accordance with the guidelines of the International Fragrance Association (IFRA)?		
Does the fragrance contain fragrance substances specified in SCCS ”Opinion on fragrances allergernes in cosmetic products” over 127 allergenes?		
Does the fragrance contain fragrance substances classified as H334 (R42) and/or H317 (R43)?		
O10: Does the product contain colourants?		

If yes, specify logKow or BCF:		
O10: Does the product contain preservatives?		
If yes, specify logKow or BCF:		
Packaging O20-O21		
O20: Does the packaging (including caps, lids and labels) contain PVC or other halogenated plastics?		
O21: Are pertinent national regulations, legislation and/or agreements within the sector regarding recycling systems for products and packaging met in the Nordic countries in which the Nordic Ecolabelled product is/will be marketed? Finland (t.ex. PYR) Sverige (REPA) Norge (Grønt Punkt)		

If the answer is yes to any of the above questions (excluding O20 and O21), specify the name, CAS number, concentration and purpose of adding each substance in question:

_____

_____

_____

_____

_____

If the composition of the product is altered, a new declaration on the fulfilment of the requirements shall be sent to Nordic Ecolabelling.

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

Appendix 4 Declaration from the manufacturer of the raw material/ingredients

For use in applications for the Nordic Ecolabel licence for dishwasher detergents / rinsing agents.

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.

Rawmaterial name: _____

The term constituent substance refers to all substances in the product, including additives in the ingredients (such as preservatives and stabilisers), with the exception of impurities from primary production. Impurities are defined as residual products from primary production that can be found in the product in concentrations below 0.010% (100 ppm). Substances that are actively added to an ingredient or product for a particular purpose are not considered to be impurities, irrespective of quantity. Impurities of over 1.0% concentration in the primary product are regarded as constituent substances. Substances/products known to be liberated by a constituent substance (e.g. formaldehyde and arylamine) are also themselves considered to be constituent substances.

	Yes	No
O3: Does the ingredient contain any substances classified as carcinogenic, mutagenic and/or reproductive toxic with the following classifications or combinations of them?		
H350 – Carcinogenic, hazard category 1A and 1B H351 – Carcinogenic, hazard category 2 Carc with R40, R45 and/or R49		
H340 – May cause genetic defects, hazard category 1A and 1B H341 – May cause genetic defects, hazard category 2 Mut with R46 and/or R68		
H360 – Toxic for reproduction, hazard category 1A and 1B H361 – Toxic for reproduction, hazard category 2 H362 – Toxic for reproduction – effects on or through breastfeeding (supplementary category) Repr with R60, R61, R62, R63 and/or R64		
O4: Does the ingredient contain any substances classified as sensitizing with the following classifications or combinations of them?		
H334 - Resp. Sens. 1/1A/1B (R42)		
H317 - Skin sens 1/1A/1B (R43)		

O6: Does the ingredient contain any substances classified as toxic to the environment with the following classifications or combinations of them?		
H410 (R50/53) - Aquatic Chronic 1		
H411 (R51/53) - Aquatic Chronic 2		
H412 (R52/53) - Aquatic Chronic 3		
O8: Does the ingredient contain any of the following substances?		
EDTA (ethylene diamin tetraacetate) and/or its salts		
DTPA (diethylene triamine pentaacetic acid, CAS 67-43-6)		
Reactive chloro-compounds		
Alkylphenolethoxylates (APEO))		
Alkylphenol derivatives (APD)		
Nitromusks and polycyclic musks		
Substances with potential for endocrine disruption of Category 1 or 2 in accordance with official EU lists. The EU report on endocrine disrupters can be read in full at http://ec.europa.eu/environment/endocrine/documents/final_report_2007.pdf (Appendix L, from page 238)		
Substances that have been evaluated in the EU to be PBT (Persistent, bioaccumulable and toxic) or vPvB (very persistent and very bioaccumulable) in accordance with Annex XIII of REACH. See for example http://esis.jrc.ec.europa.eu/index.php?PGM=pbt		
Substances on the candidate list http://echa.europa.eu/candidate-list-table		
O9: Does the ingredient contain fragrance?		
If fragrance is included answer the following 3 questions:		
Is the fragrance handled in accordance with the guidelines of the International Fragrance Association (IFRA)?		
Does the fragrance contain fragrance substances specified in SCCS ”Opinion on fragrances allergernes in cosmetic products” over 127 allergenes?		
Does the fragrance contain fragrance substances classified as H334 (R42) and/or H317 (R43)?		
O10: Does the ingredient contain colourants?		
If yes, specify logKow or BCF:		

O10: Does the ingredient contain preservatives?		
If yes, specify logKow or BCF:		

If the answer is yes to any of the above questions specify the name, CAS number, concentration and purpose of adding each substance in question:

_____

_____

_____

_____

_____

If the composition of the product is altered, a new declaration on the fulfilment of the requirements shall be sent to Nordic Ecolabelling.

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

Appendix 5 Performance test

Cleaning performance is to be tested in accordance with the standard test for dishwasher detergents developed by IKW (Association of German Detergent Manufactures e V /Industrieverband Körperpflege und Waschmittel e.V.), with the following amendments:

- Wash temperature 50˚C for the test product and 55˚C for the reference
- Water hardness 6 ˚dH
- Reference detergent IEC-D is to be used at a dose of 20 g
- Reference rinsing agent formula "Formula III" in EN50242:2008, dosage setting between 2 and 3 (the same settings for the rinsing agent to be tested as for the reference formula)

Soil categories

All the following soil categories need to be included in the test, ie at least 4 soil types.

Table 5.1 Soil categories and soil types

Soil category	Soil type
Bleachable stains	Tea
Stubborn, burnt-on soil	Minced meat on glass dishes
	Milk in the microwave
Amylase specific soils	Starch mix
	Porridge
Protease-specific soils	Egg yolk
	Minced meat on porcelain plates
	Egg/milk

For rinsing agents it is required to show that the rinsing agent is more efficient at avoiding water spots on the dishes and to avoid a redeposit of soil on the dishes. This is evalueated visually against a test with the reference rinsing agent (Formula III).

Evaluation of the result:

The product is considered to be acceptable if the tested product performs as well as or better than the reference formula in alla 4 soil categories (bleachable stains, burnt-on soils, amylase specific soils and protease specific soils). That means one soil in each category has to be as good as or better than the reference. All stains in the testing instruction are to be included in the testreport. The product is not considered to be of acceptable performance if one or more soil categories are worse than the reference product.

See example below in tacle 5.2.

Table 5.2 Example of testresults

Soil category	Soil type	Reference	Product 1	Product 2
Bleachable stains	Tea	7	8	7

Stubborn, burnt-on soil	Minced meat on glass dishes	7	7	9
	Milk in the microwave	6	8	8
Amylase specific soils	Starch mix	85%	**80%**	90%
	Porridge	7	**6**	8
Protease-specific soils	Egg yolk	80%	82%	80%
	Minced meat on porcelain plates	8	8	7
	Egg/milk	79%	90%	86%

The test result shows that product 2 has an acceptable performanc but product 1 is not acceptable due to product 1 being worse than the reference on both amylase specific soils.

The rinsing agent is considered to be of acceptable performance when it in combination with the reference detergent (IEC-D) is performing as good as or better than the combination of reference rinsing agent (Formula III i EN 50242:2008) and reference detergent (IEC-D) when avoiding water spots/stains on the dishes and avoiding redeposit of soil on the dishes.

Test report

The test report must contain:

- Test temperature
- Water hardness
- Dosage
- Description of how the test was performed
- All testresults
- Conclusions and evaluation of the results
- Information concerning the testlaboratory according to the requirements in appendix 2, part 1

Appendix 6 127 allergene fragrance substances in SCCS "Opinion on fragrances allergenes in cosmetic products" (June 2012)

INCI name (or, if none exists, perfuming name according to CosIng)	**CAS number**
ACETYLCEDRENE	32388-55-9
AMYL CINNAMAL*	122-40-7
AMYL CINNAMYL ALCOHOL*	101-85-9
AMYL SALICYLATE	2050-08-0
trans-ANETHOLE	4180-23-8
ANISE ALCOHOL*	105-13-5
BENZALDEHYDE	100-52-7
BENZYL ALCOHOL*	100-51-6
BENZYL BENZOATE*	120-51-4
BENZYL CINNAMATE*	103-41-3
BENZYL SALICYLATE*	118-58-1
BUTYLPHENYL METHYLPROPIONAL *	80-54-6
CAMPHOR	76-22-2 / 464-49-3
beta-CARYOPHYLLENE (ox.)	87-44-5
CARVONE	99-49-0 / 6485-40-1 / 2244-16-8
CINNAMAL*	104-55-2
CINNAMYL ALCOHOL*	104-54-1
CITRAL*	5392-40-5
CITRONELLOL*	106-22-9 / 1117-61-9 / 7540-51-4
COUMARIN*	91-64-5
(DAMASCENONE) ROSE KETONE-4	23696-85-7
alpha-DAMASCONE (TMCHB)	43052-87-5 / 23726-94-5
cis-beta-DAMASCONE	23726-92-3
delta-DAMASCONE	57378-68-4
DIMETHYLBENZYL CARBINYL ACETATE (DMBCA)	151-05-3
EUGENOL*	97-53-0
FARNESOL*	4602-84-0
GERANIOL*	106-24-1

HEXADECANOLACTONE	109-29-5
HEXAMETHYLINDANOPYRAN	1222-05-5
HEXYL CINNAMAL*	101-86-0
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE (HICC)*	31906-04-4 / 51414-25-6
HYDROXYCITRONELLAL*	107-75-5
ISOEUGENOL*	97-54-1
alpha-ISOMETHYL IONONE*	127-51-5
(DL)-LIMONENE*	138-86-3
LINALOOL*	78-70-6
LINALYL ACETATE	115-95-7
MENTHOL	1490-04-6 / 89-78-1 / 2216-51-5
6-METHYL COUMARIN	92-48-8
METHYL 2-OCTYNOATE*	111-12-6
METHYL SALICYLATE	119-36-8
3-METHYL-5-(2,2,3-TRIMETHYL-3-CYCLOPENTENYL)PENT-4-EN-2-OL	67801-20-1
alpha-PINENE and beta-PINENE	80-56-8 and 127-91-3, resp.
PROPYLIDENE PHTHALIDE	17369-59-4
SALICYLALDEHYDE	90-02-8
alpha-SANTALOL and beta-SANTALOL	115-71-9 and 77-42-9, resp.
SCLAREOL	515-03-7
TERPINEOL (mixture of isomers)	8000-41-7
alpha-TERPINEOL	10482-56-1 / 98-55-5
Terpinolene	586-62-9
TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES	54464-57-2 / 54464-59-4 / 68155-66-8 / 68155-67-9
TRIMETHYL-BENZENEPROPANOL (Majantol)	103694-68-4
VANILLIN	121-33-5
CANANGA ODORATA and Ylang-ylang oil	83863-30-3; 8006-81-3
CEDRUS ATLANTICA BARK OIL	92201-55-3; 8000-27-9

CINNAMOMUM CASSIA LEAF OIL CINNAMOMUM ZEYLANICUM BARK OIL	8007-80-5 84649-98-9
CITRUS AURANTIUM AMARA FLOWER / PEEL OIL	8016-38-4; 72968-50-4
CITRUS BERGAMIA PEEL OIL EXPRESSED	89957-91-5
CITRUS LIMONUM PEEL OIL EXPRESSED	84929-31-7
CITRUS SINENSIS (syn.: AURANTIUM DULCIS) PEEL OIL EXPRESSED	97766-30-8; 8028-48-6
CYMBOPOGON CITRATUS / SCHOENANTHUS OILS	89998-14-1; 8007-02-1; 89998-16-3
EUCALYPTUS SPP. LEAF OIL	92502-70-0; 8000-48-4
EUGENIA CARYOPHYLLUS LEAF / FLOWER OIL	8000-34-8
EVERNIA FURFURACEA EXTRACT*	90028-67-4
EVERNIA PRUNASTRI EXTRACT*	90028-68-5
JASMINUM GRANDIFLORUM / OFFICINALE	84776-64-7; 90045-94-6; 8022-96-6
JUNIPERUS VIRGINIANA	8000-27-9; 85085-41-2
LAURUS NOBILIS	8002-41-3; 8007-48-5; 84603-73-6
LAVANDULA HYBRIDA	91722-69-9
LAVANDULA OFFICINALIS	84776-65-8
MENTHA PIPERITA	8006-90-4; 84082-70-2
MENTHA SPICATA	84696-51-5
MYROXYLON PEREIRAE	8007-00-9;
NARCISSUS SPP.	diverse
PELARGONIUM GRAVEOLENS	90082-51-2; 8000-46-2
PINUS MUGO/PUMILA	90082-72-7 / 97676-05-6
POGOSTEMON CABLIN	8014-09-3; 84238-39-1
ROSE FLOWER OIL (ROSA SPP.)	Diverse
SANTALUM ALBUM	84787-70-2; 8006-87-9
TURPENTINE (oil)	8006-64-2; 9005-90-7; 8052-14-0
VERBENA ABSOLUTE	8024-12-2

Table 2: Fragrance substances categorised as established contact allergens in animals.

INCI name (or, if none exists, perfuming name according to CosIng)	CAS number
Allyl phenoxyacetate	7493-74-5
p-tert. -Butyldihydrocinnamaldehyde	18127-01-0
CYCLAMEN ALDEHYDE	103-95-7
Dibenzyl ether	103-50-4
2,3-DIHYDRO-2,2,6-TRIMETHYLBENZALDEHYDE	116-26-7
trans-2-Hexenal	6728-26-3
2-Hexylidene cyclopentanone	17373-89-6
HEXYL SALICYLATE	6259-76-3
p-Isobutyl-α-methyl hydrocinnamaldehdye	6658-48-6
Isocyclocitral	1335-66-6
α-Methyl cinnamic aldehyde	101-39-3
METHYLENEDIOXYPHENYL METHYLPROPANAL	1205-17-0
METHYLUNDECANAL	110-41-8
2-Methoxy-4-methylphenol	93-51-6
4-Methoxy-α-methyl benzenpropanal	5462-06-6
METHYL OCTINE CARBONATE	111-80-8
Perillaldehyde p-Mentha-1,8-dien-7-al	2111-75-3
PHENYLACETALDEHYDE	122-78-1
Jasminum Sambac Flower CERA / Extract / Water	91770-14-8

Table 3: Fragrance substances categorised as likely contact allergens by combination of evidence.

INCI name (or, if none exists, perfuming name according to CosIng)	CAS number
AMBRETTOLIDE	7779-50-2
CARVACROL	499-75-2
Citrus paradisi §	8016-20-4
CUMINALDEHYDE	122-03-2
CYCLOPENTADECANONE	502-72-7
trans-trans-delta-DAMASCONE	71048-82-3
2,4-dimethyl-3-cyclohexen-1-carboxaldehyde §	68039-49-6
DIMETHYLTETRAHYDRO BENZALDEHYDE	68737-61-1
ETHYL VANILLIN	121-32-4
HELIOTROPINE	120-57-0
ISOAMYL SALICYLATE	87-20-7

ISOLONGIFOLENEKETONE	33407-62-4
Longifolene §	475-20-7
Mentha arvensis §	68917-18-0
METHOXYCITRONELLAL	3613-30-7
METHYL CINNAMATE	103-26-4
METHYLIONANTHEME	55599-63-8
5-METHYL-alpha-IONONE	79-69-6
MYRCENE	123-35-3
MYRTENOL	515-00-4
NEROL	106-25-2
Nerolidol (isomer not specified)	7212-44-4
NOPYL ACETATE	128-51-8
PHYTOL	150-86-7
RHODINOL	6812-78-8
trans-ROSE KETONE-5	39872-57-6

Fragrance substances identified as allergens in the 1999 opinion of SCCNFP (1) are marked with an asterisk (*).