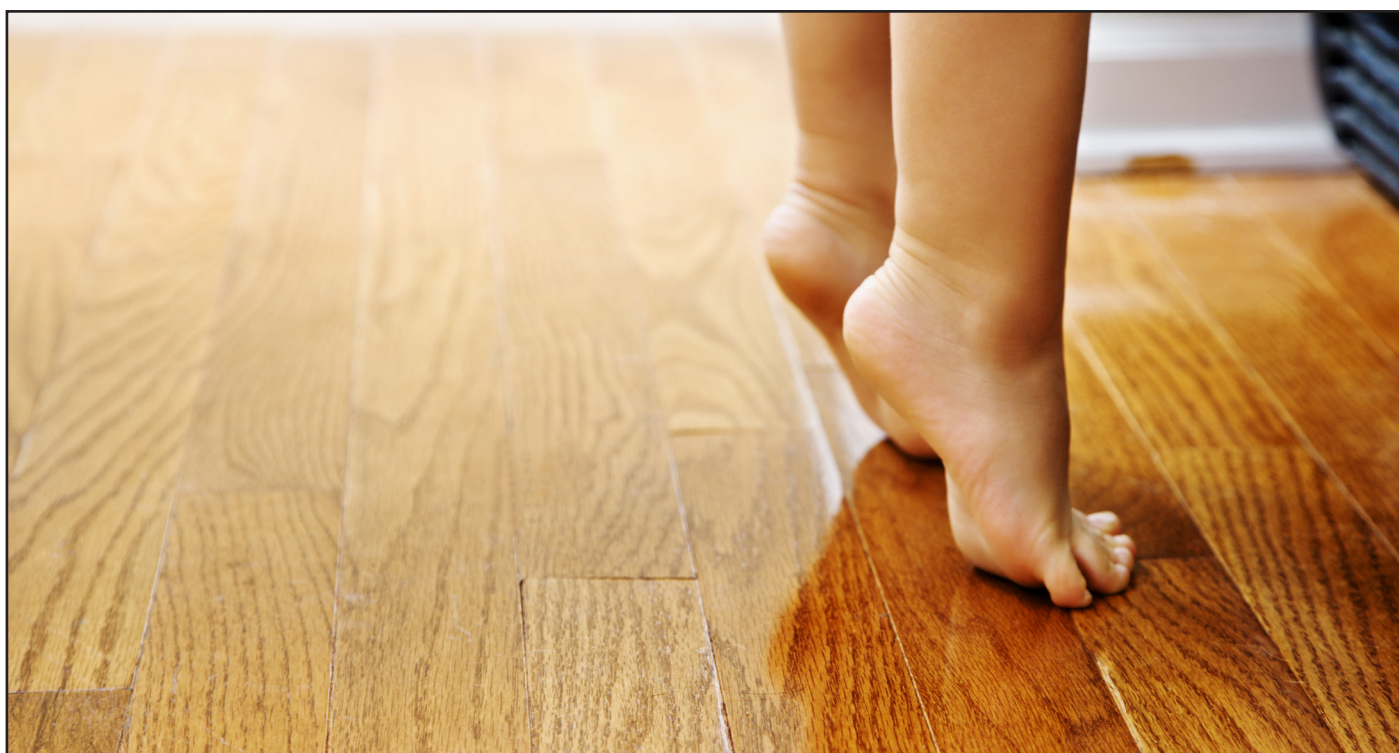


Nordic Ecolabelling of
Floor care products



Version 4.1 • 15 June 2012 – 31 December 2015



Nordic Ecolabelling

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Floor care products 051, version 4.1, 12 December 2012

This document is a translation of an original in danish. 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.

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What is a Nordic Ecolabelled floor care product?

Nordic Ecolabelled floor care products are among the least environmentally polluting products of their kind as they meet a number of environmental requirements.

The greatest environmental pollution from the use of floor care products arises when the products, during cleaning or intentional removal, end up in waste water and are discharged to treatment plants and then into the aquatic environment. By imposing requirements on the constituent substances, the pollution of the external environment can be reduced. In addition, requirements are laid down concerning specific constituents, which means that the risk of health problems for people coming into contact with the product is reduced. Requirements are also imposed on the effectiveness and quality assurance of the product.

Why choose the Nordic Ecolabel?

- Floor care product manufacturers may use the Nordic Ecolabel trade mark, the Swan, for marketing. The Nordic Ecolabel is a very well-known and well-reputed trade mark in the Nordic region.
- The Nordic Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- More environmentally aware production prepares the floor care product manufacturer for future environmental legislation.
- Environmental issues are complex. It can take a long time to gain an understanding of a specific area. Nordic Ecolabelling can be seen as an aid in this work.
- 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?

Floor care products are in this context defined as products exclusively for indoor use that apply a film of polymers or wax to floors to ease maintenance and protect the floor. The product group also includes products that remove the film/polish from the floor.

Floor care products include base coat polish, floor polish, wash polish, floor wax, wash-and-wax care products, polish removers and wax removers (see Appendix 1 for definitions).

Both products for professional users and products for consumers in general are included in the criteria for floor care products. A product is included in the group (professional/consumer) under which it is marketed. If sales are made to both user groups, it is assessed in the effectiveness test as a professional product.

Products that only have cleaning properties (e.g. non-wax wash care products) and products in which film formation takes place as a reaction between fatty acids and lime cannot be Nordic Ecolabelled according to this product group.

How to apply

Applicants are to base their application on the “Regulations for Nordic Ecolabelling” and the ecolabelling requirements in this document.

Each requirement is marked with the letter R (for requirement) and a number.

Icons in the text

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

- ✉ Enclose
- 📍 Requirement checked on site
- 📄 Enclose procedure for environmental and quality assurance

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

During the application process, Nordic Ecolabelling performs an on-site inspection to ensure adherence to the requirements. For this 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 sales of the Nordic Ecolabelled floor care product.

Enquiries

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

What are the requirements of Nordic Ecolabelling?

To be awarded a Nordic Ecolabel licence:

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

1 Environmental requirements applicable to all floor care products

The requirements below apply to all floor care products, unless it is specifically stated that it only applies to the named types of floor care product. The requirements apply to all constituent substances, unless otherwise stated in the requirement.

Unless otherwise stated, constituent substances are taken to be any substances in the product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities from raw material production. Impurities are taken to include residues from raw material production included in the finished product in concentrations of less than 100 ppm (0.0100 w/w%, 100 mg/kg), but not substances added to a raw material or product deliberately and for a purpose, regardless of the quantity. Impurities at raw material level in concentrations of over 1.0% in the raw material are, however, considered to be constituent substances. Known cleaved off products from constituent substances are also considered to be constituents.

Note that the product must meet all obligatory requirements at all times – an exemption named in a specific requirement is therefore not a general exemption from the obligatory requirements.

R1 Description of the product

Description of the product and use of the product as related to the product descriptions in "What can carry the Nordic Ecolabel?".

The product's complete formula is to be submitted to Nordic Ecolabelling. For all constituent substances, the following must be stated:

- Trade name
 - Chemical name(s) (if several constituent substances under one trading name)
 - Hazard classification according to regulations in Directive 67/548/EEC and Directive 1999/45/EC with amendments and revisions or Regulation (EC) No 1272/2008 (for each raw material, and each constituent substance)
 - Function
 - CAS no.
 - DID no. (Detergent Ingredient Database, see Appendix 2)
 - Active percentage of constituent substances
 - Constituent quantities with regard to "mixture formula" and "product formula" (see the formula proposal in the background document).
- Description of the product and its use.
- Complete formula in compliance with the requirement.
- Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).

R2 Classification of the product

The product must not be classified with hazard codes and hazard designations as stated in the table below.

Hazard classification	Hazard code and hazard warning (Regulation (EC) No 1272/2008 ¹)	Hazard designation and risk phrases (Directive No 67/548/EEC ² / 1999/45/EC ²)
Acute toxicity	Acute tox. 1-4 H300, H301, H302, H304 H310, H311, H312 H330, H331, H332	Harmful to health (Xn) R20, R21, R22, R65 Toxic (T) R23, R24, R25 Very toxic (T+) R26, R27, R28
Skin corrosive	Skin corr. 1A, 1B, 1C H314	Corrosive (C) R34, R35
Respiratory/skin sensitisation	Resp. Sens. 1 H334 Skin Sens. 1 H317	Harmful to health (Xn) R42 Sensitising (Xi) R43
Specific target organ toxicity – single/repeated exposure	STOT SE 1-2 H370, H371 STOT RE 1-2 H372, H373	Harmful to health (Xn) R48/20, R48/21, R48/22 R68/20, R68/21, R68/22 R33 Toxic (T) R39/23, R39/24, R39/25 R48/23, R48/24, R48/25 Very toxic (T+) R39/26, R39/27, R39/28
Harmful to aquatic organisms	Aquatic Acute 1 H400 Aquatic Chronic 1-4 H410, H411, H412, H413	Environmental hazard (N) / (-) R50, R53 R50/53, R51/53, R52/53

¹ Applies from Dec 2010

² Applies during period of transition to Regulation (EC) No 1272/2008 from Dec 2010 to June 2015

Exception: polish/wax removers for professional use that are classified as corrosive/Skin Corr. 1B or 1C with R34/H314 or local irritant/Eye Dam. 1 with R41/H318.

Exception: polish/wax removers for professional use that are classified as harmful to health/Acute tox. 4 with R20/H332, R21/H312 and/or R22/H302, if the packaging is designed such that the user does not have to come into contact with the product.

Note that the manufacturer in the EU/EEA country or the importer is responsible for the classification.

- ☒ Safety data sheet pursuant to prevailing European legislation.
- ☒ Safety data sheet for all raw materials pursuant to prevailing European legislation. If a polish remover or wax remover for professional use is classified as harmful to health/Acute tox. 4 with R20/H332, R21/H312 and/or R22/H302, documentation must be submitted showing that the packaging is designed such that the user does not have to come into contact with the product, and that user instructions are included in compliance with the requirement.

R3 CMR substances

Constituent substances must not be subject to any of the following hazard classifications and hazard warnings or a combination thereof.

Hazard classification	Hazard code and hazard warning (Regulation (EC) No 1272/2008 ¹)	Hazard designation and risk phrases (Directive No 67/548/EEC ²)
Carcinogenic	Carc. 1A or 1B; H350 Carc. 1A or 1B; H350i Carc. 2; H351	Carc. cat. 1 or 2; R45 Carc. cat. 1 or 2: R49 Carc. cat. 3; R40
Mutagenic	Muta. 1A; H340 Muta. 1B; H340 Muta. 2; H341	Muta. cat. 1; R46 Muta. cat. 2; R46 Muta. cat. 3; R68
Toxic to reproduction	Repr. 1A or 1B; H360F Repr. 1A or 1B; H360D Repr. 2; H361f Repr. 2; H361d Lact. H362	Repr. cat. 1 or 2; R60 Repr. cat. 1 or 2; R61 Repr. cat. 3; R62 Repr. cat. 3; R63 R64

¹ Applies from Dec 2010

² Applies during period of transition to Regulation (EC) No 1272/2008 from Dec 2010 to June 2015

The requirements also apply to substances that may release substances classified as above.

The exception to this is NTA as an impurity in complexing agents of the type MGDA and GLDA, where NTA may be included at < 1.0 w/w% of the raw material, but always so the concentration in the finished product is < 0.100 w/w%.

- Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- Duly completed and signed declaration by the producer of the raw material for each raw material (Appendix 4).

R4 Volatile organic compounds

The individual product's total concentration of volatile organic compounds must not exceed the following limits:

Wash-and-wax care products and wash polish: VOC < 0.5 w/w%

Base coat polish, floor polish and floor wax: VOC < 5.0 w/w%

Polish removers and wax removers : VOC < 20.0 w/w%

In this context, volatile organic compounds are considered to be substances defined under 1999/13/EC as VOCs, i.e. substances that, at 20°C, have a vapour pressure > 0.010 kPa.

- Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- Calculation of the VOC content of the product.
- Duly completed and signed declaration by the producer of the raw material (Appendix 4) .

R5 Compliance with administrative standards for solvents

When the products are used normally, the administrative standards for solvents must not be breached in any Nordic country.

This requirement can be documented in two ways: via a 0 ventilation test or via a measurement under normal usage conditions (see Appendix 6 to this criteria document under "Measurement of evaporation rate"). If the 0 ventilation test is used, a calculation model as shown in Appendix 6 must be used.

The administrative standards can be found at the following internet addresses:

Denmark: <http://www.at.dk/sw6796.asp>

Sweden: <http://www.av.se/lagochratt/afs/nummerordning.aspx>

Norway: <http://www.arbeidstilsynet.no/artikkel.html?tid=78880>

Finland: <http://www.finlex.fi/fi/laki/alkup/2011/20111213> or
<http://www.finlex.fi/sv/laki/alkup/2011/20111213>

- Documentation showing that administrative standards for organic solvents have not been breached in any Nordic country.

R6 Preservatives

Preservatives in the product must not be bioaccumulable $BCF < 500$ or $\log Kow < 4$. If there is a measured BCF value, the highest measured value must be used instead of $\log Kow$. Preservatives must only be added to preserve the raw material or product, not to disinfect or provide an anti-microbial function.

- Documentation for BCF or $\log Kow$.
- Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- Duly completed and signed declaration by the producer of the raw material (Appendix 4).

R7 Optimisation of preservatives

Added preservatives must be optimised in relation to the volume of the product and a "Challenge Test" (see Appendix 2) showing this must be performed.

- Test report for the performance of the "Challenge Test" showing optimal use of preservatives.

R8 Surfactants, aerobically degradable

All surfactants in floor care products must be readily degradable in accordance with the DID list. If the surfactant is not on the DID list, degradability must be documented in accordance with test method no. 301 A-F or no. 310 in the OECD guidelines for testing of chemicals or other equivalent test methods.

The exception is ingredient emulsifiers/levelling agents (max 10 mg/g active content) in floor polish, base coat polish and floor wax (see R13), fluorinated surfactants with a fluorinated carbon chain of less than or equal to 5 atoms in base coat polish, floor polish and floor wax (see R14) and silicone surfactants in base coat polish, floor polish and floor wax (see R15).

Note that floor care products with a cleaning effect are covered by the Detergents Regulation.

- Documentation that surfactants in the floor care product are readily degradable in accordance with the above.

R9 Surfactants, anaerobically degradable

All surfactants in floor care products must be anaerobically degradable in accordance with the DID list. If the surfactant is not on the DID list, degradability may be documented in accordance with an ISO 11734, ECOTOC no. 28 (June 1988) or equivalent test methods, where at least 60% degradability is achieved under anaerobic conditions.

The exception is ingredient emulsifiers/levelling agents (max 10 mg/g active content) in floor polish, base coat polish and floor wax (see R13), fluorinated surfactants with a fluorinated carbon chain of less than or equal to 5 atoms in base coat polish, floor polish and floor wax (see R14) and silicone surfactants in base coat polish, floor polish and floor wax (see R15).

- ☒ Documentation that surfactants in the floor care product are anaerobically degradable in accordance with the above.

R10 Environmentally harmful substances

The total quantity of chemical substances that meet the criteria for classification as environmentally hazardous (N or without a symbol (R52/53 or R53) /H400, H410, H411, H412 or H413) present in the product must not exceed 100 mg/g active content.

The exception to this is polish removers and wax removers where the total quantity of chemical substances that fulfil the criteria for classification as environmentally hazardous (N or without a symbol (R52/53 or R53) /H400, H410, H411, H412 or H413) present in the product must not exceed 2.0 w/w% active content.

This requirement also applies to substances that have proven to form persistent environmentally harmful degradation products under relevant conditions.

High molecular weight substances (molecular weight > 700, maximum diameter > 1.17 nm and a maximum molecule length > 4.3 nm) are exempted from the requirement, if they have an aquatic toxicity EC50/LC50 > 100 mg/l.

Classification in accordance with the Dangerous Substances Directive 67/548/EEC will apply during the period of transition to Regulation (EC) No 1272/2008 from December 2010 to June 2015. See Appendix 5.

Surfactants classified with H412 are exempted from the requirement, provided that they are readily degradable* and anaerobically degradable**.

** In accordance to the DID-list. If the substance is not on the DID-list documentation must be according to test method No. 301 A-F or No. 310 in OECD guidelines for testing of chemicals or other equivalent test methods.*

*** In accordance to the DID-list. If the substance is not on the DID-list documentation must be according to ISO 11734, ECETOC No. 28 (June 1988) or other equivalent test methods, where a minimum of 60% degradability under anaerobic conditions is achieved.*

- ☒ Declaration of surfactants that are exempted from the requirement (quantity, classification, degradability).
- ☒ Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- ☒ Duly completed and signed declaration by the producer of the raw material (Appendix 4).
- ☒ The applicant must submit test results, at the very least in the form of a safety data sheet/product sheet in accordance with prevailing European legislation for all ingredients in the product, setting out results for ecotoxicological testing, degradability and bioaccumulation, performed in accordance with the OECD's test methods. See test methods for ecotoxicity, degradability and bioaccumulation in Appendix 2 to this criteria document.
- ☒ Applicants must provide calculations showing compliance with the limits for environmentally harmful substances.

R11 Phosphorus

The total quantity of phosphorus may be a maximum of 0.20 w/w% in wash-and-wax care products, wash polish, polish removers and wax removers.

Note that phosphonates are not permitted, see R17.

- ☒ Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- ☒ Duly completed and signed declaration by the producer of the raw material (Appendix 4).

R12 Residual monomers in polymers

The total content of monomers classified in accordance with Appendix 5 must not exceed 100 mg/kg polymers (100 ppm) measured on newly produced polymer dispersion.

Note that impurities at raw material level in concentrations of over 1.0% are considered to be constituent substances.

- ☒ Duly completed and signed declaration by the producer of the raw material (Appendix 4) on the classified monomers present in the raw material and the quantities in which each is present.

R13 Ingredient emulsifiers and levelling agents in base coat polish, floor polish and floor wax

The total concentration of ingredient emulsifiers and levelling agents that are not aerobically and anaerobically degradable according to R8 and R9, must not exceed 10 mg/g active content in base coat polish, floor polish and floor wax.

Note that if fluorosurfactants are used as ingredient emulsifiers or levelling agents R14 must also be fulfilled.

Note that if silicone surfactants are used as ingredient emulsifiers or levelling agents, R15 must also be fulfilled.

- ☒ In the case of base coat polish, floor polish and floor wax: Statement showing that the total concentration of non-aerobically and anaerobically degradable ingredient emulsifiers and levelling agents does not exceed 10 mg/g active content.

R14 Fluorosurfactants in base coat polish, floor polish and floor wax

The exceptions to R8 and R9 are fluorosurfactants in base coat polish, floor polish and floor wax.

Fluorosurfactants must only be present in quantities equivalent to 0.025 w/w% in base coat polish, floor polish and floor wax.

The fluorinated carbon chain of the fluorinated surfactants must be less than or equal to 5 atoms.

Condition: If the product contains silicone surfactants, fluorosurfactants must not be present in the product.

- ☒ Duly completed and signed declaration by the manufacturer of the floor care product regarding content of fluorinated surfactants (Appendix 3).
- ☒ Duly completed and signed declaration by the producer of the raw material content of fluorinated surfactants (Appendix 4).
- ☒ In the case of base coat polish, floor polish and floor wax: Statement of the quantity of fluorosurfactants in the product, confirming that the concentration does not exceed 0.025 w/w%.
- ☒ Documentation from the producer of the raw material showing that the carbon chain of fluorosurfactants is less than or equal to 5.

R15 Silicone surfactants in base coat polish, floor polish and floor wax

The exception to R8 and R9 is silicone surfactants in base coat polish, floor polish and floor wax.

Silicone surfactants must only be present in quantities equivalent to 0.25 w/w% in base coat polish, floor polish and floor wax.

Condition: If the product contains fluorinated surfactants, silicone surfactants must not be present in the product.

- Duly completed and signed declaration by the manufacturer of the floor care product regarding content of silicone surfactants (Appendix 3).
- Duly completed and signed declaration by the producer of the raw material regarding content of silicone surfactants (Appendix 4).
- In the case of base coat polish, floor polish and floor wax: Statement of the quantity of silicone surfactants in the product, confirming that the concentration does not exceed 0.25 w/w%.

R16 CDV calculation for wash polish and wash-and-wax care products

CDV (critical dilution volume) must be determined for all ingredients for the maximum dosage recommended. High molecular weight substances (molecular weight > 700, maximum diameter > 1.17 nm and a maximum molecule length > 4.3 nm) are not included in the calculation of CDV.

CDV must not exceed 8,000 litres per litre of in-use solution calculated on the basis of chronic data or CDV must not exceed 10,000 litres per litre of in-use solution calculated on the basis of acute data.

- Calculation of CDV (See Appendix 2 for guidelines).
- Documentation of information not found on the DID list. See the DID list part B.

R17 Other requirements applicable to constituent chemical substances

The product must not contain the following constituent substances:

- Perfume
- Phthalates
- Dyestuffs and pigments
- APEO (alkylphenoethoxylates) and derivatives thereof
- Halogenated and aromatic solvents
- Complexing agents EDTA (ethylene diamine tetraacetic acid), DTPA (diethylene triamine pentaacetate) and phosphonates. (Requirements for NTA, see R3).
- Substances judged to be "Substances of very high concern" (SVHC), and that are on the candidate list http://echa.europa.eu/chem_data/candidate_list_en.asp.
- Nanoparticles (from nanomaterials*)

** The definition of nanomaterials follows the European Commission's definition of nanomaterials, from 18 October 2011, with the exception of the limit for the number size distribution of particles that are reduced to 1%: Nanomaterial: "a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 1% of the particles in the number size distribution, one or more external dimensions are in the size range 1-100 nm".*

Polymer emulsions are not considered to be nanomaterials.

- Duly completed and signed declaration by the manufacturer of the floor care product (Appendix 3).
- Duly completed and signed declaration by the producer of the raw material (Appendix 4).

2 Requirements concerning packaging

R18 Packaging – plastic

Plastic packaging must be labelled in accordance with DIN6120, Part 2, ISO 11469:2000. Plastic – Generic identification and labelling of plastic products, or equivalent. Caps, lids and pumps are exempted from this requirement.

PVC and other halogenated plastics must not be included in the packaging or packaging components (including caps/lids/pumps and labels).

- ☒ Checked on inspection visits or using images of the product's labelling or a datasheet 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.
- ☒ Declaration from manufacturer (Appendix 3) and packaging overview with statement of packaging type.

R19 Weight Utility Ratio

All products must meet the following primary packaging requirements:

$$WUR = \text{SUM} ((W_i + U_i)/D_i) < X$$

where $X = 2.5$ g/g active content for consumer products and

$X = 1.0$ g/g active content for professional products

W_i = The weight of the packaging component i (grams)

U_i = The weight of non-recycled material in the packaging component i (grams)

D_i = The product's content of active components (grams)

- ☒ Calculation of WUR.
- ☒ Documentation from the packaging manufacturer of the quantity of recycled material in the packaging components.

3 Requirements concerning effectiveness

The effectiveness of the product must be documented in accordance with

R20 Effectiveness

The effectiveness of the product must be documented in accordance with Appendix 7 for professional products and Appendix 8 for consumer products. In the case of applications for a Nordic Ecolabel for base coat polish, these must be tested together with another polish ("top polish").

Requirements concerning effectiveness are set out under the respective methods in Appendices 7 and 8.



1. For floor polish for professional users:

Either: Documentation of laboratory testing and field testing (Appendix 7, Part 1).

Or: Documentation of user testing (Appendix 7, Part 5 and Table 7-1).

2. For wash polish/wash-and-wax care products for professional use:

Either: Documentation of laboratory testing (Appendix 7, Part 2).

Or: Documentation of user testing (Appendix 7, Part 5 and Table 7-2).

3. For base coat polish for professional use:

Either: Documentation of laboratory testing. The base coat polish is tested together with a "top polish" as under points 1 and 2. Recoatability is tested for the base coat polish alone (Appendix 7, Part 3).

Or: Documentation of user testing of base coat polish alone (Appendix 7, Part 5 and Table 7-3). In addition, a user test for base coat polish in combination with another polish/floor care product.

4. For polish removers and wax removers for professional use:

Either: Documentation of laboratory testing and field testing (Appendix 7, Part 4).

Or: Documentation of user testing (Appendix 7, Part 5 and Table 7-4).

5. For floor polish for consumers:

Documentation of laboratory testing and field testing (Appendix 8, Part 1).

Floor polish products for consumers that pass the user test for professional products need not undergo additional effectiveness testing.

Products approved for professional use, and which are to be marketed as consumer products, need not undergo additional effectiveness testing.

6. For wash polish/wash-and-wax care products for consumers:

Documentation of laboratory testing (Appendix 8, Part 2).

Wash polish/wash-and-wax care products for consumers that pass the user test for professional products need not undergo additional effectiveness testing.

Products approved for professional use, and which are to be marketed as consumer products, need not undergo additional effectiveness testing.

7. For polish removers and wax removers for consumers:

Documentation of laboratory testing (Appendix 8, Part 3).

4 Information for users

R21 Information text for the product

The information text on the packaging/in the product sheet for floor care products with a cleaning effect must comply with the EU Regulation's provisions on the declaration of contents (No 648/2004, Annex VII).

The application of the product or the product type must be clearly indicated in the information text and there must be user guidance for all applications for the product.

The EU Regulation on the declaration of contents: Regulation (EC) No 648/2004 of the European Parliament and of the Council, Annex VII.

- ☒ Sample of written information on the product (safety data sheet, product sheet and label) showing the entire information text in all relevant languages where the product is marketed.

R22 Dosage instructions

If the product needs to be diluted before use, dosage ranges must be indicated on the labels.

Consumer products that need to be diluted before use must be accompanied by dosage instructions for the product, so that correct dosing is ensured.

The product must be supplied with guidance on application and removal.

The product data sheet or the label must state the length of time to wait before applying a new coat in order that the administrative standards are not exceeded (see R5).

- ☒ A copy of the label and the product data sheet, where applicable, setting out the above information.
- ☒ In the case of consumer products, a copy of the dosing instructions, which ensure correct dosing, must also be enclosed.

5 Quality and official requirements

To ensure that the Nordic Ecolabel requirements are met, the following procedures must be implemented.

If the manufacturer of the floor care product has a certified environmental management system in accordance with ISO 14 001 or EMAS in which the following procedures are implemented, it is sufficient for the accredited auditor to confirm that the requirements are implemented.

R23 Person responsible for the Nordic Ecolabel

One person at the enterprise must have responsibility for ensuring that the Nordic Ecolabel requirements are fulfilled, and one person must act as a contact with Nordic Ecolabelling.

- ☒ Organisational structure showing those responsible for the above.

R24 Documentation

The licence holder must be able to produce a copy of the application and data and calculation material (including test reports, documents from sub-contractors and the like) for the documentation submitted in connection with the application.

🔍 Checked on site.

R25 Quality of the floor care product

The licence holder must guarantee that the quality of the Nordic Ecolabelled floor care product will not deteriorate during the period of validity of the licence.

📖 Procedures for receiving and, where necessary, attending to claims/complaints concerning the quality of the Nordic Ecolabelled floor care products.

R26 Planned changes

Planned changes in products and markets that affect the Nordic Ecolabel requirements must be reported in writing to Nordic Ecolabelling.

📖 Procedures showing how planned changes in products and markets are handled.

R27 Unforeseen non-conformities

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

📖 Procedures showing how unforeseen non-conformities are handled.

R28 Traceability

The licence holder must be able to trace the Nordic Ecolabelled floor care product in the production process.

📖 Description/procedures for how the requirement is met.

R29 Return system

Relevant national rules, laws and/or industry agreements concerning return systems for products and packaging (such as REPA in Sweden, PYR in Finland and Grønt Punkt in Norway) must be observed in the Nordic countries in which the Nordic Ecolabelled floor care products are marketed.

☒ Copy of the applicant's agreement on affiliation to existing agreements on recycling/processing and Appendix 3 or a similar declaration for all the Nordic countries in which the products are marketed.

R30 Laws and regulations

The licence holder must guarantee adherence to safety regulations, working environment legislation, environmental legislation and conditions/permits specific to the operations at all production sites for the Nordic Ecolabelled product.

☒ Duly completed and signed application form.

R31 Marketing

The marketing of Nordic Ecolabelled floor care products must comply with "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

☒ Duly completed Appendix 9.

Marketing

The Nordic Ecolabel is a widely known and well-reputed trade mark in the Nordic region. Nordic Ecolabelled products and services may be marketed using the Nordic Ecolabel for as long as the associated licence remains in force.

The label must be positioned in such a way that there is no doubt about what the label denotes and so that it is clear that the floor care product 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

The design of the Nordic Ecolabel is as follows:



Each licence has a unique licence number that must be displayed in conjunction 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 also check that the floor care product meets the Nordic Ecolabel requirements after a licence has been granted. This may involve a site visit, random sampling or a similar test.

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

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

How long is a licence valid?

Nordic Ecolabelling adopted version 4 of the criteria for Floor care products on 15 June 2012. The criteria are valid until 30 June 2015.

On 12 December 2012 the Nordic Ecolabelling Board adopted changes in R2 and R10. In addition minor alterations have been made in Appendix 3 and 4. The new version is called 4.1.

The Nordic Ecolabel licence will continue to apply for as long as 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 will automatically be extended and the licensee informed.

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

New criteria

At the next revision the following possibilities will be reviewed:

- Extending the product group to include new product types such as water glass products and outdoor products on the basis of new RPS for all products.
- Increasing the stringency of the requirements governing VOCs and at the same time considering alternatives to VOCs.
- Prohibiting preservatives in floor care products.
- Increasing the stringency of the phosphorus requirement governing all product types.
- Considering the benefits of “high solids floor polish” products
- Increasing the stringency of the requirements governing CDV and WUR, and considering setting CDV requirements for additional product types.
- Changing requirements for ingredient emulsifiers and levelling agents
- Increasing the stringency of the requirement governing the environmental properties of silicone surfactants and fluorosurfactants.
- Increasing the stringency of the requirements governing environmentally harmful substances and dividing up the requirements according to the nature of the hazard.
- A new definition of high molecular weight substances.
- Updating test requirements.

Appendix 1 Definitions

Base coat polish:	A floor polish used as pore filler and to give a polish better adhesion. Normally consists of polymers and resin.
Floor polish:	Floor polish forms a hard, continuous and dirt-resistant film. Floor polish contains film-forming components (dispersed wax, polymers, resin) which are applied to protect a floor and to make maintenance easier.
Floor wax:	A wax that forms a soft film (polyethylene, resin) in order to protect the floor.
Ingredients:	The chemical substances or mixtures of chemical substances which, during production, are mixed together to make the floor care product. In cases where a couple of the ingredients react chemically with one another in connection with the production of the floor care product, the reaction products subsequently present in the floor care product are regarded as ingredients. The ingredients may be grouped according to their function (e.g. surfactants, preservatives and perfume).
Manufacturer:	The enterprise that finishes the product, i.e. mixes the formula and packs it.
Perfume and dyestuffs:	Organic substances added first and foremost for aesthetic reasons to provide fragrance and colour. Perfume may, however, mask the odour of other ingredients.
Polish removers and wax removers:	Used to remove polish and wax from floors. Polish and wax removers consist, among other things, of organic solvents, alkalis, surfactants, hydrotropes and complexing agents.
Preservatives:	Organic substances added to prevent the growth of microorganisms in the floor care product that would reduce the quality and stability of the product.
Product:	The floor care product itself in the form in which it is sold. Thus not in diluted form.
Professional product:	A product exclusively marketed for use in a professional context. The product is not classed as professional if exclusively marketed to the retail trade, or if marketed both to the retail trade and for professional use.
Surfactants:	Also called detergents, they form a group of organic substances that consist of a hydrophobic (water-repellent) and a hydrophilic (water-soluble) part. This structure means that surfactants have a surface-active effect.
Wash polish/wash-and-wax care products:	Comprise combined cleaning and polish improvers. They contain film-forming components such as polymers, resin and/or wax. Wash-and-wax care products qualify as maintenance products.

Appendix 2 Analyses and test methods

Requirements concerning the analysis laboratory

1A Requirements concerning the analysis laboratory

The following applies to ecotoxicity tests and the Challenge Test. The analysis laboratory must be competent and independent with regard to the stipulations below.

The analysis laboratory must fulfil the general requirements of standard EN ISO 17025 or have official GLP status. For the Challenge Test, the applicant's analysis laboratory/test procedure may be approved for analysis and testing if:

- The manufacturer has a quality assurance system that covers sampling and analyses and is certified to ISO 9000.
- The test method for the Challenge Test is included in the quality assurance system.
- Nordic Ecolabelling is given access to all the raw data from the test.

1B Laboratory requirements for effectiveness test

The laboratory must 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 if:

- The manufacturer has a quality assurance system that covers sampling and analyses and is certified to ISO 9000.
- The test method for the effectiveness test is included in the quality assurance system.
- Nordic Ecolabelling is given access to all the raw data from the effectiveness test.

Test methods and calculations

“Alternative methods / similar methods”

In the case of the use of test methods other than as indicated in this Appendix 2 and under each requirement: the test method must be confirmed as appropriate by an independent third party. In addition, there must be an assessment of similarities/differences and how the result will deviate from a result using the test indicated in the requirement or in Appendix 2. Nordic Ecolabelling must approve the use of the alternative test on the basis of these assessments.

Ready aerobic biodegradability

For ready biodegradability, test methods no. 301 (A-F) and no. 310 in the OECD guideline for testing of chemicals or other equivalent test methods are applied.

Potential aerobic biodegradability

For potential (ultimate) biodegradability, test method no. 302 (A-C) in the OECD guideline for testing of chemicals or other equivalent test methods is applied.

Anaerobic biodegradability

For anaerobic degradability, ISO 11734, ECOTOC no. 28 (June 1988), test method no. 311 in the OECD guideline for testing of chemicals or equivalent test methods are applied. The requirement is a minimum of 60% biodegradability under anaerobic conditions in 56 days (ECETOC no. 28, June 1988), 60 days (ISO 11734) and 60 days (OECD 311), respectively.

For substances not included in the DID list and where documentation is not available regarding anaerobic degradability according to the above, the following consideration can be applied as an exception for anaerobic degradability:

Substances that are not toxic for aquatic organisms ($IC_{50}/EC_{50}/LC_{50} > 10$ mg/l), and which are readily biodegradable under aerobic conditions and at the same time have either

- low adsorption ($A < 25\%$)
- or
- high desorption ($D > 75\%$) according to OECD guideline no. 106
- or
- are not bioaccumulable according to the section on bioaccumulability

Acute aquatic toxicity

For acute aquatic toxicity, test methods no. 201 (algae), no. 202 (daphnia) and no. 203 (fish) in the OECD guideline for testing of chemicals or other equivalent test methods are applied.

For surfactants/surface-active agents, toxicity data for at least two groups of organisms (fish, daphnia, algae and algae) are required. For other substances, toxicity data for one species only is acceptable.

Chronic aquatic toxicity

For chronic aquatic toxicity, test methods no. 201 (algae), no. 211 (daphnia) and no. 211 or no 215 (fish) in the OECD guideline for testing of chemicals or other equivalent test methods are applied.

Please note that specification of an NOEC or LOEC value is not in itself a chronic test. A chronic test requires the test period to extend over a “long period of time”. The test method for acute aquatic toxicity for algae extends over 72 hours which corresponds to several algae generations, and it is therefore also used as a chronic test. For daphnia, the chronic test extends over 21 days and for fish the test period extends over 14 days to 60 days, depending on the method and the species of fish.

Bioaccumulability

The bioaccumulability of a substance can be tested on fish according to OECD guidelines 305 A-E. If the biological concentration factor (BCF) of the substance is ≥ 500 , the substance is deemed bioaccumulable, and if $BCF < 500$ the substance is deemed non-bioaccumulable. Unless otherwise established, substances are deemed bioaccumulable if $\log K_{ow} \geq 4$ according to OECD guidelines 107 or 117 or equivalent methods.

If there is a measured BCF value, the highest measured value must be used instead of $\log K_{ow}$. This means that a substance with a $\log K_{ow}$ value ≥ 4 is not considered bioaccumulable if the highest measured BCF value is < 500 . OECD guideline 107 is not applicable for surfactants with both fat and water soluble properties as this is a test that measures whether the substance is fat or water soluble (results in a $\log K_{ow}$ value). For these substances it has to be demonstrated with a high degree of certainty based on present knowledge that they and their degradation products do not have long-term harmful effects on organisms in the aquatic environment.

DID list (Detergent Ingredient Database)

Ecotoxicological data can be found for most ingredients in Part A of the DID list (Detergent Ingredients Database, developed jointly by the EU Ecolabel and Nordic Ecolabelling). The list is available on the Nordic Ecolabelling websites (see page 2 of this criteria document for addresses). Part B contains instructions on what to do for ingredients that are not on the list. For these criteria, the applicable DID list is the version of 30 June 2004 or later versions. The list contains information on toxicity (acute and chronic), biodegradability (including aerobic and anaerobic), safety factors and so on.

Ecotoxicological data for use in the DID list, Part B, may be taken from the product safety data sheets for the ingredients, on condition that the data are credible and the test method is in accordance with the methods specified in Appendix 2 to this criteria document. In the same way reference may also be made to analogous considerations, provided that they are conducted by a competent third party, and reference may be made to relevant data from literature that have been scientifically assessed.

Challenge Test

In order to minimise the quantity of preservative, a “Challenge Test” must be performed. The Challenge Test is an umbrella term for tests that determine the necessary quantity of preservative in products. The test is performed on a range of samples of the test product, all of which have had different concentrations of preservative added to them. The samples are tested for the growth of a number of bacteria, yeasts and moulds after 7 days. They are then seeded again with a mix of bacteria, yeasts and moulds and the samples are tested again for growth 7 days after seeding. This continues for a minimum of 28 days (some tests require a minimum of 6 weeks). The lowest concentration of preservative that produces no growth is the optimum amount of preservative for the product.

The various manufacturers and suppliers of preservatives have different Challenge Tests/methods that they use to determine the right preservative concentration. These include: the Koko Test (test method SM 021), the USP Challenge Test (US Pharmacopoeia) and the CTFA Challenge Test (Cosmetic Toiletries and Fragrance Association).

Calculation of CDV

The critical dilution volume (CDV) is expressed in litres and is calculated for each individual ingredient (except for water and high molecular weight substances) in accordance with the following formula:

$$CDV_i = (\text{Quantity in mg of the ingredient per litre of usage solution}) \times DF_i / TF_i$$

where:

CDV_i = critical dilution volume for an ingredient (i)

DF_i = degradation factor for an ingredient (i)

TF_i = toxicity factor for an ingredient (i)

The total critical dilution volume of the product is the sum of the CDV_i for all ingredients. A calculation example is given below. In the example, CDV is calculated with chronic data of 6,742 litres and this means that the CDV requirement of 8,000 litres is met.

CDV is a measure of the amount by which a product needs to be diluted in order to be rendered harmless to waterborne organisms. It is the relationship between the recommended dosage of the product and the toxicity and degradability of the product.

CDV is calculated on the basis of information on ingredients found in the DID list (Detergent Ingredients Database) dated 30 June 2004 or later versions. Information not found on the list is determined in accordance with Part B of the DID list.

Ecotoxicological data for use in the DID list, Part B, may be taken from the product safety data sheets for the ingredients, on condition that the data are credible and the test method is in accordance with the methods specified in Appendix 2 to this criteria document. In the same way reference may also be made to analogous considerations, provided that they are conducted by a competent third party, and reference may be made to relevant data from literature that have been scientifically assessed.

In the absence of data, the following worst case data for the DID list can be used:

$$LC50/EC50 = 1$$

$$SF = 10,000$$

$$DF = 1$$

$$aNBO = P$$

$$anNBO = N$$

Where no data for chronic toxicity exist, TF_{chronic} is taken as equal to TF_{acute} .

Example:

The following example is purely intended to make it possible to check understanding of the calculations of the criteria.

A formula for an invented product is shown below. The DID no. denotes the number in the Detergent Ingredients Database. The result of the calculations is rounded off.

Please note that data for Name 1 (“New Surfactant”) in the example are taken directly from the safety data sheet of the ingredient. Only ecotoxicity data for the entire ingredient including water are set out on the data sheet.

In the case of New Surfactant, the data sheet sets out acute data for 3 trophic levels (fish, algae and daphnia) and the lowest value is 17 mg/l. This means that the safety factor is 1,000 and that the lowest toxicity must therefore be divided by 1,000 to obtain the toxicity factor (TF acute = TF chronic in the absence of chronic data).

New Surfactant is, according to the data sheet, readily degradable and therefore the value of the DF (the degradability factor) is equal to 0.05.

Trade names (active content)	Chemical names	Quantity (mg per litre of usage solution)	DID no.	TF chronic	DF	CDV chronic
Name 1 (27%)	“New Surfactant”	250	(*)	0.017	0.05	735.3
Name 2 (30%)	Cocamidpropyl Betain	108	61	0.0009	0.05	6,000
Name 3 (100%)	Glycerine	25	112	0.88	0.05	1.4
Name 4 (60%)	Phenoxyethanol	0.08	99	2	0.05	0.002
Name 5 (100%)	Sodium Chloride	0.5	134	1	1	0.5
Total						6737.2

() The ingredient is not on the DID list and the applicant refers to ecotoxicity data on the data sheet.*

In the example, CDV is calculated with chronic data of 6,737 litres and this means that the CDV requirement of 8,000 litres is met.

Appendix 3 **Duly completed and signed declaration by the manufacturer of the floor care product**

The requirements apply to all floor care products except where it is specifically stated that they apply only to the named floor care products. The requirements apply to all constituent substances, unless otherwise stated in the requirement. Unless otherwise stated, constituent substances are taken to be any substances in the product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities from raw material production. Impurities are taken to include residues from raw material production included in the finished product in concentrations of less than 100 ppm (0.0100 w/w%, 100 mg/kg), but not substances added to a raw material or product deliberately and for a purpose, regardless of the quantity. Impurities at raw material level in concentrations of over 1.0% in the raw material are, however, considered to be constituent substances. Known cleaved off products from constituent substances are also considered to be constituents.

The declaration is made according to best convictions and to the best available knowledge at the time. Reservations are made for any developments and new knowledge. If such knowledge arises, the signatory is obliged to submit an updated declaration to Nordic Ecolabelling.

The manufacturer's stamp and signature confirm that the declaration was completed by the manufacturer:

Name of manufacturer	
Stamp and signature	Date
Trade name of product	
Classification and labelling of product	

- Floor care product with cleaning effect (wash polish/wash-and-wax product)
- Floor care product without cleaning effect (floor polish/base coat polish/floor wax)
- Polish remover/wax remover
- Consumer product
- Professional product

Does the product contain constituent substances that are classified as one of the following in accordance with prevailing European legislation (see R3): Carcinogenic, Mutagenic (Mut) or Toxic for Reproduction (Rep)?

Yes No

The requirements also apply to substances that may release substances classified as above.

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain volatile organic compounds? Yes No

In this context, volatile organic compounds are considered to be substances defined under 1999/13/EC as VOCs, i.e. substances that, at 20°C, have a vapour pressure > 0.010 kPa.

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain preservatives? Yes No

If yes, are the preservatives added to preserve a raw material or the product?

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain substances classified as environmentally hazardous? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain softeners? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain substances that may form environmentally harmful degradation products? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain phosphorus? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain non-aerobically and non-anaerobically degradable ingredient emulsifiers or levelling agents? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the product contain fluorosurfactants or silicone surfactants? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

If fluorosurfactants, state carbon chain length: _____

Does the product contain:

Perfume? Yes No

Phthalates? Yes No

Dyestuffs or pigments? Yes No

APEO (alkylphenoethoxylates) or derivatives thereof? Yes No

Halogenated and aromatic solvents? Yes No

Complexing agents EDTA (ethylene diamine tetraacetic acid), DTPA (diethylene triamine pentaacetate), NTA or phosphonates? Yes No

Substances judged to be "Substances of very high concern" (SVHC), and that are on the candidate list http://echa.europa.eu/chem_data/candidate_list_en.asp? Yes No

Nanoparticles (from nanomaterials*)? Yes No

**The definition of nanomaterials follows the European Commission's definition of nanomaterials, from 18 October 2011, with the exception of the limit for the number size distribution of particles that are reduced to 1%: Nanomaterial: "a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 1% of the particles in the number size distribution, one or more external dimensions are in the size range 1-100 nm".*

Polymer emulsions are not considered to be nanomaterials.

Do the packaging or packaging components (including caps/lids/pumps and labels) contain PVC or other halogenated plastic? Yes No

Will the product(s) be marketed in Sweden, Finland or Norway? Yes No

If yes, a copy of the agreement on affiliation to relevant agreements on recycling/processing is to accompany the application (such as REPA in Sweden, PYR in Finland and Grønt Punkt in Norway), see R29. Appendix no. _____

Appendix 4 Duly completed and signed declaration by the producer of the raw material

The requirements apply to all constituent substances, unless otherwise stated in the requirement. Unless otherwise stated, constituent substances are taken to be any substances in the product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities from raw material production. Impurities are taken to include residues from raw material production included in the finished product in concentrations of less than 100 ppm (0.0100 w/w%, 100 mg/kg), but not substances added to a raw material or product deliberately and for a purpose, regardless of the quantity. Impurities at raw material level in concentrations of over 1.0% in the raw material are, however, considered to be constituent substances. Known cleaved off products from constituent substances are also considered to be constituents.

Note: that this declaration must state whether the raw material contains any of the substances listed below, irrespective of whether they are an impurity or not, and irrespective of quantity.

Note: that this appendix can be sent directly to Nordic Ecolabelling in the country in which the application is to be processed.

The declaration is made according to best convictions and to the best available knowledge at the time. Reservations are made for any developments and new knowledge. If such knowledge arises, the signatory is obliged to submit an updated declaration to Nordic Ecolabelling.

The raw material producer's stamp and signature confirm that the declaration was completed by the producer of the raw material producer:

Name of producer	
Stamp and signature	Date
Trade name of product	
Classification and labelling of product	

Does the raw material contain constituent substances that are classified as one of the following in accordance with prevailing European legislation (see R3):

Yes No

Carcinogenic, Mutagenic or Toxic for Reproduction?

The requirements also apply to substances that may release substances classified as above.

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain volatile organic compounds?

Yes No

In this context, volatile organic compounds, including halogenated and/or aromatic solvents, are considered to be substances defined under 1999/13/EC as VOCs, i.e. substances that, at 20°C, have a vapour pressure > 0.010 kPa.

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain preservatives? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain substances classified as environmentally hazardous? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain softeners? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain substances that may form environmentally harmful degradation products? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain phosphorus? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain residual monomers from polymers that are classified as hazardous under Appendix 5 in the criteria for floor care products, version 4? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain ingredient emulsifiers or levelling agents? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

Does the raw material contain fluorosurfactants or silicone surfactants? Yes No

If yes, state chemical name, CAS no. and quantity in ppm, w/w% or mg/kg:

If fluorosurfactants, state carbon chain length: _____

Does the raw material contain:

- | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|
| Perfume? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Phthalates? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Dyestuffs or pigments? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| APEO (alkylphenoethoxylates) or derivatives thereof? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Halogenated and aromatic solvents? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Complexing agents EDTA (ethylene diamine tetraacetic acid), DTPA (diethylene triamine pentaacetate), NTA or phosphonates? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Substances judged to be "Substances of very high concern" (SVHC), and that are on the candidate list http://echa.europa.eu/chem_data/candidate_list_en.asp ? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Nanoparticles (from nanomaterials*)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

**The definition of nanomaterials follows the European Commission's definition of nanomaterials, from 18 October 2011, with the exception of the limit for the number size distribution of particles that are reduced to 1%: Nanomaterial: "a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 1% of the particles in the number size distribution, one or more external dimensions are in the size range 1-100 nm".*

Polymer emulsions are not considered to be nanomaterials.

Appendix 5 Environmental hazard classification and classification of residual monomers

Classification in accordance with the Dangerous Substances Directive 67/548/EEC will apply during the period of transition to Regulation (EC) No 1272/2008 from December 2010 to June 2015.

Classification in accordance with Regulation (EC) No 1272/2008 applies from December 2010.

Environmental hazard classification concerning R10

Hazard classification	Hazard code and hazard warning (Regulation (EC) No 1272/2008)	Hazard designation and risk phrases (Directive No 67/548/EEC)
Harmful to aquatic organisms	Aquatic Acute 1 H400 Aquatic Chronic 1-4 H410, H411, H412, H413	Environmental hazard (N) / (-) R50, R53 R50/53, R51/53, R52/53

Classification of residual monomers R12

Hazard classification	Hazard code and hazard warning (Regulation (EC) No 1272/2008)	Hazard designation and risk phrases (Directive No 67/548/EEC)
Carcinogenic	Carc. 1A or 1B; H350 Carc. 1A or 1B; H350i Carc. 2; H351	Carc. cat. 1 or 2; R45 Carc. cat. 1 or 2; R49 Carc. cat. 3; R40
Mutagenic	Muta 1A; H340 Muta 1B; H340 Muta. 2; H341	Muta. cat. 1; R46 Muta. cat. 2; R46 Muta. cat. 3; R68
Toxic to reproduction	Repr. 1A or 1B; H360F Repr. 1A or 1B; H360D Repr. 2; H361f Repr. 2; H361d Lact. H362	Repr. cat. 1 or 2; R60 Repr. cat. 1 or 2; R61 Repr. cat. 3; R62 Repr. cat. 3; R63 R64
Acute toxicity	Acute tox. 1-4 H300, H301, H302, H304 H310, H311, H312 H330, H331, H332	Harmful to health (Xn) R20, R21, R22, R65 Toxic (T) R23, R24, R25 Very toxic (T+) R26, R27, R28
Respiratory/skin sensitisation	Resp. Sens. 1 H334 Skin Sens. 1 H317	Harmful to health (Xn) R42 Sensitising (Xi) R43
Specific target organ toxicity – single/repeated exposure	STOT SE 1-2 H370, H371 STOT RE 1-2 H372, H373	Harmful to health (Xn) R48/20, R48/21, R48/22 R68/20, R68/21, R68/22 R33 Toxic (T) R39/23, R39/24, R39/25 R48/23, R48/24, R48/25 Very toxic (T+) R39/26, R39/27, R39/28
Harmful to aquatic organisms	Aquatic Acute 1 H400 Aquatic Chronic 1-4 H410, H411, H412, H413	Environmental hazard (N) / (-) R50, R52, R53 R50/53, R51/53, R52/53

Appendix 6 Calculation of air requirement for compliance with administrative standards

The room height is set at 2.5 m and the calculation is performed on the basis of the minimum number of square metres per litre of the recommended dosage.

For the purpose of the calculation, the steam pressure (p) of the solvent in mmHg at 20°C can be used to derive the evaporation factor.

Where more solvents are present in the product, the air requirement for these solvents is added up.

Calculation example:

Does the XYZ compound fulfil the requirement for solvents?

Administrative standard for the solvent XYZ: 300 mg/m³

(the lowest Nordic standard value is used)

Steam pressure: 0.35 mmHg at 20°C

Evaporation factor: 0.3 (see Table 1)

Quantity of solvent (XYZ) in product: 3.9%

Product density: 1.0299 kg/l

Recommended dosage: 1 litre/40-90 m²

Grams of XYZ/litre of product =

(% XYZ in product)/100%) x product density (kg/l) x 1000 g/kg = 0.039 x 1.0299 kg/l x 1000g/kg = 40.17 g/l

Corrected air requirement (m³/l) =

((grams of XYZ/litre of product) x 1000 mg/g) x evaporation factor / administrative standard (mg/m³) = ((40.17 g/l x 1000 mg/g) x 0.3) / 300 mg³ = 40.17 m³/l

At an assumed maximum exposure (1 litre of product covers a floor of 40 m², and with the height of the room at 2.5 m), the air requirement will be fulfilled because:

The air availability (m³) = Smallest area stated in the dosage instruction (m²) x 2.5 m (standard room height) = 40 m²/l x 2.5 m = 100 m³/l > 40.17 m³/l (air requirement)

Conclusion: XYZ can be used.

Table 1: Relationship between the steam pressure of a solvent expressed in mmHg at 20°C and the evaporation factor.

Steam pressure (p) given in mmHg at 20°C	Evaporation factor
P > 200	2.0
200 > p > 10	1.4
10 > p > 3	1.0
3 > p > 1	0.7
1 > p > 0.1	0.3
0.1 > p	0.0

Reference: The administrative standards can be found at the following internet addresses:

Denmark: <http://www.at.dk/sw6796.asp>

Sweden: <http://www.av.se/lagochratt/afs/nummerordning.aspx>

Norway: <http://www.arbeidstilsynet.no/artikkel.html?id=78880>

Finland: <http://www.finlex.fi/fi/laki/alkup/2011/20111213> or <http://www.finlex.fi/sv/laki/alkup/2011/20111213>

Appendix 7 Effectiveness testing of professional products

This Appendix comprises five parts:

Part 1: Floor polish

Part 2: Wash polish and wash-and-wax care products

Part 3: Base coat polish

Part 4: Polish removers and wax removers

Part 5: User testing for professional products. See other requirements as to effectiveness in requirement R20

Part 1 – Standardised testing of professional floor polish

The following parameters must be documented:

Water resistance

Test method: ASTM D 1793-96 or other applicable version. Standard Test Method for Water Spotting of Emulsion Floor Polishes.

The result must be assessed in accordance with the following categories:

“Very high”: No change relative to the point of departure

“High”: Barely visible change

“Medium”: Greying disappears during the course of two hours

Requirement level: “Medium”

Detergent resistance

Test method: ASTM D 3207-96 or other applicable version. Standard Test Method for Detergent Resistance of Floor Polish Films.

The following formula for “standard detergent” must be used instead of the formula specified in the test method:

Sodium citrate	5%
Berol 91-8 (fatty alcohol, ethoxylated)	8%
Berol 522 (alkyl phosphate ester)	3%
Sodium carbonate	0.5 %
*Demineralised water	up to 100%

The dosage must be 1:200 (corresponding to 5 grams/litre) and the pH in solution between 6 and 8.

Detergent resistance is assessed qualitatively in accordance with the following categories:

“Very good”: No weakening/deterioration of the polish

“Good”: < 10% after 200 cycles

Requirement level: “Good”.

Recoatability

Test method: ASTM D 3153-91 or other applicable version. Standard Test Method for Recoatability of Water-Emulsion Floor Polishes.

Assessment in accordance with the following categories:

“Very good”: Multicoat finish is significantly better than one coat alone.

Requirement level: “Very good”.

Slip resistance

Test method: ASTM D 2047-04 or other applicable version. Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.

Requirement level: Friction of 0.5 or more.

Gloss

Test method: ASTM D 523-99 or other applicable version. Standard Test Method for Specular Gloss. Alternatively, the following test methods may be used: ISO 2813, DIN 67530 or ASTM D 1455.

Requirement level: The gloss of the polish must be specified on the product.

Removal

Test method: ASTM D 1792-97 or other applicable version. Standard Test Method for Long-Term Removability Properties of Emulsion Floor Polishes.

Test substrate: Vinyl Asbestos Tile (as described in the test). Alternatively, Vinyl Quartz may be used:

Requirement level: The dry film must be completely removed after 75 cycles.

Field testing

Test method: ASTM D 3052-91 or other applicable version. Standard Practice for Rating Water-Emulsion Floor Polishes.

The test is used to determine gloss, levelling, recoatability, discolouration, powdering, crazing, wear, heel marking, resistance to soiling, stripes, detergent resistance, slip resistance and removal, in comparison with a reference material.

The test is a field test and describes how a test surface is to be laid out and treated in testing various types of polish.

The method is extended to include the following points:

- The field test must be performed on the floor materials for which the polish is intended/recommended.
- The field test must be performed using a variety of maintenance methods, all of which must be documented.
- The field test must be performed using a variety of traffic levels relevant to the area of use.

- The producer must state the reference product used. The reference product must have been available on the market for at least one year and must have been shown to have been of satisfactory quality.
- When cleaning, the cleaning detergent normally used on the site must be used in place of the detergent specified in the test method. The producer must specify the product used.

The polish must be evaluated by a minimum of three independent observers with the relevant technical background within the area of film-forming floor care products.

The reference polish is given a value of 0 and provides the basis for the assessment.

The following evaluative categories are used:

- 0 equal to the reference product
- +1 slightly better than the reference product
- +2 much better than the reference product
- 1 slightly worse than the reference product
- 2 much worse than the reference product

The results must be reported as an average by the observers. Assessment must be given to one decimal point (e.g. 1.2).

Requirement level: The polish must be as good as or better than the reference product. This means a test result of minimum -0.4, equating to “equal to the reference product”.

Part 2 – Testing of wash polish and wash-and-wax care products for professional use

The cleaning and care properties are measured either visually or optically. Testing must show that the test product is better than or as good as a second equivalent product. The comparative product must be well established on the market in the country or countries in which the product will be marketed.

Requirement: An account must be provided of the test method used, test performers, test conditions (e.g. type of floor, type of soiling, cleaning method, etc.), results and the reason for the choice of comparative product.

Part 3 – Standardised testing of base coat polish for professional use

If a base coat polish is to qualify for an ecolabel, the effectiveness of the base coat polish must be documented in combination with a second polish that is laid on top. The method is specified in Appendix 7, Part 1.

The properties that are to be tested on base coat polish alone are as follows:

Recoatability

Test method: ASTM D 3153-91 or other applicable version. Standard Test Method for Recoatability of Water-Emulsion Floor Polishes.

Assessment in accordance with the following categories:

“Very good”: Multicoat finish is significantly better than one coat alone.

Requirement level: “Very good”.

Part 4 – Testing of polish removers and wax removers for professional use

Removal

Test method: ASTM D 1792-82 or other applicable version. Standard Test Method for Long-Term Removability Properties of Emulsion Floor Polishes.

Test substrate: Vinyl Asbestos Tile (as described in the test). Alternatively, Vinyl Quartz may be used:

Requirement level: The dry film must be completely removed after 75 cycles.

Part 5 – User test for professional products

The effectiveness of the product may be documented by means of user test forms (see Tables 7-1 to 7-4). This alternative is applicable to all product types.

In the case of base coat polishes, the user test form for base coat polish must be completed in addition to one of the other user test forms (depending on the type of product that the base coat polish is combined with).

The following requirements apply:

- The product must be used by at least 5 users for 3 months. In case of polish removers/wax removers at least 5 users and at least 2 different floor materials are required, if the product can be used on at least 2 different floor materials. In the case of specialist wax remover products, e.g. wax remover products for linoleum, at least 5 users are required (references must be stated).
- The product must be used with satisfactory results on the types of substrate for which the polish/maintenance product is intended.
- The traffic conditions under which the products are to be tested must correspond to normal traffic in corridors in large office buildings.
- Polish removers/wax removers must be tested on 2-3 coats of a polish appropriate to the polish remover/wax remover, and the polish must have been in place on the floor for at least one year.

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

The types of floors that must be tested:

The test must include all of the floor types for which the product is marketed. This means at least one user per floor type. The exception is polish removers/wax removers, where the product is to be tested on at least 2 different floor materials, if the product can be used on at least 2 different floor materials.

Requirements applicable to the individual parameter:

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

Overall assessment of the product:

A score of 3 must be given by at least 4 out of the 5 users (at least 80% of all users).

A score of 1 must not be awarded by any of the users.

For each product, the individual parameters must be assessed separately (test parameters). In the case of non-standard products, Nordic Ecolabelling may permit the user's report to add a further point's assessment for other overall properties such as removal of floor care products, drying time, wear, etc.

Table 7-1. User testing of floor polish for professional use

Product type	Floor type	Test parameter	Points (1-5p, where 5 is best)
Floor polish and floor wax Name of the product:	Types of floor for which the product is intended (to be completed by the manufacturer):	Interpretation: How easy is the product to apply/distribution capacity?	_____ p
		Does the product foam on application?	_____ p
		Odour of the product during application?	_____ p
		How good is the product at levelling/spreading?	_____ p
		Cleaning/maintenance of polish: Removal of traffic marks (heel marks)?	_____ p
		Durability of the product's original gloss?	_____ p
		How easy is it to mop the polishtreated floor?	_____ p
		Slip resistance?	_____ p
		Water resistance?	_____ p
		Discolouration of polish?	_____ p
		Resistance to recommended cleaning product?	_____ p
		Overall assessment of the product, 1-5p, where 5 is best (other parameters such as removal, drying time before next coat, wear resistance etc. can also be included here):	
Test period:			
Floor type/substrate:			
Dosage:			
Comments on overall assessment:			
Name of user:			

Table 7-2. User testing of wash polish/wash-and-wax care products for professional use

Product type	Floor type	Test parameter	Points (1-5p, where 5 is best)
Wash polish/ wash-and-wax care product Name of the product:	Types of floor for which the product is intended (to be completed by the manufacturer):	Interpretation: How easy is the product to apply/distribution capacity?	_____ p
		Does the product foam on application?	_____ p
		Odour of the product?	_____ p
		Cleaning/maintenance with the product: Removal of traffic marks (heel marks)?	_____ p
		Durability of the product's gloss?	_____ p
		Slip resistance	_____ p
		Water resistance?	_____ p
		Cleaning effect?	_____ p
Overall assessment of the product, 1-5p, where 5 is best (other para- meters such as removal, drying time before next coat, wear resistance etc. can also be included here):			_____ p
Test period:			
Floor type/substrate:			
Are polishing machines used?			
Comments on overall assessment:			
Name of user:			

User testing of base coat polish

If a base coat polish is to qualify for an ecolabel, the effectiveness of the base coat polish must be documented in combination with a second polish that is laid on top.

Table 7-3. User testing of base coat polish for professional use

Product type	Floor type	Test parameter	Points (1-5p, where 5 is best)
Base coat polish Name of the product:	Types of floor for which the product is intended (to be completed by the manufacturer):	Interpretation: How easy is the base coat polish to apply?	_____ p
		Does the base coat polish foam on application?	_____ p
		Odour of the base coat polish during application?	_____ p
		How good is the product at levelling/spreading?	_____ p
		Overall assessment of the product, 1-5p, where 5 is best (other para- meters such as removal can also be included here):	_____ p
Test period:			
Floor type/substrate:			
Comments on overall assessment:			
Name of user:			

User testing of polish removers/wax removers

Where a polish remover/wax remover can be used on more than one type of floor material, it must be tested on at least 2 different floor materials and each floor material must be tested by 5 different users.

Note: In the case of specialist wax remover products, e.g. wax remover products for linoleum, at least 5 users are required.

Table 7-4. User testing of polish removers/wax removers for professional use

Product type	Polish type	Test parameter	Points (1-5p, where 5 is best)
Polish remover or wax remover Name of the product:	Polish types or wax types for which the product is intended (to be completed by the manufacturer):	Interpretation: How quickly does the polish/wax remover work after application?	_____ p
		How long does it take to dissolve the polish/wax?	_____ p
		Absorption: How easy is it to rinse off the residues and neutralise the pH of the floor?	_____ p
		How is the floor material affected by the polish/wax remover?	_____ p
Overall assessment of the product, 1-5p, where 5 is best			_____ p
Test period:			
The type of polish remover/wax remover and the type of polish/wax removed:			
Floor type:			
Comments on overall assessment:			
Name of user:			

Appendix 8 Effectiveness testing of consumer products

This Appendix comprises three parts: Part 1 deals with floor polish, Part 2 with wash polish and wash-and-wax care products and Part 3 with polish removers and wax removers. See other requirements concerning effectiveness testing in requirement R20 of the main document.

Products that are approved for professional use and that will also be marketed as consumer products are only required to undergo effectiveness testing for products for professional use (Appendix 7).

Part 1 – Standardised testing of floor polish for consumers

Laboratory test

The following parameters must be documented:

Water resistance:

Test method: ASTM D 1793-92. Standard Test Method for Water Spotting of Emulsion Floor Polishes.

The result must be assessed in accordance with the following categories:

“Very high” No change relative to the point of departure

“High” Barely visible change

“Medium” Greying disappears during the course of two hours

Requirement level: “Medium”.

Slip resistance

Test method: ASTM D 2047-82. Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.

Requirement level: Friction of 0.5 or more.

Removal

Test method: ASTM D 1792-82. Standard Test Method for Long-Term Removability Properties of Emulsion Floor Polishes.

Test substrate: Vinyl Asbestos Tile as described in the test. Alternatively, Vinyl Quartz may be used.

Requirement level: The dry film must be completely removed after 75 cycles.

Field testing

A field test must be performed to document the effectiveness of the product. The field test must be performed by means of the application of the polish to a trafficked floor surface, after which the usage properties are assessed over time.

The test is used to determine gloss, levelling, recoatability, discolouration, powdering, cracking, wear, heel marks, soil resistance, banding, cleaning resistance, slip resistance and removability, compared with a reference product.

The field test must be performed on the floor materials for which the polish is intended/recommended.

The producer must state the reference product used. The reference product must have been available on the market for at least one year and must have been shown to have been of satisfactory quality.

Evaluation of the polish must be carried out by at least 3 observers with a relevant technical background in film-forming floor care products. The reference polish is assigned a value of 0 and forms the starting point in the evaluation. The following evaluation categories are used:

- 0 equal to the reference product
- +1 slightly better than the reference product
- +2 much better than the reference product
- 1 slightly worse than the reference product
- 2 much worse than the reference product

Results must be reported as an average from the observers.

The assessment may be given to one decimal place (e.g. 1.2).

Requirement level: The polish must be as good as or better than the reference product. This means a test result of minimum -0.4, equating to “equal to the reference product”.

Part 2 – Testing of wash polish and wash-and-wax care products for consumers

The cleaning and care properties are measured either visually or optically. Testing must show that the test product is better than or as good as a second equivalent product. The comparative product must be well established on the market in the country or countries in which the product will be marketed.

Requirement: An account must be provided of the test method used, test performers, test conditions (e.g. type of floor, type of soiling, cleaning method, etc.), results and the reason for the choice of comparative product.

Part 3 – Testing of polish removers and wax removers for professional use

Removal

Test method: ASTM D 1792-82 or other applicable version. Standard Test Method for Long-Term Removability Properties of Emulsion Floor Polishes.

Test substrate: Vinyl Asbestos Tile (as described in the test). Alternatively, Vinyl Quartz may be used.

Requirement level: The dry film must be completely removed after 75 cycles.

Appendix 9

Marketing of Nordic Ecolabelled floor care products

We hereby confirm that we are aware of the rules governing the use of the Nordic Ecolabel as described in the “Regulations for the Nordic Ecolabelling of products” of 22 June 2011 or later versions and we undertake that the marketing of the Nordic Ecolabelled floor care product will comply with these regulations.

We also confirm that we are familiar with the criteria for the Nordic Ecolabelling of floor care products.

We undertake to ensure that the persons marketing the ecolabelled floor care products within our company receive information on the criteria governing the ecolabelling of floor care products and “Regulations for the Nordic Ecolabelling of products” dated 22 June 2011 or later versions.

Place and date	Name of company
Contact	Tel.
Head of marketing	Tel.

A new confirmation must be submitted to Nordic Ecolabelling in the event of changes in personnel.