# Nordic Ecolabelling for Transport wash installations



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

## **Addresses**

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

#### Denmark

Ecolabelling Denmark Danish Standards Foundation Göteborg Plads 1, DK-2150 Nordhavn Fischersgade 56, DK-9670 Løgstør Tel. +45 72 300 450 info@ecolabel.dk www.ecolabel.dk

#### Norway

Ecolabelling Norway Henrik Ibsens gate 20 NO-0255 OSLO Tel. +47 24 14 46 00 info@svanemerket.no www.svanemerket.no

#### Finland

Ecolabelling Finland Urho Kekkosen katu 4-6 E Umhverfisstofnun FI-00100 HELSINKI Tel. +358 9 61 22 50 00 joutsen@ecolabel.fi www.ecolabel.fi

#### Sweden

Ecolabelling Sweden Box 38114 SE-100 64 STOCKHOLM Tel. +46 8 55 55 24 00 info@svanen.se www.svanen.se

#### Iceland

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

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# What is a Nordic Swan Ecolabelled transport wash installation?

Nordic Swan Ecolabelling of transport wash installations focus on the impact a transport wash has on the environment.

The aim of these criteria is to stimulate the development of resource-efficient and effective transport wash installations without hazardous discharges to air, soil or water. For that reason the requirements in the criteria concerns the following areas:

The physical conditions of the installation:

- Dimensions of wash installation and water treatment unit designed according to need
- Reduce emissions and water consumption
- Requirements regarding chemicals
- Emission controls and waste management
- Environmental management, including procedures for operation and maintenance

# Why choose the Nordic Swan Ecolabel?

Transport wash installations affect the environment through considerable consumption of water and chemicals, and through emissions of contaminated wash water. Wash water from transport wash installations contains metals and organic substances that have a negative impact on the water recipients, processes and sludge quality. Water consumption is particularly large in installations that do not re-circulate water.

Emissions of metals, oil and organic substances per washed transport vary a great deal from installation to installation. Much of the contamination derives from the dirt that is washed off the transport. Emissions of metals and organic substances can be significantly limited by choosing specifically adapted cleaning chemicals and tailoring the treatment technology to the washing method. This naturally assumes that the business has good procedures in place for the operation and maintenance of the wash installation.

The requirements for a Nordic Swan Ecolabelled transport wash installation stimulate the development of resource-efficient and effective transport wash installations without environmentally hazardous emissions to air, soil or water.

# What can carry the Nordic Swan Ecolabel?

Wash installations for passenger cars, buses, trucks\*, trains and other rail transport can be Nordic Swan Ecolabelled.

The wash installations must be automated and/or manual, pre-programmed installations.

Wash installations for containers and for use in other services, such as reconditioning and repairs, are not covered by the criteria. Graffiti wash installations are also not covered by the criteria.

The licensee of the Nordic Swan Ecolabelled transport wash installation is the owner of the wash installation (such as a petrol station). Total suppliers of washing units, chemicals and water treatment units may obtain a **basic licence** as defined below.

- Transport wash installations that apply for Nordic Swan Ecolabelling must meet all the requirements in the criteria document. Wash installations for trains and other rail transport are exempt from requirements O4 and O36.
- Where transport wash installations use washing equipment, washing chemicals, water treatment chemicals and water treatment units from a supplier with a basic licence (see explanation below), it must state on the licence which basic licence holder is being used. Transport wash installations that apply for a licence to cover washing equipment, washing chemicals, water treatment chemicals and water treatment units from a supplier with a basic licence must meet all the requirements in the criteria document, but are not required to submit documentation for each requirement where the supplier (basic licence holder) has already submitted such documentation. This applies to the following requirements:
  - Initial sampling (O5)
  - Water treatment chemicals (O9)
  - Chemical requirements (O10–O24)

#### **Basic licence**

A total supplier of washing units, chemicals and water treatment units may obtain a basic licence for their washing technology. If the supplier uses an external chemicals supplier, it must be stated on the licence which chemicals supplier the basic licence holder has a contract with, and which chemicals are tailored to the treatment technology and wash installation, and thus covered by the basic licence. When applying for a basic licence, the applicant must refer to a physical installation where the initial sampling has been conducted. The installation where the initial sampling took place must also be shown on the licence.

A basic licence may only be marketed with the Nordic Swan Ecolabel logo to potential purchasers of wash installations, and not users of wash installations.

\* Passenger car means a vehicle designed for the transportation of no more than 9 people including the driver. Truck means a vehicle larger than 3.5 tonnes, with or without trailer. The term bus denotes a vehicle that is registered as a bus for more than 9 persons.

A basic licence holder must meet all requirements in the criteria document, with the exception of the following requirements, which must be documented for the individual installations making use of a basic licence:

- O25 Automatic door closure
- All point score requirements (P1, P2, P3, P4 and P5), but must still report how many points are achieved in terms of water consumption (O7) and chemicals (O8).
- O27 Emptying system for toilets
- O28 Special vehicles

The licence holder always retains responsibility for ensuring that the transport wash installation is operated in agreement with the Nordic Ecolabelling criteria. Licences are issued to each individual wash installation. If a chain/group has several wash installations, a licence will be awarded to each wash installation, on condition that each wash installation meets the requirements.

# How to apply

#### Application and costs

For information about the application process and fees for this productgroup, please refer to the respective national web site. For addresses see page 3.

#### What is required?

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

The criteria for transport wash installation comprise a combination of obligatory requirements and point score requirements. The letter "O" and a number indicate obligatory requirements. These requirements must always be fulfilled. The letter "P" and a number distinguish point score requirements. Each requirement of this type gives a point score. These scores are then totalled. A minimum total score must be achieved to fulfill the licence constraints.

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
- $\boldsymbol{\rho}$  The requirement checked on site
- Enclose procedure in environmental and quality management system

To be awarded a Nordic Swan Ecolabel licence:

- All obligatory requirements must be fulfilled.
- Automated wash installations must achieve at least 6 points. Use the table in chapter 1.6 to calculate the points score.
- Manual wash installations must achieve at least 4 points. Use the table in chapter 1.6 to calculate the points score.

• Nordic Ecolabelling must inspect the site.

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

#### License validity

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.

#### **On-site inspection**

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

#### Queries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 3 for addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

# **1** Environmental requirements

### **1.1** Design of the wash installation

#### **01** Wash installation and water treatment equipment/system

There is to be a brief description of the transport wash installation, which includes:

- type of wash installation (manual self-service installations and/or automated installation, dimensioned for cars, buses, trucks, trains and other rail transport)
- washing method
- type of treatment unit (treatment technique)
- no. of transport that installation is designed for per day

For buses and trucks, water consumption and emissions are calculated in relation to the vehicle's length in metres. For trains and other rail transport, water consumption and emissions are calculated in relation to 12 metres of train. See O6.

• no. of transport washed per day

The waste water from the wash installation, (also in the case of overflow) is to be cleansed by a water treatment solution tailored to the washing method and washing volume. A sludge and oil separator with sand filter is to be included in the water treatment solution, with the exception of biological treatment units where an oil separator is not required.

Declaration from the suppliers of the water treatment solution and the chemicals that the wash installation and the water treatment solution are tailored to the washing method and washing volume, see Appendix 1.

#### O2 Technical description of the installation

The oil separator and water treatment solution tailored to the wash installation must not be used to treat surface water. The water treatment system may be used to treat waste water from a part of the site that has a use other than the washing of transport, provided this is approved by the supplier of the water treatment system. Toilets must not be connected to the water treatment system due to the risk of spreading infections.

A sketch of the wash installation is to be provided, showing the location of:

- the wash installation's water and drainage systems
- washing machines
- water treatment equipment
- sludge and oil separator, overflow
- sampling point, which must be easily accessible
- water meter connected to the wash installation
- Sketch of the wash installation showing the above points and description of the drainage system, in accordance with the requirement. If the water treatment system will be used to treat waste water from elsewhere on the site, a declaration must be made by the supplier to the effect that the treatment solution is designed to treat waste water from parts of the site with a use other than the washing of transport.

#### **03** Installations with re-circulated water

Wash installations with re-circulated water must be designed to keep anaerobic conditions in the water to a minimum. This may be done, for example, by pumping air into the water.

#### 04 Manual wash installations

Re-circulated water must not be used in manual wash installations.

In wash installations where customers wash their own cars manually, the choice and use of cleaning and care chemicals is to be controlled automatically and water consumption is to be time-controlled.

Declaration of how chemical choice, dosing and water consumption are controlled in manual wash installations. Declaration from the supplier that re-circulated water is not used for manual washing. Appendix 1 can be used.

### 1.2 Water consumption and emissions

#### 05 Initial sampling

When applying for the Nordic Swan Ecolabel, sampling is to be conducted at the installation to show that the emission requirements in O6 and the water consumption requirements in O7 are fulfilled.

For new wash installations that are awarded a licence outside the sampling period, an initial sampling must be conducted in the course of the next sampling period (1 November -30 April).

#### Sampling period:

The sampling is to be conducted during the period 1 November -30 April, and once at least 10% of the annual transport figure have been washed after the sludge and oil separator has been pumped out.

#### Sampling for water analysis:

The results of the sampling will form the basis for a Nordic Swan Ecolabel licence application and must show compliance with the emission requirements in O6.

In the event of a new application, water samples are to be taken using the automatic flow proportional method or manual random sampling. Two waste water samples are to be taken within the period 1 November -30 April, and there must be a minimum of one month between the two samples.

Licence applicants who use technology for which the total supplier already has a Nordic Swan Ecolabel licence (basic licence) do not need to conduct the initial sampling, since it has already been documented that the technology works to a satisfactory degree.

For basic licence holders and licensees who do not have an agreement with a basic licence holder, an annual self-assessment is to be conducted to calculate emissions under the terms of the requirements for self-assessment in O29.

#### Water consumption:

Water consumption is to be measured for seven days during the period 1 November – 30 April. In the case of initial sampling, the water consumption must be measured over the same period as the <u>water analysis</u> sampling.

A description/statement of the measures taken to avoid anaerobic conditions in systems with re-circulated water.

#### **Reassessment:**

Wash installations that are due for reassessment must conduct a new initial sampling when renewing their licence. This applies to installations with a basic licence and installations that have a licence of their own that is not associated with a basic licence.

Wash installations that make use of a basic licence are exempted from the requirement regarding the initial sampling, including during reassessments, since this will already have been conducted by the basic licence holder.

Description of compliance with the requirement, see Appendix 2 and 6.

#### 06 Emissions from the wash installation

Emissions to the drainage system from automated and manual wash installations must not exceed the values specified in the table below.

The sampling is to be conducted during the period 1 November -30 April, and once at least 10% of the annual transport figure have been washed after the sludge and oil separator has been pumped out.

Water samples are to be taken using the automatic flow proportional method or manual random sampling. Two waste water samples are to be taken within the period 1 November -30 April, and there must be a minimum of one month between the two samples.

The emissions must be calculated as monthly average values. For information on water sampling, see Appendix 6 "Explanations, analysis and control".

	Emission requirements for passenger car washes		Emission requirements for bus and truck washes		Emission requirements for trains and other rail transport	
	Finland, Iceland, Norway and Sweden	Denmark	Finland, Iceland, Norway and Sweden	Denmark	Denmark, Finland, Iceland, Norway and Sweden	
Σ Pb, Ni, Cr	5 mg/car	5 mg/car	15 mg/vu	15 mg/vu	5 mg/12 metres of train	
Cd	0.05 mg/car	0.025 mg/car	0.15 mg/vu	0.075 mg/vu	0,1 mg/12 metres of train	
Zn	50 mg/car	50 mg/car	150 mg/vu	150 mg/vu	50 mg/12 metres of train	
Cu	10 mg/car	10 mg/car	30 mg/vu	30 mg/vu	30 mg/12 metres of train	
Oil	1.5 g/car	0.75 g/car	4.5 g/vu	2.25 g/vu	2,5 g/12 metres of train	
Sb	-	-	-	-	2 mg/12 metres of train	

#### **Table O6 Emissions**

One vehicle unit (vu) is a vehicle, truck or bus, with a length of 12 metres.

- 0.5 vu is a van or minibus, for instance, with a length of about 6 metres.

- 1.5 vu is, for instance, an articulated bus or a semi-trailer rig with a length of about 18 metres.

- 2 vu is a truck plus trailer with a length of about 24 metres.

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Test results. The water analysis shall be carried out by a competent laboratory according to test methods specified in Appendix 6. The sampling must take place at a point after the water treatment equipment but before the connection to the municipal waste water network.

#### P1 Emissions of phthalates (1p)

Wash installations that take measurements of the phthalates di-2-ethylhexyl phthalate (DEHP), dibutyl phthalate (DBP), butyl benzyl phthalate (BBP) and diisobutyl phthalate (DIBP) are awarded 1 point. Water samples must be taken both before and

after the water treatment unit in order to measure the phthalate content before and after treatment with the exception for biological treatment where water samples are taken after treatment.

Test results using the GC-MS method (Gas Chromatography-Mass Spectrometry) with detection limit  $\leq 0.5$  micrograms/litre.

#### **O7** Water consumption

Water consumption is calculated as the number of litres of fresh water consumed per wash or 12 metres of train, calculated as an annual average, and must not exceed the values in the tables below. Points will be given for water consumption that is lower than the limit values in table O7. See section 1.6 for a summary of the points.

Water consumption is to be measured and logged on a monthly basis.

For information on calculating water consumption, see Appendix 6 "Explanations, analysis and control".

	Passenger ca (litres/wash	assenger cars Trucks, buses itres/wash) (litres/wash)		Trains and other rail transport (litres/12 metres of train)	
	Automated	Manual	Automated	Manual	Automated
Finland, Iceland, Norway and Sweden	90	70	270	210	130
Denmark	70	50	210	150	130

#### Table 07 Water consumption

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Documentation showing the calculation of water consumption, see Appendix 6. For newly built installations, water consumption must be documented in a declaration from the supplier of the wash installation.

### 1.3 Chemicals

Chemical products used to clean transport and wash installations must fulfil the chemical requirements O10–O24. Water treatment products cannot be Nordic Swan Ecolabelled, but must meet the requirements in O8.

For car care products and chemicals, used for cleaning of transport and wash installation, that are not Ecolabelled, all of the requirements in O8-O24 must be documented and met in order to be used in en Ecolabelled transport wash installation.

Water treatment chemicals must be accounted for in O8 and O9.

Unless otherwise specified, the term 'constituent substances' refers to all substances in products, including additives in the raw materials (e.g. preservatives and stabilisers), but not impurities from primary production. Impurities comprise residues from primary production that may be found in the laundry detergent at concentrations below 100 ppm (0.0100% by weight, 100 mg/kg) Substances that are added to an ingredient, deliberately or for a purpose, are not regarded as impurities, regardless of concentration. Impurities at concentrations greater than 1.0% in the ingredient are regarded as constituent substances. Substances/products known to be liberated by a constituent substance are also regarded as constituent substances.

#### 08 Overview of chemicals

An overview of the chemicals used in operating the wash installation is to include information such as the manufacturer/supplier, function (degreasing, wax, etc), quantity and whether the product is Nordic Swan Ecolabelled. The licence number is to be stated for all ecolabelled products.

30% of the car care products used in the wash installation must be Nordic Swan Ecolabelled. Products containing oxalic acid (CAS no. 6153-56-6) for use in removing surface rust from trains and other rail transport are excluded from the calculation of Nordic Swan Ecolabelled products. The proportion of Nordic Swan Ecolabelled car care products (%) is also to be calculated (as active substance, which means content without water). Points are awarded depending on the percentage of Nordic Swan Ecolabelled products used in the operation. See section 1.6 for more about points scoring.

For chemicals that are not Nordic Swan Ecolabelled, at least 95% by volume of the total quantity of chemicals used on an annual basis (both Nordic Swan Ecolabelled and non-Nordic Swan Ecolabelled products) must meet requirements O9–O24. Documentation for O9–O24 must be obtained from the chemicals supplier and sent to Nordic Ecolabelling.

- Overview of all chemicals, see Appendix 3, and calculation of percentage of Nordic Swan Ecolabelled products.
- For car care products and chemical products that are not Nordic Swan Ecolabelled, the supplier must submit a declaration to Nordic Ecolabelling, see Appendix 4.

#### **09** Water treatment chemicals – all wash installations

Chemical products used for water treatment (e.g. chemical separation, pH regulation, combating microorganisms) must not contain organochlorine substances or reactive chlorine compounds that may form organochlorine metabolites.

Declaration from the supplier of the water treatment chemicals that the products or methods do not contain organochlorine substances or reactive chlorine compounds that may form organochlorine metabolites, in accordance with appendix 11.

#### 010 Fragrance in chemicals in manual installations

- Chemicals used in manual installations must not contain fragrance.
- Duly completed declaration from the manufacturer, see Appendix 8.

#### 011 Formulation – non-ecolabelled chemicals

At least 95% by volume of the total amount of non-ecolabelled chemicals, based on annual consumption, is to be documented with a complete formulation. There must be a safety data sheet for the product and all its constituent substances.

The formulation shall include the trade name, chemical name, quantity and CAS number for each constituent substance. The water content of the ingredients and the function of each ingredient are also to be stated.

Complete formulation in line with the requirement and safety data sheet/product data sheet for the product and each constituent substance, in accordance with Directive 2001/58/EC.

#### 012 Classification of the product

Products that are to be used in Nordic Swan Ecolabelled wash installations must not have a classification, as stated in the table O12, under the CLP Regulation (EC) No 1272/2008 as amended.

#### Table 012 Classification of the product

Classification	CLP Regulation
Toxic to aquatic organisms	H400
Category Acute 1	H410, H411
Chronic 1-4	H412, H413
Hazardous to the ozone layer	H420
Acute toxicity	H300, H310, H330
Acute toxicity 1-4	H301, H311, H331
	H302, H312, H332
Specific target organ toxicity	H370, H371
(STOT) with single and	H372, H373
repeated exposure STOT SE 1-2	
STOT SE 1-2 STOT RE 1-2	
Respiratory or skin sensitising	H334, H317
Category 1	
Skin corrosion or irritation	H314
Skin Corr. 1A	Exception:
	Products for professional use for closed, automatic wash installations may be classified as H314 Skin Corr. 1A if the classification concerns pH.
Explosive	H200, H201, H202
Category 1.1-1.6	H203, H204, H205
Organic peroxides	H242
Flammable liquids Flam. Liq. 1-2	H224, H225
Pyrophoric liquids and solids	H250

Label and data sheet for the product in accordance with European legislation.

#### 013 Super-concentrates

Super-concentrates are defined as products that contain <10% water by volume.

Super-concentrates must otherwise meet all other requirements for classification as set out in O12 above, in useable form (at maximum recommended dosage).

The packaging for super-concentrates must be designed in such a way that there is no risk that the user will come into contact with the product. For super-concentrates a technical instruction and user manual must be available describing how to avoid contact with the product.

- Declaration on classification of the product in useable form (at maximum recommended dosage) showing that the requirement is met.
- Declaration from the manufacturer regarding packaging design, as well as a technical description and user manual, describing how the user can avoid contact with the product.

#### 014 CMR-substances

None of the constituent substances must be classified as carcinogenic, mutagenic or toxic to reproduction (CMR) with the following hazard phrases:

H360

H361 H362 H350 H351

H340

H341

The requirement also applies for substances that may give off substances with the above classifications.

NTA (nitriloacetate, CAS no. 139-13-9) as synthesis residue/impurity in complex agents are exempted from the requirement. Concentrations of NTA must not exceed 0,010% in the product.

Declaration from the manufacturer or ingredient supplier of the car care product, see Appendix 8.

#### 015 Nanomaterials/particles

Nanoparticles (from nanomaterials\*) must not be actively added to chemical products.

\*The definition of nanomaterials follows the European Commission's definition as issued on 18 October 2011: "A nanomaterial is a natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions is in the size range 1–100 nm." Polymer emulsions are not counted as a nanomaterial.

Declaration from the manufacturer of the car care product, see Appendix 8.

#### 016 Organic substances, degradability

All organic substances and their degradation products shall be readily aerobically degradable in accordance with OECD Guidelines No. 301 A–F or other equivalent methods (surfactants are exempted from the requirement for the 10-day window) and anaerobically degradable\* in accordance with ISO 11734 or other similar method.

The following compounds are exempted from the degradability requirement:

- non-chlorinated polymers
- non-chlorinated natural and synthetic waxes
- preservatives
- iminodisuccinate
- fragrances (see separate requirements in O18, O19 and O20)
- dyes in products for professional use (see separate requirements in O23)
- denaturing agents in ethanol

\* Wash installations that are closed-loop wastewater systems are exempt from the requirement for anaerobic degradability. A closed-loop wastewater system means that effluent is not discharged to municipal wastewater treatment plants or recipient.

- Degradability for all organic substances in the car or boat care product shall be documented in accordance with the DID list. If the substance is not on the DID list, other documentation in accordance with the section on degradability (Appendix 6) shall be submitted.
- For wash installations that are closed-loop wastewater systems: Name of the waste management facility handling the waste products and a description of what happens to the waste products.

#### **O17** Substances that must not be present in the products

The following substances must not be present in the products:

- halogenated and/or aromatic solvents
- organic chlorine compounds and reactive chlorine
- dyes in products for non-professional use
- substances on the Candidate List\*
- substances meeting the PBT criteria (persistent, bioaccumulative and toxic substances)\*\*
- very persistent and very bioaccumulative organic substances\*\*
- substances considered as a potential endocrine disrupting chemical (EDC), category I or II, according to the European Union's reports on endocrine disruptors (http://ec.europa.eu/environment/endocrine/documents/final\_report\_2007.pdf) (Annex L, page 238 onwards)
- linear alkylbenzene sulphonates (LAS)
- alkylphenol ethoxylates (APEO) or alkylphenol derivatives (APD)
- quaternary ammonium compounds, which are not readily degradable
- benzalkonium chloride
- siloxanes D4, D5 and HMDS
- EDTA, DTPA
- poly and perfluorinated alkylated substances (PFAS)

\*The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table \*\*PBT and vPvB substances are defined in Annex XIII of REACH (Regulation (EC) No 1907/2006). Substances that meet or substances that form substances that meet the PBT or vPvB criteria can be found at: http://esis.jrc.ec.europa.eu/index.php?PGM=pbt. Substances "deferred" or substances "under evaluation" are assumed not to have PBT or vPvB properties.

Duly completed declaration, see Appendix 8.

#### 018 Fragrances – IFRA

The use of fragrances must follow IFRA's guidelines. The guidelines of IFRA (International Fragrance Association) can be found at www.ifraorg.org/guidelines.asp

Declaration from the manufacturer of the car care product and from the fragrance manufacturer that the use of fragrances follows IFRA's guidelines, see Appendix 8 and Appendix 9.

#### 019 Musk compounds

Musk compounds and polycyclic musk compounds are not permitted in car care products. This includes the following substances:

Compound	CAS number
Musk xylene	81-15-2
Musk ambrette	83-66-9
Musk moskene	116-66-5
Musk tibetine	145-39-1
Musk ketone	81-14-1
ННСВ	114109-62-5, 114109-63-6, 1222-05-5, 78448-48-3 and 78448-49- 4
AHTN	1506-02-1 and 21145-77-7

Declaration by the manufacturer of the car care product and by the fragrance manufacturer that the substances listed in the requirement are not present in the product, see Appendix 9.

#### **O20** Allergenic fragrance substances

The following allergenic fragrance substances are not permitted in car care products.

#### Table O20

Allergenic fragrance substances	CAS-number
Amyl cinnamic	122-40-7
Benzyl alcohol	100-51-6
Cinnamic alcohol	104-54-1
Citral	5392-40-5
Eugenol	97-53-0
Hydroxycitronellal	107-75-5
Isoeugenol	97-54-1
Amylcinnamic alcohol	101-85-9
Benzyl salicylate	118-58-1
Cinnamic aldehyde	104-55-2
Coumarin	91-64-5
Geraniol	106-24-1
Hydroxyisohexyl 3-cyclohexen carboxaldehyde	31906-04-4
Anisyl alcohol	105-13-5
Benzyl cinnamate	103-41-3
Farnesol	4602-84-0
Buthylfenyl methylpropional	80-54-6
Linalool	78-70-6
Benzyl benzoate	120-51-4
Citronellol	106-22-9
Hexyl cinnamic	101-86-0
d-Limonene	5989-27-5
alfa isometyl ionone	127-51-5
Methyl heptine carbonate (methyl 2-octynoat)	111-12-6
Oakmoss extract	90028-68-5
Treemoss extract	90028-67-4

Fragrance substances in professional products for automatic wash installations are excepted from the requirement regarding classification H334 and/or H317 if the packaging designed in such a way that there is no risk that the user will come into contact with the product.

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Declaration by the manufacturer of the car care product and by the fragrance manufacturer that none of the allergenic fragrances are present in the product, see Appendix 9.

#### **O21** Preservatives

Preservatives included in products or in constituent substances must not be potentially bioaccumulative. Preservatives are not considered bioaccumulative if the following criteria are met:

Classification	OECD 107 or 117	OECD 305	
Not bioaccumulative	logK <sub>ow</sub> < 4.0	BCF < 500	

If there is data on both BCF and logK<sub>OW</sub>, the value for the highest BCF measured shall be used.

 $\square$  Documentation for BCF or logK<sub>OW</sub>.

#### **O22** Volatile organic compounds (VOC)

The product may only contain a limited amount of volatile organic compounds (VOC) which could contribute to the formation of photochemical ozone, measured as POCP (Photochemical Ozone Creation Potential).

Products that have a VOC content of < 6.0% do not need to undergo the POCP calculation, since the requirement will be fulfilled even in a worst-case scenario.

The maximum content of VOC in the product is 60 g ethylene equivalents/kg product.

 $\sum (m_1 \cdot POCP_1 + m_2 \cdot POCP_2 + \ldots)$ 

 $\leq 60 \text{ g } C_2 H_2 \text{ ekvivalenter/kg}$ 

m produkt

 $m_i$  – mass in grams of VOC<sub>i</sub> in the product

 $POCP_i - VOC_i$  substance's factor in Table 1 of Appendix 10 in the criteria for car and boat care products, version 5. The POCP value for each constituent substance/ingredient must be entered in the formula.

mprodukt is the mass of the product in kg

Organic compounds are defined as VOC if the vapour pressure > 0,01 kPa ved 20 °C.

If there is no data on vapour pressure for an organic substance with a boiling point  $< 250^{\circ}C$  at 101.3 kPa (1 atm), the organic substance is to be included in the POCP calculation.

POCP: Photochemical Ozone Creation Potential (photochemical ozone is a main constituent of smog).

In the case of solvents not included on the list in Appendix 10, POCP values from tests may provide the basis for calculating the permitted VOC content, alternatively the worst case for the VOC group may be used.

In the case of super-concentrates, the POCP calculation must be performed using the useable form (at maximum recommended dosage).

Product formulation and declaration of fulfilment, including calculation of VOC content.

#### 023 Dyes in professional products

Pigments in dyes must not contain lead, cadmium, mercury, hexavalent chromium, aluminium or copper.

All dyes present in the product as an ingredient or in a raw material must be approved for use in foodstuffs in any Nordic country. Alternatively, the dye must not be bioaccumulative. Dyes are not considered bioaccumulative if the following criteria are met:

Classification	OECD 107 or 117	OECD 305	
Not bioaccumulative	$\log K_{\rm OW} < 4.0$	BCF < 500	

If there is data on both BCF and  $logK_{OW}$ , the value for the highest BCF measured shall be used.

- Declaration that the requirement is fulfilled.
- Specification of E-number (number assigned on approval of foodstuff), alternatively LogK<sub>ow</sub> or BCF.

#### O24 PVC in packaging

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

Declaration from the manufacturer. Declaration of the type of packaging used.

## 1.4 Energy

Basic licence holders are exempted from requirement O25 and have no opportunity to accrue points in requirements P2–P4.

#### 025 Automatic door closure

Enclosed wash installations with doors in and out must have a system of automatic door closure that operates during periods where heating is required to ensure satisfactory operation.

Wash installations with fixed washing equipment, where trains and other rail transport are driven through during the washing process, are exempt from the requirement.

**P** This will be checked during an on-site inspection.

#### P2 Energy reporting (2p)

2 points are awarded for reporting calculated annual values for energy consumption by energy type (electricity, district heating, oil, etc).

Energy report with calculations.

#### P3 Automatic light control (1p)

Automatic light control in the wash installation earns 1 point.

 $\boldsymbol{\rho}$  This will be checked during an on-site inspection.

#### P4 Energy saving measures (max. 2p)

Introduction of energy measures that considerably reduce energy consumption (points are given on approval by Nordic Ecolabelling). 1 point is given per measure, up to a maximum of 2 points.

Declaration according to the requirement.

## 1.5 Special requirements and self-assessments

Basic licence holders are exempted from requirements O27 and O28.

#### O26 Sludge emptying

Tanks and containers in water treatment units with re-circulated water must be filled with clean water. When emptying the sludge, it must be guaranteed that the sludge tanker truck is not contaminated with heavy metals or bacteria.

Waste from oil and sludge separators and other contaminants from the water treatment unit must be processed by a facility that is approved by the authorities to handle this type of waste.

Declaration, see Appendix 5, that the sludge tanker truck is not contaminated with heavy metals or bacteria before the sludge is emptied, or see Appendix 5 – Emptying systems for toilets. Declaration that waste from oil and sludge separators and other contaminants from the water treatment unit are processed by a facility that is approved by the authorities to handle this type of waste.

#### 027 Emptying system for toilets

The requirement applies to wash installations for buses, trucks, trains and other rail transport.

If the wash installation is intended to wash installations for buses, trucks, trains and other rail transport with toilets, there must be an emptying system in place that ensures the toilet waste is not emptied in a way that can contaminate the re-circulated water. If there are no facilities for emptying toilets, the customer must be informed that their toilet cannot be emptied at the installation due to the dangers of spreading infections.

Description of the emptying system for toilets and description of how customers are informed if there is no emptying system available.

#### **O28** Special vehicles

When vehicles requiring special hygiene are washed, such as vehicles covered by EC 852/2004, only fresh water may be used, i.e. no re-circulated water. However, the total emission values per vehicle must be met. If the plant washes both vehicles that demand extra hygiene and vehicles that may be washed with re-circulated water, the plant shall be equipped with a so-called double system. Double system means that the plant can temporarily be switched over to using fresh water only.

Description of the emptying system for toilets and description of how customers are informed if there is no emptying system available.

Declaration on how the vehicles requiring special hygiene are washed.

#### 029 Self-assessment

Self-assessment and record-keeping shall be performed in accordance with a selfassessment programme comprising the following:

- The figures for fresh water consumption and number of transport are to be recorded each month.
- The annual average of fresh water consumption is to be calculated as number of litres per wash or 12 metres of train.
- Complaints of a serious nature are to be recorded.

This record is to be submitted to Nordic Ecolabelling once a year.

For basic licence holders and licensees who are not linked to a basic licence, the self-assessment programme must also include:

- Emission samples are to be taken once a year during the period 1 November 30 April.
- Emission values to be calculated per wash or 12 metres of train for ∑ Pb, Ni, Cr plus Cd, Zn, Cu, Sb\* and oil.

\* Only applies for wash installations for trains and other rail transport.

For basic licence holders, emission samples are to be taken once a year from the reference installation that is included in the basic licence and 10% of installations that make use of the basic licence, with the latter amounting to a minimum of one installation and a maximum of four installations per year.

For licensees who are not linked to a basic licence, emission samples are to be taken every two years.

This information is to be compiled in an annual report and submitted to Nordic Ecolabelling by 30 April each year. Appendix 2 can be used for the self-assessments.

#### P5 Waste (1p)

1 point may be given to wash installations that sort the packaging that cleaning and water treatment chemicals are delivered in and send it to a recycling plant for re-use or material recovery.

This requirement does not apply to basic licence holders.

Invoice or copy of agreement stating that waste fractions are sent for re-use or material recovery.

## 1.6 Points summary

**Automated wash installations** must achieve at least **6 points** to be Nordic Swan Ecolabelled.

**Manual wash installations** must achieve at least **4 points** to be Nordic Swan Ecolabelled.

Points are given for the following requirements:

- **P1**: Emissions of phthalates (1p)
- **P2:** Energy reporting (2p)
- **P3**: Automatic light control (1p)
- **P4:** Energy saving measures (2p)
- **P5:** Waste (1p)

In addition, points are given for:

Lower water consumption than the minimum requirement (**O7**) (max 2p) A higher % of Nordic Swan Ecolabelled products (**O8**) (max 3p)

#### **Basic license**

For basic licence holders there is no requirement concerning total points, but the basic licence holder must document the number of points achieved with regard to:

- Water consumption (O7)
- % Ecolabelled products (O8)

All licensees must use at least 30% Nordic Swan Ecolabelled car care products in their installations.

Requirement	Result achieved	Possible points			Points achieved	
DEHP measurement ( <b>P1</b> )	Before treatmen					
Water consumption		Passenger car wash:				
(07)	litres/washed	F, I, N and S:	65 litre 45 litre	<ul> <li>Interview of the second se</li></ul>		
	transport	DK:	50 litre 35 litre	•		
		Manual installations:	60 litres: <b>1 p</b> (Nordic) 40 litres: <b>1 p</b> (Denmark)			
		Wash installations for buses and trucks				
		F, I, N and S:	200 litres: <b>1 p</b> 135 litres: <b>2 p</b>			
		DK:		es: <b>1 p</b> es: <b>2 p</b>		
		Manual installations:		es: <b>1 p</b> (Nordic) es: <b>1 p</b> (Denmark)		
		Wash installations for	r trains a	nd other rail transport		
		DK, F, I, N and S:	100 litres: <b>1 p</b> 65 litres: <b>2 p</b>			
Chemicals ( <b>08</b> )		<ul> <li>&gt; 76% ecolabelled products: 3 p</li> <li>51-75% ecolabelled products: 2 p</li> <li>&lt; 31-50% ecolabelled products: 1 p</li> </ul>				
Energy reporting ( <b>P2</b> )		Calculated annual values for energy consumption by energy type (electricity, district heating, oil, etc): 2 p				

Automatic light control ( <b>P3</b> )	Automatic light control: <b>1 p</b>	
Energy saving measures ( <b>P4</b> )	Introduction of energy measures that considerably reduce energy consumption (points are given on approval by Nordic Ecolabelling). <b>1 p</b> is given per measure, up to a maximum of <b>2 p</b> .	
Waste ( <b>P5</b> )	Sorting of packaging that cleaning and water treatment chemicals are delivered in and sending to a recycling plant for re-use or material recovery: <b>1</b> p	
Total no. of points:		points

### 2 Environmental management including regulatory requirements

#### O30 Environmental policy

The company must draw up an environmental policy that sets out the company's level of ambition and the environmental goals that the company is committed to achieving. The environmental policy must be signed by the CEO/MD.

Copy of the procedure in the environmental management system.

#### 031 Organization and responsibility

An organisational chart shall be provided, showing areas of responsibility and functions. The information shall also include a contact person for the Nordic Swan Ecolabel, and the people responsible for purchasing, marketing, operating the wash installation and staff training.

Copy of the procedure in the environmental management system.

#### 032 Procedures and instructions

Each wash installation shall have documented procedures and instructions that ensure that the Nordic Ecolabelling criteria are fulfilled regarding:

- daily checks on the washing and water treatment units, including checking that the water treatment equipment is functional and operates when the wash installation is in use
- implementation of self-assessments
- operation and maintenance of the wash installation
- reporting unforeseen non-conformities and planned changes (for example change of chemicals) to Nordic Ecolabelling

The wash installation must also have procedures to ensure satisfactory protection against the transmission of Legionella, E. coli and other pathogens.

The procedures shall contain the following text:

• In the event of a stoppage lasting longer than 30 days, water samples shall be taken and submitted for analysis. The installation cannot be put back into operation until the analysis results show the level of harmful bacteria is below a safe level.

The wash installation must not be used when the water treatment unit is out of service.

Measures such as sterilisation or disinfection should also be considered if the device or parts of the device have been significantly changed or opened for maintenance purposes in a way that might have allowed or might potentially allow infection to occur. Declaration according to the requirement.

#### 033 Training

To ensure satisfactory operation of the installation, it is important that employees and personnel involved in daily operations have received training in how to run the installation.

Description of staff training and skills.

#### O34 Storage and handling of chemicals

Chemicals are to be stored securely and in line with the requirements in the safety data sheets.

Floor drains in chemical storage rooms must be connected to the water treatment system. Alternatively, the chemicals must be contained separately, for example in a bund that keeps the chemicals separate. The bund must be able to contain the volume of the largest container plus 10% of the sum of the other stored volumes.

The packaging for chemical products must be designed such that the user does not risk coming into contact with the product during dosing to make dosing easier or when replacing dosing pumps.

- A description of the way in which chemicals are stored and the way in which the drain in the floor of the chemical room is constructed.
- Declaration of the packaging design.

#### O35 Safety data sheets

Safety data sheets for the chemical products used for cleaning and water treatment must be readily available at the installation and they must be easily accessible to the people working there.

Declaration of where the safety data sheets are kept.

#### O36 Information on use of customers' own products/degreasers

The customers must be informed that use of their own products/degreasers is not permitted. This regards both manual and automatic wash installations.

**P** Checked on site.

#### 037 Quality

After being washed in the wash installation the transport shall be as clean as if it had been washed in some other wash installation that uses equivalent methods of washing.

Report on complaints.

#### 038 Legislation and regulations

The business must comply with environmental laws and regulations in the country in question. This means, for example, that the discharge of water to the drainage system must comply with the environmental authority's instructions. Procedures must be in place to interpret which requirements the environmental legislation demands and to monitor the installation's compliance with the requirements.

No documentation is required, but Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.

#### **O39** Purchasing procedures

Basic licence holders and licensees who do not make use of a basic licence must have chemical purchasing procedures which ensure that the products are Nordic Swan

Ecolabelled or that they meet the Nordic Ecolabelling requirements for chemicals in wash installations.

Basic licence holders and licensees who do not make use of a basic licence must include procedures for purchasing new equipment that ensure more energy-efficient solutions.

Copy of the procedure in the environmental management system.

#### 040 Technical service

Documented procedures or service agreements that ensure regular checks and servicing.

Servicing records are to be retained and kept readily available.

- Copy of procedures in the environmental management system or alternatively a service agreement showing how checks are carried out.
- **P** Servicing records, test records and other records checked on site.

#### 041 Customer information

Customers must be informed about the fact that they are using a Nordic Swan Ecolabelled transport wash installation and what that entails.

Copy of procedures in environmental management system describing how the customers are informed.

#### 042 Documentation from the applicant

A copy of the application is to be accompanied by the supporting fact sheets and calculation data (including test reports, documents from supplier and so on) required as part of the application.

**P** Checked on site.

#### O43 Annual follow-up

Each year (by 30 April), the environmental requirements shall be followed up by the person responsible for the Nordic Swan Ecolabel licence and then submitted to Nordic Ecolabelling.

- $\square$  The following must be sent in:
  - Annual average water consumption (O7)
  - Number of washed transport in a year
  - Emissions calculated per wash or 12 metres of train (O6) (A licensee holder who uses a basic license is exempted from this requirement).
  - Overview of chemicals (O8)

#### 044 Marketing

The requirement is removed as decided by the Board of Directors 17 November 2014.

# **Regulations for the Nordic Ecolabelling of services**

To easily identify Nordic Swan Ecolabelled services, the licence number and a descriptive sub text shall always accompany the Nordic Swan Ecolabel.

The descripted sub text for 074 Transport wash installations is: Wash installation

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

# Follow-up inspections

Nordic Ecolabelling may decide to check whether transport wash installation 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 wash installation 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.

# **Criteria version history**

Nordic Ecolabelling adopted version 3.0 of the criteria for vehicle wash installations on 23 October 2013. The criteria are valid until 31 October 2018.

On 17 November 2014 the Board of Directors decided to remove requirement O44 Marketing. This has been done as an editorial change, the version has not been changed.

Nordic Ecolabelling's Criteria Group decided on 14 December 2017 to prolong the criteria to 31 December 2020. The new version is called 3.1.

On 15 January 2019 Nordic Ecolabelling decided to prolong the criteria to 31 December 2021. On 13 March 2019 Nordic Ecolabelling decided to extend the criteria with wash installations for trains and other rail transport. The new version is called 3.2.

On 16 December 2019 Nordic Ecolabelling decided to prolong the criteria to 30 June 2022. The new version is called 3.3.

On 08 December 2020 Nordic Ecolabelling decided to prolong the criteria to 31 December 2023. The new version is called 3.4.

On 12 April 2021 Nordic Ecolabelling decided to adjust requirement O16 so that wash installations with closed-loop wastewater systems are exempt from the requirement for anaerobic degradability. The new version is called 3.5.

On 29 November 2022 Nordic Ecolabelling decided to prolong the criteria to 31 December 2024. The new version is called 3.6.

# New criteria

- Consider to set requirements for water treatment unit's efficiency. Gather data to find out how much % organic material a water treatment unit has the capacity to remove (calculated as reduced COD concentrations in waste water relative to the inlet water).
- Assess the potential to set requirements for cleaning performance in relation to the washing capacity of the equipment.
- Regard the possibility to require total energy consumption for the wash installation.
- Tightening of the requirements regarding emissions from the wash installation.
- Stricter requirements regarding volatile organic compounds (VOC) in the car care products.
- Assess whether it is relevant to set requirements concerning noise pollution from wash installations.
- Investigate the materials used in the brushes and whether they are made of PVC, and assess whether it is relevant to set requirements concerning the brush materials.

## Appendix 1 Coordination of suppliers to wash installation (01)

Wash installation:

Address:

#### **Description of wash installation:**

Type of installation:	□ Automated	🗌 Manual (self	-service)
Designed for:	Passenger cars	□ Buses	Trucks
	□ Trains and other	rail transport	
Wash method:	□ High-pressure	$\Box$ Brush wash	Other
No. of transport that installation is designed for per day (24h):	Number:		
Max no. of transport washed per day (24h):	Number:		

#### Suppliers to the wash installation:

#### Supplier of wash installation (equipment):

Product name of wash installation:

Type of installation

For manual wash installations – is re-circulated water used for manual washing? (O4)

#### Supplier of water treatment unit:

Product name of water treatment unit:

Type of treatment:

Is the water treatment system designed to accommodate waste water from areas with uses other than washing transport?

Is the sludge and oil separator part of the water treatment system?

## Supplier of washing and water treatment chemicals:

Washing and water treatment products:

# 

🗌 Yes 🗌 No



🗆 Yes 🗆 No

🗆 Yes 🗆 No

#### **Declaration from suppliers:**

Declaration that the above adapted wash method, water treatment technology and chemicals are compatible with the stated volume of washes described above.

Supplier of wash installation (equipment):
Signature:
Name (BLOCK CAPITALS):
Date:

#### Supplier of water treatment unit:

Signature:

Name (BLOCK CAPITALS):

Date:

Supplier of washing and water treatment chemicals:

Signature:

Name (BLOCK CAPITALS):

Date:

# Appendix 2 Report – initial sampling (05)

Wash installation:	
Address:	

Estimated no. of washes per year:	
Max no. of transport per day:	
Date of sampling:	
Date of latest sludge emptying:	
Number of transport washed after latest sludge emptying and before sampling:	

Sampling was performed:

 $\square$  automatic flow proportional

 $\Box$  other methods (specify)

# Table 1: Declaration of number of washes and water consumption during the sampling period

	D 1	D 2	D 3	D 4	D 5	D 6	D 7	Σ
No. of transport washed								
Total water consumption (litres)								
Water consumption per transport (I/ transport)								

#### Table 2: Report on emissions during the sampling period

(Requirement O6)	Concentration in waste water	Emission per wash or 12 metres of train	Total emissions during the week
$\Sigma$ Lead (Pb) + Nickel (Ni) + chromium (Cr)	mg/l	mg/wash or 12 metres of train	g
Cadmium (Cd)	mg/l	mg/wash or 12 metres of train	mg
Zinc (Zn)	mg/l	mg/wash or 12 metres of train	g
Copper (Cu)	mg/l	mg/wash or 12 metres of train	g
Oil index	g/l	g/wash or 12 metres of train	g
Antimony (Sb)	mg/l	mg/12 metres of train	mg
DEHP (optional)	Before treatment: After treatment:		

Comments:

#### Signature of analysis laboratory:

Laboratory name:

Signature:

Name (BLOCK CAPITALS):

Date:

Place:

# Appendix 3 Overview of chemicals (08)

The following declaration may be used by applicants when applying for a licence for a Nordic Swan Ecolabel for transport wash installations.

The declaration relates to the wash installation with the following name:

Wash installation:	
Address:	
Supplier/importer:	

Car care products, chemicals and water treatment chemicals used in the wash installation must be listed in the table below.

<b>Overview of the chemicals</b>	used in the wash installation
----------------------------------	-------------------------------

Name of chemical	Manufacturer/supplier	Function (degreasing, wax, etc)	Ecolabelled (licence number)

#### Signature of the supplier

Date:	Phone:
Contact person:	E-mail:
Signature:	

In the event of any changes to the use of chemicals, a new declaration must be submitted to Nordic Ecolabelling.

## Appendix 4 Declaration of chemicals that are not Nordic Swan Ecolabelled (08)

Manufacturer:

Trade name:

#### Familiarity with the criteria for transport wash installations

We have familiarised ourselves with the criteria for Nordic Ecolabelling of transport wash installations and are well acquainted with the requirements regarding chemicals used in Nordic Swan Ecolabelled wash installations as described in the section on chemicals in the criteria document.

 $\Box$  Yes  $\Box$  No

#### **Fulfilment of requirements**

The abovementioned product fulfils all requirements for chemicals as stated in the criteria for Nordic Ecolabelling of wash installations. These requirements comprise:

- Classification of the product (**O12**)
- Super-concentrates (**O13**)
- CMR substances (**O14**)
- Nanomaterials/particles (**O15**)
- Organic substances, degradability (**O16**)
- Substances that must not be present in the products (O17)
- Fragrances IFRA (**O18**)
- Musk compounds (**O19**)
- Allergenic fragrances (**O20**)
- Preservatives (**O21**)
- Volatile organic compounds (VOC) (**O22**)
- Dyes (**O23**)
- PVC in packaging (**O24**)

 $\Box$  Yes  $\Box$  No

#### Signature of the manufacturer

Phone:
E-mail:

## Appendix 5 Declaration regarding sludge emptying (O26)

The following declaration may be used by applicants when applying for a licence for a Nordic Swan Ecolabel transport wash installation.

Company:

Address:

Wash installation being pumped out:

We hereby guarantee that when emptying the above wash installation's water treatment system, the water from the sludge tanker truck is not contaminated with heavy metals or bacteria.

Date:	Phone:
Contact person:	E-mail:
Signature:	

# Appendix 6 Explanations, analysis and control

#### 1 Water sampling

For a first application or in the event of major changes, water samples are to be taken, as set out in requirement O5 on the initial sampling, to check that the emission criteria in O6 are fulfilled.

For basic licence holders and licensees who do not make use of a basic licence, compliance with the emission requirements in O6 is to be monitored during the period of validity of the licence with the help of water samples. This is to be conducted during the period 1 November - 30 April.

Water samples shall be collected around one year after the licence has been granted. It is not necessary to submit an annual report the first year after receiving a licence if the initial sampling (O5) was conducted within the same period of time.

For example, if the samples for the annual report for 2012 are taken in November– December both in 2011 and 2012, the results from the sampling in 2011 are the ones to be entered in the table. The results from November–December 2012 will be the guide values for 2013. If, however, the samples are taking during the first quarter of 2012, these results can be reported in the annual report for 2012.

Nordic Ecolabelling reserves the right to demand further water sampling during the licence period if this is considered necessary (such as in case of a change of chemicals, change of washing equipment, or the irregular use of the wash installation).

Sampler	The sampling shall be carried out by a person from an accredited body or a person with a certificate/diploma in water sampling.
Time of year	Sampling must be conducted between 1 November and 30 April, and when at least 10% of the annual transport figure has been washed after the sludge/oil separator has been emptied.
Sampling point	Sampling must take place at a point, after the water treatment equipment but before the connection to the municipal waste water network/water recipient, where the collected waste water flow from the wash installation passes. Water turbulence is important at the sampling point, to avoid samples from layered water.
Sampling technique	The samples are to be taken by automatic flow proportional sampling or manual random sampling.
Number of samples for automatic flow proportional sampling	For initial sampling (O5): Two waste water samples (full day samples) are to be taken within the sampling period, and there must be a minimum of one month between the two samples. For the annual sampling (O29): One waste water sample (full day samples) is to be taken within the sampling period.

Number of samples for manual random	For initial sampling (O5): Two random samples are to be taken within the sampling period , and
sampling	there must be minimum one month between the two samplings.
	The random sampling is to be conducted while transport are being washed in the wash installation.
	For the annual sampling (O29):
	One random sample is to be taken within the sampling period.
Loading	The sampling is to be conducted while transport are being washed in the wash installation so that the water treatment unit is at operating load.
Water consumption	During the initial sampling, <b>fresh water consumption</b> is to be measured over a week (7 days). Water consumption per transport is calculated by dividing water consumption over the same period.
	The annual average water consumption for self-assessment (O29) is to be calculated as litres per year divided by number of transport washes per year.
	The report on total water consumption is to include all water consumption at the wash installation. The amount of water used to fill up the system after emptying is not included when calculating water consumption per transport (on condition that water is not discharged during filling).
	For trucks/buses, an estimate is first made of the number of washed vehicle units. The water consumption is then divided by the number of washed vehicle units.
	For trains and other rail transport the water consumption is divided with the number of 12 metres of train.
Emissions per vehicle unit	Emissions per vehicle unit are calculated by multiplying water consumption (I/vehicle unit or I/12 metres of train) by the analysis result from the sampling (mg/I).
	The quantity of emissions for each parameter is calculated by subtracting the estimated loss of water in the system (max 15 l/car, 45 l/vehicle unit or 45 l/12 metres of train) from the water consumption per car/vehicle unit/12 metres of train (l/car, l/vehicle unit or l/12 metres of train).
Analysis parameters	The samples are to be analysed for:
	<ul> <li>Σ Pb, Ni and Cr</li> </ul>
	• Cd
	• Zn
	• Cu
	<ul> <li>Oil index</li> <li>Antimony (Sb)</li> </ul>
Canada handlina	
Sample handling	The gathered samples must be handled such that no changes occur in the composition of the samples. This means that both the collection container and the sample bottles must be clean. Samples that are to be analysed for the oil index are to be taken directly in a glass container and stored in the dark at a temperature of between 0 and $+4^{\circ}$ C until the analysis is conducted.
	The collection container (applies to metals) is to be thoroughly shaken before a sample is transferred to a sample bottle and sent off to the laboratory.
Sludge	Information on the amount of sludge/water dealt with is to be indicated on the invoice or transport receipt from the contractor responsible for sludge emptying.

#### 2 Analysis laboratories

The analysis laboratory 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 if:

• the sampling and analysis process is monitored by the authorities, or

- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 9001 or ISO 9002, or
- the manufacturer can demonstrate agreement with an initial test conducted at the manufacturer's own laboratory and testing carried out in parallel at an independent test institute, and the manufacturer takes samples in accordance with a fixed sampling schedule.

#### **3 Analysis methods**

In exceptional cases, the ecolabelling body may permit analysis methods other than those stated below provided that the applicant can verify that the measuring accuracy is at least as precise.

	Requirement	Analysis method
Metals Cadmium (Cd) Lead (Pb) Copper (Cu) Chromium (Cr) Nickel (Ni) Zink (Zn)	O6	EN ISO 11885 or equivalent national standard
Oil index	06	EN ISO 9377-2 or equivalent national standard
DEHP Phthalates DEHP (di-2-ethylhexyl phthalate) DBP (dibutyl phthalate) BBP (benzyl butyl phthalate) DIBP (diisobutyl phthalate)	P1	GC-MS method (Gas Chromatography-Mass Spectrometry) with detection limit ≤ 0.5 micrograms/litre. The method must be accredited, or validated by other means.
Aquatic acute toxicity		201-203 in OECD guidelines
Biological degradability	016	Aerobic: 301 A-F in OECD guidelines Anaerobic: ISO 11734
Potential bioaccumulation	021 023	BCF – determined using test method 305 in OECD guidelines KOW or POW are to determined using test method 107 in OECD guidelines, or 117 in OECD guidelines.

#### 4 Ecotoxicological test methods

International test methods (OECD Guidelines for Testing of Chemicals, ISBN 92-64-1222144) or equivalent test methods must be applied for documentation. If corresponding methods are to be used, these methods must be considered by an independent authority to ensure that the test results are equal. The relevant test methods to be used are specified below.

#### The methods can be found at:

http://puck.sourceoecd.org/vl=31948566/cl=20/nw=1/rpsv/periodical/p15\_about.ht m?jnlissn=1607310x

#### 5 Acute / chronic toxicity factor

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

Use of methods 10, 211, 215 and 229 in OECD's guidelines for testing of chemicals or equivalent method to test chronic aquatic toxicity.

#### 6 Bioaccumulation

In order to get an understanding of a substance's ability to accumulate in organisms, the bioconcentration factor (BCF) for fish or the distribution factor octanol/water ( $P_{OW}$  or  $K_{OW}$ ) are to be determined.

Some of the following methods are to be considered: OECD guidelines 107, 117 or 305, and classification according to:

Classification	OECD 107 or 117	OECD 305
Non-bioaccumulative	log K <sub>ow</sub> < 4,0	BCF < 500
Bioaccumulative	log K <sub>ow</sub> > 4,0	BCF ≥ 500

OECDs test method 107 cannot be used for surface-active substances, which are both fat and water soluble. Based on current knowledge, for such substances it must be shown to a high degree of certainty that the substance itself and its decomposition products do not pose a long-term hazard to aquatic organisms.

Data models (such as BIOWIN) are permitted but if the results of an approximation are close to the set limit values or if Nordic Ecolabelling holds contradictory information, more reliable information is required.

If there is information on both BCF and logK<sub>ow</sub>, the value of the highest BCF is to be considered.

#### 7 Aerobic non-biodegradable substances, aNBO

Test methods 301 (A to F) or 310 in the OECD Guidelines for the Testing of Chemicals (ISBN 92 64 1222144) should be used to test aerobic biodegradability.

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

#### 8 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<sub>2</sub> 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".

#### 9 Potential degradation

For potential (inherent) degradation test methods 302 (A to C) in OECD guidelines for testing of chemicals (ISBN 92-64-1222144) are used. For an ingoing substance to be considered as potential degradable, the test must achieve at least 70% mineralization (> 70% BOD/DOC/COD reduction) after 28 days.

Other scientific accepted test methods can also be used. Test results from such methods must be evaluated of an independent authority.

## Appendix 7 Marketing of Nordic Swan Ecolabelled transport wash installations - removed

The appendix is removed as decided by the Board of Directors 17 November 2014.

# Appendix 8 Declaration – ingredient supplier/manufacturer

This declaration is to be completed by the ingredients supplier/manufacturer in conjunction with ecolabelling according to the criteria for transport wash installations, generation 3.

The declarations are given in good faith and according to the knowledge possessed at this time. Reservations are made for developments and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

This declaration states whether any of the substances below are constituent substances of the ingredients, either as an impurity or not, and irrespective of the quantity. This is also to be explained on page 2 of the declaration.

The declaration applies to the following ingredients:

Product name, ingredients:	
Ingredient manufacturer:	
Ingredient supplier:	

The following definition of "constituent substance" applies: unless otherwise stated, the constituent substances are all substances in the product, including additives (i.e. preservatives or stabilisers) in the ingredients, but not impurities from the ingredient production. Impurities are defined as residual products from the ingredient production that can be found in the final product in concentrations below 100 ppm (0.01% by weight, 100 mg/kg), but not substances added to an ingredient or product deliberately and with a purpose, regardless of amount. Substances/products known to be liberated by a constituent substance are also themselves considered to be constituent substances.

The undersigned hereby declares the following about the above ingredients:

Is the ingredient or are substances in the ingredient classified as carcinogenic, mutagenic and/or toxic to reproduction ( <b>O14</b> )? If yes, state the following:		🗆 No
- Which substances:		
- Quantity (% by weight):		
Does the ingredient contain residues of NTA ( <b>014</b> )?	□ Yes	🗌 No
NTA may only occur as an impurity in complex makers and must not exceed 0.010% of the product)		
If yes, state quantity (% by weight):		
<b>Does the ingredient contain nanomaterials*/particles (015)</b> ? *The definition of nanomaterials follows the European Commission's definition as issued on 18 October 2011: "A nanomaterial is a natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions is in the size range 1–100 nm." Polymer emulsions are not counted as a nanomaterial.	☐ Yes	□ No

Does the ingredient contain any of the following substances ( <b>017</b> )?				
<ul> <li>halogenated and/or aromatic solvents</li> </ul>				
<ul> <li>organic chlorine compounds and reactive chlorine</li> </ul>				
<ul> <li>dyes in non-professional products (does not apply to screenwash)</li> </ul>				
<ul> <li>Substances of Very High Concern (SVHC)*</li> </ul>				
<ul> <li>PBT substances (persistent, bioaccumulative and toxic substances under the criteria in Annex XIII of REACH)***</li> </ul>				
<ul> <li>vPvB substances (very persistent and very bioaccumulative substances under the criteria in Annex XIII of REACH)</li> </ul>				
<ul> <li>substances considered to be a potential endocrine disrupting chemical (EDC), category I or II, according to the European Union's reports on endocrine disruptors**</li> </ul>				
<ul> <li>linear alkylbenzene sulphonates (LAS)</li> </ul>				
<ul> <li>alkylphenol ethoxylates (APEO) or alkylphenol derivatives (APD)</li> </ul>				
<ul> <li>quaternary ammonium compounds, which are not readily degradable</li> </ul>				
benzalkonium chloride				
<ul> <li>siloxanes D4, D5 and HMDS</li> </ul>				
• EDTA, DTPA				
<ul> <li>poly and perfluorinated alkylated substances (PFAS)</li> </ul>				
Does the ingredient have added fragrance?	🗌 Yes	🗆 No		
If yes,				
Is the fragrance added in line with IFRA's guidelines ( <b>018</b> )?	🗆 Yes	🗆 No		
IFRA – International Fragrance Association – www.ifraorg.org/guidelines.asp				
* http://echa.europa.eu/web/guest/candidate-list-table *				
**http://ec.europa.eu/environment/endocrine/documents/final_report_2007.pdf				
(Annex L, page 238 onwards)				
*** http://esis.jrc.ec.europa.eu/index.php?PGM=pbt				

If the answer is yes to any of the above questions, state the name, CAS-number and concentration in the ingredient, and the background to the addition of each substance (e.g. whether it is an impurity):

#### Signature of the ingredient supplier/manufacturer:

Date:	Company name:
Phone:	E-mail:
Name (contact person, BLOCK CAPITALS):	Signature (contact person):

## Appendix 9 Declaration from fragrance manufacturer/supplier

This declaration is to be completed by the manufacturer/supplier of any fragrance that is contained in Nordic Swan Ecolabelled car or boat care products under the criteria for transport wash installations, generation 3.

The declarations are given in good faith and according to the knowledge possessed at this time. Reservations are made for developments and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

This declaration states whether any of the substances below are constituent substances of the ingredients, either as an impurity or not, and irrespective of the quantity. This is also to be explained on page 2 of the declaration.

The following definition of "constituent substance" applies: unless otherwise stated, the constituent substances are all substances in the product, including additives (i.e. preservatives or stabilisers) in the ingredients, but not impurities from the ingredient production. Impurities are defined as residual products from the ingredient production that can be found in the final product in concentrations below 100 ppm (0.01% by weight, 100 mg/kg), but not substances added to an ingredient or product deliberately and with a purpose, regardless of amount. Substances/products known to be liberated by a constituent substance are also themselves considered to be constituent substances.

Note that the fragrance manufacturer/supplier must also make a declaration in relation to the requirements set out in Appendix 8.

#### IFRA (**018**)

Is the fragrance produced in line with IFRA's guidelines? IFRA – International Fragrance Association – www.ifraorg.org/guidelines.asp	□ Yes	🗆 No
Musk compounds ( <b>019</b> )		
Are any of the following musk compounds and polycyclic musk compounds adde to the perfume?	d 🗌 Yes	🗆 No
- Musk xylene (CAS no. 81-15-2)		
- Musk ambrette (CAS no. 83-66-9)		
- Musk moskene (CAS no. 116-66-5)		
- Musk tibetene (CAS no. 145-39-1)		
- Musk ketone (CAS no. 81-14-1)		
- HHCB (CAS no. 114109-62-5, 114109-63-6,		
1222-05-5, 78448-48-3 and 78448-49-4)		
- AHTN (CAS no. 1506-02-1 and 21145-77-7)		
Allergenic fragrances ( <b>O20</b> )		
Does the fragrance contain one or more substances classified as R42/H334 and/or R43/H317?	□ Yes	🗆 No
If yes, state which:		
Name:		
% by weight:		

If the answer is yes to any of the above questions, state the name, CAS-number and concentration in the ingredient, and the background to the addition of each substance (e.g. whether it is an impurity):

#### The fragrance supplier/manufacturer's signature:

Date:	Company name:
Phone:	E-mail:
Name (contact person, BLOCK CAPITALS):	Signature (contact person):

# Appendix 10 POCP factor of VOC substances (022)

In the case of solvents not included on the list, POCP values from tests may provide the basis for calculating the permitted VOC content, alternatively the "worst case" for the VOC group may be used. The list below is not synonymous with substances approved for use in Nordic Swan Ecolabelled products.

The calculation is based on the UMIP2003 method from the LCA Centre in Denmark. The figures in the table are taken from "the British trajectory model".

Alkanes	0,4 +/-0,1 (worst case = 0,5)	Alkenes	0,5+/- 0,2
Methane	0,007 1	Ethylene	1.0
Ethane	0.1	Propylene	0.6
Propane	0.5	1-butene	0.5
n-butane	0.5	2-butene (trans)	0.4
i-butane	0.4	2-pentene (trans)	0.4
n-pentane	0.3	2-methylbut-1-en	0.2
i-pentane	0.3	2-methylbut-2-en	0.5
n-hexane	0.5	3-methylbut-1-en	0.5
2-methylpentane	0.5	Isobutene	0.6
3-methylpentane	0.4	Isoprene	0.6
2,2-dimethyl- butane	0,3 1		
2,3-dimethyl- butane	0,4 1	Alkynes	0.4
n-heptane	0.5	Acetylene	0.4
2-methylhexane	0,5 1		
3-methylhexane	0,5 1	Aromatics	
n-octane	0.5	benzene	0.4
2-methylheptane	0.5	toluene	0.5
n-nonan	0.4	o-xylene	0.2
2-metyloctane	0.5	m-xylene	0.5
n-decane	0.4	p-xylene	0.5
2-methylnonane	0.4	ethyl benzene	0.5
n-undecane	0.4	1,2,3- trimetylbenzene	0.3
n-dodecane	0.3	1,2,4- trimetylbenzene	0.3
methylcyklo- hexane	0.5	1,3,5- trimetylbenzene	0.3
		o-ethyl toluene	0.4
		m-ethyl toluene	0.4
		p-ethyl toluene	0.4
		n-propyl benzene	0.5

Aldehydes	0,3 +/- 0,2		
formaldehyde	0.3	-	
acetaldehyde	0.2		
propionaldehyde	0.2		
butyraldehyde	0.2	Alcohols	0,2 +/- 0,02
isobutyraldehyde	0.3	methanol	0.2
valeraldehyde	0.3	ethanol	0.2
acroleine	0.8	isopropanol	0.2
benzaldehyde	-	butanol	0.2
		isobutanol	0.3
Ketones	0,2 +/- 0,1	butane-2-diol	0.3
acetone	0.1		
methyl ethyl ketone	0.2	Chlorinated alkanes	0,01 +/- 0,01
methyl i-butyl ketone	0.3	methylene chloride	0.02
		chloroform	0.004
Ethers	0,4 +/- 0,1	methyl chloroform	0.002
dimethyl ether	0.3	_	
propylene glycolmethyl ether	0.5	Chlorinated alkenes	0,2 +/- 0,3
		trichlorethylene	0.1
Esthers	0,2 +/- 0,1	tetrachlorethylene	0.01
methyl acetate	0.1	allyl chloride	0.5
ethyl acetate	0.3		
isopropyl acetate	0,2 1		
n-butyl acetate	0.3		
isobutyl acetate	0.4		
propylene glycol metylether acetate	0.2		

Source: LCA Center Denmark (2007): EDIP characterisation factors for photochemical ozone formation (High NOx).

## Appendix 11 Declarations from supplier of water treatment chemicals (09)

This declaration must be completed by the manufacturer/supplier of water treatment chemicals used in Nordic Swan Ecolabelled transport wash installations in line with generation 3 of the criteria.

This declaration must state that the chemical products used for water treatment (e.g. chemical separation, pH regulation, combating microorganisms) do not contain organochlorine substances or reactive chlorine compounds that may form organochlorine metabolites.

#### **Overview of chemicals:**

Name of water treatment chemical	Manufacturer

Does any of the water treatment chemicals above contain organochlorine Substances or reactive chlorine compounds that may form organochlorine metabolites?

#### Signature of the supplier of water treatment chemicals:

Date	Company name
Phone	E-mail
Name (contact person, capital letters)	Signature (contact person)