

Nordic Ecolabelling of **Dish washers**



Version 3.7 • 14 March 2007 – 31 October 2014



Nordic Ecolabelling

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This document is a translation of an original in Swedish.

In case of dispute, the original document should be taken as authoritative.

003 Dish washers, version 3.7, 12 November 2013

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 dish washer?

The greatest environmental impact caused by a dish washer comes from its use. These Nordic Ecolabel criteria focus therefore on requirements regarding the use of the machine. To be awarded a Nordic Ecolabel licence, a machine must meet environmental requirements without compromising performance.

A Nordic Ecolabelled dish washer fulfils requirements in a number of areas, such as:

- electricity and water consumption
- the reduced use of certain materials that are hazardous to health and the environment
- the recycling of materials
- cleaning and rinsing performance.
- noise

The requirements for energy consumption are set for the lowest-possible usage. By reducing energy levels we can influence the effects energy sources have on global warming.

What can carry the Nordic Ecolabel?

Compact/worktop and floorstanding dish washers for household use can be Nordic Ecolabelled. The dish washer may be a freestanding or integrated model.

How to apply

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

Icons in the text

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

☒ Enclose

ℙ The requirement checked on site

Application

The application shall be sent to Nordic Ecolabelling in the country in which the dish washers is sold/the applicant carries on activities. See page 2 for addresses. The application documents comprise an application form and documentation demonstrating fulfilment of the requirements (specified in the criteria).

Further information and assistance may be available. Visit the Web site of the national ecolabelling body for more information.

Documentation

The methods used for testing of dish washers are described in chapter 2.2. The laboratory which performs the tests shall be named and it shall declare that it fulfil the requirements in chapter 2.1.

All tests shall be performed by an independent test institute at the recommended standard programme if nothing else is stated.

Sales in other Nordic countries

Registering a licence in another Nordic country allows the Nordic Ecolabel to be used on a larger market. The following must be submitted to Nordic Ecolabelling:

- Form for sales in other Nordic countries.
- Copy of license
- Instruction manual in the local language.
- Information on marketing in the valid country, according to appendix 2.

Registration is free of charge but an annual fee shall be paid in accordance with the national regulations.

On-site inspection

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

Costs

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

Enquiries

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

1 Requirements

All environmental and performance requirements must be tested using the same programme – the appliance’s ”recommended standard programme”. It must be made clear to the end customer that it is this programme that fulfils Nordic Ecolabel requirements. The duration of this programme must also be stated.

1.1 Environmental requirements

R1 Energy efficiency

The dish washer must, with recommended standard programme, fulfil the requirements of energy efficiency class A or higher as defined in Commission delegated regulation (EU) No 1059/2010 with regard to energy labelling of household dishwashers.

- Report containing the results of the energy efficiency test, performed according to the method specified.

R2 Water consumption

The dish washer must use a maximum of 1.2 litres of water per place setting in accordance with EN 50242.

- Report containing the results of the test, performed according to the method specified.

R3 Dish washer detergents

The dish washer shall have clear volumetric markings on the detergent dispenser allowing the user to adjust the detergent quantity used according to the type and amount of load and its degree of soil.

- The manufacturer must certify that the requirement is fulfilled.

R4 Noise

Airborne acoustic noise from the machine, in terms of sound power level, must not exceed 48 dB(A) from freestanding or integrated dish washers, measured in accordance with the test method specified and using the same standard programme as used for measuring energy efficiency.

- Report containing the results of the noise test, performed according to the method specified.

R5 Marking of plastic parts

Plastic parts weighing more than 25 grams must be provided with markings specifying the material, in accordance with ISO 11 469.

- The manufacturer must certify that the requirement is fulfilled in accordance with Appendix 1.

R6 Heavy metals

No substances based on cadmium, lead mercury or their compounds may be added to parts.

- The manufacturer must certify that the requirement is fulfilled in accordance with Appendix 1.

R7 Flame retardants in plastic parts

The following flame retardants may not be added to plastic materials:

- polybrominated biphenyls (PBB)
- polybrominated biphenyl ethers (PBDE)
- chloroparaffins with chain length 10-13 carbon atoms and chlorine content >50% by weight (CAS no 85535-84-8).

Plastic parts heavier than 25 grams shall not contain flame retardant substances that are assigned any of the risk phrases, as defined in Council Directive 67/548/EEC as last amended by commission Directive 98/98/EEC:

- R45 (may cause cancer)
- R46 (may cause heritable genetic damage)
- R60 (may impair fertility)
- R61 (may cause harm to the unborn child).

This requirement does not apply to flame retardants that on application change their chemical nature to no longer warrant classification under any of the risk phrases listed above, and where less than 0,1% of the flame retardants in the treated part remains in the form as before application.

All flame retardants used in plastic parts heavier than 25 grams shall be identified by name and CAS no.

- ☒ • The manufacturer must certify that the requirement is fulfilled in accordance with Appendix 1.
- The manufacturer must append a list of flame retardants, used in plastic parts heavier than 25 grams, and their CAS numbers

R8 Recycling

The product must be designed so that at least 75% by weight of the components, materials and substances of the apparatus can be reused or recycled in accordance with the WEEE directive.

According to Article 4 of the WEEE directive, this type of product must be simple to reuse and the materials must be simple to recycle. This means that joints must be easy to find and access, electronic components must be easy to find and remove, the product must be easy to disassemble using common standard tools, and it must be possible to separate out incompatible and hazardous materials.

WEEE: Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste of electrical and electronic equipment.

- ☒ Declaration from the manufacturer that the requirement is fulfilled, see Appendix 1.

1.2 Requirements of efficiency and performance

R9 Cleaning performance

The dish washers cleaning performance index must, for the standard programme, be higher than 1.12 as defined in Commission delegated regulation (EU) No 1016/2010 with regard to ecodesign requirements for household dishwashers.

- ☒ Complete test report from test of cleaning performance conducted according to Commission delegated regulation (EU) No 1016/2010 with regard to ecodesign requirements for household dishwashers.

R10 Drying performance

The dish washer must, with recommended standard programme, fulfil the requirements of drying performance class A as defined in Commission delegated regulation (EU) No 1059/2010 with regard to energy labelling of household dishwashers.

- ☒ Complete test report according to Commission delegated regulation (EU) No 1059/2010 with regard to energy labelling of household dishwashers.

1.3 Other requirements

R11 Regulatory requirements regarding safety, the working environment and the external environment

The manufacture of Nordic Ecolabelled dish washers must follow the legislation in force in each country of manufacture regarding recycling systems for products and packaging, as well as safety, the working environment, occupational safety and conditions/concessions specific to production facilities.

Failure to comply with legislation may result in the withdrawal of the licence.

R12 Instructions

The machine must be sold with instructions that include descriptions of correct use with regard to environmental impact and recommendations for the optimum use of energy, water and dish washer detergents when using the machine. These instructions must include the following:

- a) The cover or first page must display the following text: "More information on how to further minimise environmental impacts is given in these instructions".
- b) Information about water softening
- c) Information on the availability of environmentally suitable dish washer detergents,
- d) Instructions that the amount of dish washer detergent should be adjusted to the hardness of the water, the type and quantity of load and its degree of soil (e.g. a half-full machine requires less dish washer detergent than a full machine).
- e) Information on the dish washer's consumption of energy and water at different temperatures and loads, so that the consumer can select a suitable programme to minimise energy and water consumption. It must be made clear that Nordic Ecolabel requirements are fulfilled by the recommended standard programme.
- f) Information on the duration of each programme.

- g) Maintenance instructions for the dish washer including the regular cleaning of filters and pumps and the removal of deposits.
- h) Instructions on how to install the machine to minimise noise.
- i) Information that the failure to observe the above advice can lead to a greater consumption of energy, water and/or dish washer detergent, which can result in higher running costs and impaired performance.
- j) Information on how the consumer can take advantage of the manufacturer's take-back scheme.

Instructions.

R13 Design, settings

The machine must be clearly marked so that suitable settings can be selected for different types of load. All programmes, must be clearly marked on the dish washer.

The applicant must certify that the requirement is fulfilled (e.g. with photographic evidence).

R14 Warranty

The manufacturer must provide a warranty that the dish washer will work without fault for at least two years. The period of warranty shall start on the date of delivery to the customer.

The applicant must certify that the requirement is fulfilled.

R15 Spare parts

The availability of spare parts must be guaranteed for ten years after production of the machine has ceased.

The applicant must certify that the requirement is fulfilled.

R16 Child safe

The front shall have a child safety device that easily can be switched on or off, or other equal device.

The applicant must certify that the requirement is fulfilled and it must be recorded in the user manual.

1.4 Quality and regulatory requirements

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

R17 Nordic Ecolabel licence person

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

A chart of the company's organizational structure detailing who is responsible for the above.

R18 Documentation

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



Checked on site.

R19 Quality of the dish washer

The licensee must guarantee that the quality of the production of the Nordic Ecolabelled dish washer is maintained throughout the validity period of the licence.



Procedures for collating and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Ecolabelled dish washer.

R20 Planned changes

Written notice must be given to Nordic Ecolabelling of planned changes that have a bearing on Nordic Ecolabel requirements.



Procedures detailing how planned changes are handled.

R21 Unplanned nonconformities

Unplanned nonconformities that have a bearing on Nordic Ecolabel requirements must be reported to Nordic Ecolabelling in writing and journalled.



Procedures detailing how unplanned nonconformities are handled.

R22 Traceability

The licensee must have a traceability system for the production of the Nordic Ecolabelled dish washer.



Description of/procedures for the fulfilment of the requirement.

R23 Take-back system

Relevant national regulations, legislation and/or agreements within the sector regarding the recycling systems for products and packaging shall be met in the Nordic countries in which the Nordic Ecolabelled dish washer are marketed.



Declaration from the applicant regarding adherence to existing recycling/ take-back agreements.

R24 Marketing

Marketing of the Nordic Ecolabelled dish washer must comply with "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.



Appendix 2 duly completed.

2 Analyses and checks

2.1 Requirements concerning testing institute/analysis laboratory

The testing institute/analysis laboratory must be impartial and competent and fulfil the general requirements in accordance with standard ISO/IEC 17025, or be an accredited analysis laboratory.

2.2 Analysis and test methods

Energy efficiency and drying performance, with standard programme, shall be tested in accordance with Commission delegated regulation (EU) No 1059/2010 with regard to energy labelling of household dishwashers.

Cleaning performance, with standard programme, shall be tested in accordance with Commission delegated regulation (EU) No 1016/2010 with regard to ecodesign requirements for household dishwashers.

Water consumption, with standard programme, shall be tested in accordance with EN 50242.

Noise shall be tested in accordance with EN 60704-2-3 and EN 60704-3.

2.3 Follow-up inspections

Follow-up inspections of Nordic Ecolabel licenses may be initiated by Nordic Ecolabelling. Such an inspection can be performed in a number of ways. For example, a machine may be chosen at random from a retail outlet and tested by an independent test institute. Nordic Ecolabelling carries the costs of such tests. If, however, the machine does not comply with the details on which the Nordic Ecolabel license is based, the licensee is liable to the costs.

Design of the Nordic Ecolabel

Design of the Nordic Ecolabel:



licence number
"Dish washer"

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

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

Validity of the criteria document

This criteria document, version 4, has been ratified by the Nordic Ecolabelling Board on 14 March 2007 and applies until 30 June 2009.

On 29 May 2008, the Nordic Ecolabelling Board decided to prolong the validity of the criteria with one year. The new version is called 3.1 and it is valid until 30 June 2010.

The Secretariat Manager's meeting decided on 9 June 2009 to prolong the validity of the criteria with eighteen months until 31 December 2011. The new version is called 3.2.

On 7 December 2010, the Nordic Ecolabelling Board decided to prolong the validity of the criteria with one year. The new version is called 3.3 and it is valid until 31 December 2012.

The Secretariat Manager's meeting decided on 15 November 2011 to prolong the validity of the criteria with ten months. It was also decided to make changes in R1, R9, R10 and in chapter 2.2. The new version is called 3.4 and is valid until 31 October 2013.

The Secretariat Manager's meeting decided on 12 September 2012 to prolong the validity of the criteria with six months until 30 April 2014. The new version is called 3.5.

The Secretariat Manager's meeting decided on 8 February 2013 to prolong the validity of the criteria with three months until 31 July 2014. The new version is called 3.6.

The Secretariat Manager's meeting decided on 12 November 2013 to prolong the validity of the criteria with three months until 31 October 2014. The new version is called 3.7.

During the validity period, the Nordic Ecolabelling Board may decide on adjustments, clarifications and/or extensions of the criteria, and a new version will then be issued. This does not normally involve any re-appraisal of licences that have been granted.

One year prior to the expiry date of this criteria document at the latest the Nordic Ecolabelling Board will provide information on future ecolabelling criteria.

New criteria

The following requirements will be assessed in future criteria:

- Requirement regarding heavy metals used in alloys and surface treatment.
- Requirement regarding flame retardants in plastics and electronic components.
- Requirement regarding provisions to connect the machine directly to a hot water source.
- The possibility to set the energy requirement to A+

Appendix 1 Declaration from the dish washer manufacturer

- R5** Are all plastic components that weigh more than 25 grams marked in accordance with ISO 11469? Yes No
- R6** Have cadmium, lead, mercury or their compounds been added to any parts? Yes No
- R7** Does the product contain any of the following flame retardants: Yes No
- polybrominated biphenyls (PBB)
 - polybrominated biphenyl ethers (PBDE)
 - chloroparaffins with chain length 10-13 carbon atoms and chlorine content >50% by weight (CAS no 85535-84-8).
- R7** Does the product contain flame retardants that are assigned one or more of the following risk phrases, in accordance with EU chemical legislation: Yes No
- R45 (may cause cancer)
 - R46 (may cause heritable genetic damage)
 - R60 (may impair fertility)
 - R61 (may cause harm to the unborn child)
- R7** Is there a list enclosed, with name and CAS-number, on used flame retardants (it is possible to use the table below)? Yes No

List of flame retardants

Trade name	Chemical name and CAS no.	Used in component:	Supplied by:

- R8** Is the proportion of recyclable materials in the machine, defined according to the WEEE directive, at least 75% by weight? Yes No

Location and date	Company Name
Signature of the dish washer manufacturer	
Clarification of signature	

Appendix 2 Marketing of Nordic Ecolabelled Dish washers

We hereby confirm that we are acquainted with the rules governing the Nordic Ecolabel as described in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

We hereby undertake that the marketing of the dish washer will comply with these regulations.

We hereby confirm that we are familiar with the criteria document for Nordic Ecolabelling of Dish washers.

We undertake to ensure that the personnel responsible for marketing the Nordic Ecolabelled dish washers within our company will receive information on the criteria governing the Nordic Ecolabelling of Dish washers and "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

Place/date

Name of company

Contact person

Tel. no.

Marketing Manager

Tel.no.

In the event of a change of personnel, a new confirmation must be sent to Nordic Ecolabelling.