

Nordic Ecolabelling for  
**Compost bins**



**Version 3.1 • 11 June 2014 - 30 June 2021**

# Content

<b>What is a Nordic Swan Ecolabelled compost bin?</b>	<b>4</b>
<b>Why choose the Nordic Swan Ecolabel?</b>	<b>4</b>
<b>What can carry the Nordic Swan Ecolabel?</b>	<b>5</b>
<b>How to apply</b>	<b>5</b>
<b>1 Material composition</b>	<b>7</b>
<b>2 Environmental requirements</b>	<b>7</b>
2.1 Plastics	7
2.2 Insulating material	8
2.3 Wood	8
2.4 Chemicals	9
2.5 Product function requirements	12
2.6 Waste and packaging	13
<b>3 Quality and regulatory requirements</b>	<b>13</b>
<b>Regulations for the Nordic Ecolabelling of products</b>	<b>15</b>
<b>Follow-up inspections</b>	<b>15</b>
<b>History of the criteria</b>	<b>15</b>
<b>New criteria</b>	<b>15</b>

Appendix 1	Marketing of Nordic Swan Ecolabelled compost bins - removed
Appendix 2	Declaration by plastics supplier
Appendix 3	Specification of wood raw materials (supplier)
Appendix 4	Basis for calculation of certified amount wood raw material
Appendix 5	Directions for forestry certification
Appendix 6	Declaration of classification of chemical products
Appendix 7	Constituent substances in chemical products
Appendix 8	Content of user instructions
Appendix 9	Background memorandum on compost bins

019 Compost bins, version 3.1, 16 August 2018

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  
Tel: +45 72 300 450  
info@ecolabel.dk  
www.ecolabel.dk

## Finland

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

## Iceland

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

## Norway

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

## Sweden

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

This document may only be copied in its entirety and without any type of change.

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

## What is a Nordic Swan Ecolabelled compost bin?

Nordic Swan Ecolabelled compost bins are containers for composting garden waste and organic waste from households. The criteria document covers year-round compost bins. The purpose of the criteria is to ensure that the bin composts the waste effectively.

Nordic Swan Ecolabelled compost bins are among those on the market with the lowest environmental impact. Special features of these compost bins are that:

- Effective composting and robust design that tolerates low temperatures are assured thanks to extensive function testing
- There are environmental and health requirements on the chemicals used in the production of the compost bins.
- The bins offer good anti-rodent protection.

Thanks to thorough function testing, a Nordic Swan Ecolabelled compost bin is documented to work in practice. Requirements are also set regarding the materials used in the compost bin, such as plastics and wood. Use of chemicals in production that are harmful to health and the environment is banned. Requirements regarding detailed user instructions make it easier for users to master the biological process in the compost bin and minimise operational problems.

## Why choose the Nordic Swan Ecolabel?

- Manufacturers and retailers can use the Nordic Swan Ecolabel trademark in their marketing. This is a very well-known and trusted trademark in the Nordic region.
- The Nordic Swan Ecolabel is a cost-effective and simple way for manufacturers to communicate their environmental work and commitment to customers and suppliers.
- More eco-aware operations can prepare the manufacturer for future environmental requirements.
- Environmental issues are complex and it can take a long time to gain an understanding of a specific area. Nordic Swan Ecolabelling can be seen as an aid in this work.
- The Nordic Swan Ecolabel not only covers environmental but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Swan Ecolabel licence can also be seen as a mark of quality.

# What can carry the Nordic Swan Ecolabel?

The criteria apply to bins for composting organic household and garden waste. Only year-round compost bins are included in the product group. The product group does not include compost bins with a capacity > 20 person-equivalents or closed toilet systems. Nordic Ecolabelling has separate criteria for closed toilets.

## How to apply

### Application and costs

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

### What is required?

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

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

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

- ☒ Enclose
- 🔍 The requirement checked on site

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

### 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. See page 3 for addresses. Further information and assistance may be available. Visit the relevant national website for further information.

# 1 Material composition

## 01 Description of the products

A description of the compost bin must be provided. The description must include

- Type of compost bin
- Materials used in the compost bin such as type of plastics, metal, wood and insulating material, including percentage by weight
- Suppliers of the various materials

Description in accordance with the above.

## 2 Environmental requirements

Unless otherwise stated, constituent substances are taken to be any substances in the product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities from raw material production.

Impurities are taken to include residues from raw material production included in the finished product in concentrations of less than 100 ppm (0.0100 w/w%, 100 mg/kg), but not substances added to a raw material or product deliberately and for a purpose, regardless of the quantity. Known cleaved off products from constituent substances are also considered to be constituents.

### 2.1 Plastics

#### 02 Halogenated plastics

Halogenated plastics must not be used in the compost bin.

Declaration from manufacturer of compost bin or plastics supplier stating that no halogenated plastics have been used.

#### 03 Recovered plastics

The requirement applies if plastics make up more than 10% of the product by weight. Plastics used in the compost bin must contain a minimum of 30% recovered materials by weight.

Isolation is exempted this requirement.

*Recovered plastics shall apply to the definition of recovered plastics in the standard ISO 14021. According to ISO 14021 recovered material is defined as post-consumer recovered material such as scrapped plastics products or packaging or pre-consumed material such as reprocessed production waste. Production waste (scrap, rework, regrind) which can be directly reused in the process is not regarded as recycled.*

Recovered plastics must not contain halogenated flame retardants. However, impurities of up to 1000 ppm are permitted.

Declaration from plastics supplier that the raw material has been recovered and percentage of recovered plastics. Declaration from plastics supplier that the plastic does not contain halogenated flame retardants. Appendix 2 can be used.

Calculation by applicant showing percentage of recovered/recycled plastics.

## 2.2 Insulating material

### 04 Blowing agent

Blowing agents for insulating material must have an ozone depletion potential (ODP) = 0 and a global warming potential ( $GWP_{100}$ ) < 15 (calculated as CO<sub>2</sub> equivalents over a period of 100 years).

The blowing agent must not contain halogenated organic impurities.

- Overview of blowing agent used and confirmation from manufacturer/supplier of blowing agent that the requirement is met.

## 2.3 Wood

O5 and O6 apply to all timber used in the product except small part, e.g. handles. O7 applies if wood makes up more than 10% of the product by weight. Small parts, e.g. handles, are exempted from the 10 % in O7.

### 05 Origin and traceability

This requirement concerns all product parts containing wood, willow, or bamboo. The requirement applies to both certified and uncertified material.

The applicant shall:

- a) demonstrate traceability for all wood, willow or bamboo raw materials. State the name (latin and a nordic language), geographic origin (country/state and region/provins) and suppliers for the wood, willow or bamboo raw materials.
- b) have a written procedure covering sustainable wood supplies

Wood, willow and bamboo must not originate from:

- Protected areas or areas treated by means of an official procedure with a view to achieving protected status.
- Areas in which rights of title or of use are unresolved.
- Unlawfully harvested wood and fibre raw materials.
- Genetically modified trees and plants.

In addition, management of the forests must not damage or disrupt:

- Natural forest, biodiversity, special ecosystems and important ecological functions
- Socially and culturally significant assets.

- Name (latin and nordic), geographical origin (country/state and region/province) of the raw materials used. Appendix 3 is to be completed by suppliers/manufacturer.

- A written procedure ensuring traceability to the origin of the raw materials. The procedures must include an updated list of all suppliers of raw materials used in the product.

### 06 Biocides

After harvesting the wood must not be treated with insecticides classified by WHO as type 1A and type 1B.

This requirement applies to the treatment of timber after felling.

WHO classification: An overview can be found at: [http://www.who.int/ipcs/publications/pesticides\\_hazard/en](http://www.who.int/ipcs/publications/pesticides_hazard/en), “The WHO recommended classification of pesticides by hazard and guidelines to classification 2009” or by contacting one of the secretariats.

- ☒ Statement by suppliers of wood on which pesticides have been used and declaration in accordance with Appendix 3 for each individual product.

## **07 Wood from certified forestry**

The requirement covers solid wood, laminated wood and veneer, which in total is contained in more than 10 % of the product. It does not cover willow and bamboo.

A total of 70 % by weight of the wood purchased for Nordic Swan Ecolabelled compost bins must come from areas where the forest management is certified in compliance with a forestry standard and certification system that meet the criteria in appendix 5.

The requirement may be documented as purchased wood on an annual basis for the various types of wood used. Certification must be performed by a third party on the basis of a current forestry standard that fulfils the requirements applicable to standards and certification systems contained in Appendix 5.

- ☒ Proportion (%) of certified wood used in the applicant's Nordic Swan Ecolabelled production on an annual basis. Completed appendix 4 from the supplier.
- ☒ Copy of a forest certificate that meet the criteria for forestry management described in appendix 5.

Nordic Ecolabelling may request additional information in order to assess whether the requirements applicable to standards, certification systems and certified proportion have been met. For example a copy of the approval report issued by the certification body, a copy of the forestry standard including the name, address and telephone number of the organization that drafted the standard as well as references to persons representing parties and interest groupings invited to participate in the development of the forestry standard.

## **2.4 Chemicals**

The requirements cover all chemical products such as glue, sealant, varnish, stain, oil, paint, wood preservatives and similar used by the manufacture in the production of the Nordic Swan Ecolabelled products and by the manufacturer's subcontractors in the production of parts for the Nordic Swan Ecolabelled products.

Impregnating agents for wood are subject to specific exemptions and requirements. See the individual requirements for information on exemptions.

Auxiliary substances such as lubricants and detergents are not subject to requirements.

Metals and metal coatings are exempt from the requirements.

Plastics and isolation are exempt from O8, O9 and O10. See separate requirement for additives in plastics.

## **08 Overview of chemicals**

The manufacturer of the compost bin must provide an overview of the chemicals used in production, e.g. glue, wood preservatives and surface treatment. Chemicals which are used by subcontractors and in the production of parts for the Nordic Swan Ecolabelled product must also be specified.

- ☒ Overview from manufacturer of compost bin of the chemicals used in production.

## 09 Classification of production chemicals

Production chemicals used in production of the compost bin must not be classified in accordance with Table 1.

Chemical products used to impregnate wood are exempt from the requirements for chemicals that are harmful to the environment, very toxic or toxic. See O12 for specific requirements for impregnating agents for wood.

**Table 1: Classification**

Classification according to CLP Regulation 1272/2008		Classification according to EU's Dangerous Preparations Directive 1999/45/EC, 2008
Hazard class and category	H-phrase	Hazard class and R-phrase
Toxic to aquatic organisms Category acute 1 Chronic 1-3	H400, H410, H411, H412	R52, R53 or R52/53. N with R50, R50/53, R51/53
Hazardous to the ozone layer	H420	R59
Acute toxicity Category 1-3	H300, H310, H330, H301, H311, H331	Tx (T+ in Norway) with R26, R27, R28, R39, T with R23, R24, R25, R39, R48,
Specific target organ toxicity (STOT) with single and repeated exposure STOT SE category 1 STOT RE category 1	H370, H372	T with R39 and/or R48 Xn with R68
Carcinogenic Carc 1A/1B/2	H350, H350i, H351	T with R45 and/or R49 (Carc 1 or Carc 2) or Xn with R40 (Carc 3)
Mutagenic Mut 1A/1B/2	H340, H341	T with R46 (Mut 1 or Mut 2), Xn with R68 (Mut 3)
Toxic for reproduction Repr 1A/1B/2	H360, H361, H362	T with R60, R61 (Repr 1 or Repr 2), Xn with R62, R63, R64

*The classification applies under the EU's Preparations Directive 1999/45/EC as amended and/or the CLP Regulation (EC) No 1272/2008 as amended. During the transition period, i.e. until 1 June 2015, classification under the EU's Preparations Directive or the CLP Regulation may be used. After the transition period, only classification under the CLP Regulation will apply.*

Be aware that it is the manufacturer of the chemical who is responsible for the classification.

- ☒ Safety data sheet/product sheet in accordance with the relevant legislation in the country in which the application is being made, e.g. Appendix II of REACH (Regulation (EC) No 1907/2006).

## 010 Constituent substances in production chemicals

Chemical products used to impregnate wood are exempt from this requirement. See O12 for specific requirements for these products. Varnish, stain, paint, glue and similar used for surface treatment are not exempt.

The following constituent substances must not be contained in the chemical product:

- Persistent, bioaccumulative and toxic (PBT) organic substances\*
- Very persistent and very bioaccumulative (vPvB) organic substances\*
- Substances on the Candidate List\*\*
- Carcinogenic, mutagenic and reprotoxic (CMR) substances (category 1 and 2)\*\*\*

- Halogenated organic compounds (including chlorinated and fluorinated organic compounds, such as PFOA (perfluorooctanoic acid and salts/esters thereof), PFOS (perfluorooctyl sulphonate and its compounds), PTFE (polytetrafluoroethylene), etc.). Exceptions to this are:
  - The biocide CMIT: the mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one [CAS No. 247-500-7] and 2-methyl-4-isothiazolin-3-one [CAS No. 220-239-6]) must not exceed 0.0015% by weight.
  - Paint pigments that comply with EU requirements for pigments in materials that come into contact with food.
- Alkylphenols, alkylphenoethoxylates or other alkylphenol derivatives\*\*\*\*
- Chlorophenols (their salts and esters) and dimethylfumerate (biocides)
- Isothiazolins in concentrations exceeding 0.15% by weight
- Bisphenol A compounds
- Phthalates
- Pigments and additives based on copper, lead, boron, creosote, tin, cadmium, chromium<sup>VI</sup> or mercury, or their compounds.

\* PBT and vPvB substances are defined in Annex XIII of REACH (Regulation (EC) 1907/2006).

Substances that meet the PBT or vPvB criteria, and substances that form substances that meet the criteria, may be viewed on the website of the European Chemicals Bureau, ECB:

<http://ecb.jrc.it/esis/index.php?PGM=pbt>. Substances that are "excluded" or substances "under evaluation" are not considered to have the properties of PBT or vPvB.

\*\* The Candidate List can be found at ECHAs homepage: <http://echa.europa.eu/sv/candidate-list-table>

\*\*\* See riskphrases for CMR substances in table 1

\*\*\*\* Alkylphenol derivatives are defined as substances that release alkylphenols when they break down.

- A declaration from the chemicals supplier is required for each chemical product used in the compost bin. Appendix 7 can be used.

### **O11 Additives in plastics**

Halogenated paraffins, halogenated flame retardants, phthalates, pigments and additives based on copper, lead, boron, tin, cadmium, chromium VI or mercury, or their compounds, must not be actively added to plastics.

The requirement does not apply to recycled plastics.

- Declaration from the plastics supplier. Appendix 2 can be used.

### **O12 Wood preservation – impregnation**

Creosote or cobber can not be used for wood preservation.

- Confirmation from producer of wood, and safety data sheet/product sheet in accordance with the relevant legislation in the country in which the application is being made, e.g. Appendix II of REACH (Regulation (EC) No 1907/2006).

### **O13 Maintenance products – wood**

If the user instructions contain recommendations for maintenance of timber with chemicals, these products must satisfy O9 and O10. The trade name of the product in question must be stated. See also O19.

- The chemicals manufacturer for the maintenance product must provide a declaration that O9 and O10 are fulfilled. Appendices 6 and 7 can be used.
- Trade name of the product.
- Copy of user instructions.

**014 Mercury thermometer**

Installing a mercury thermometer in the compost bin is not permitted.

- Confirmation from manufacturer of compost bin that no mercury thermometer has been installed.

**2.5 Product function requirements****015 Acid-resistant metal**

Metal parts that are in contact with a corrosive medium (e.g. compost, seepage and air) must be acid-resistant, i.e. treated to prevent corrosion.

- Declaration from supplier of metal that the metal is acid-resistant, with description of treatment.

**016 Polyethylene density**

Polyethylene must have a density greater than 935 kg/m<sup>3</sup>, with the exception of crosslinked polyethylene.

- Confirmation of polyethylene density from plastics manufacturer or supplier.

**017 Design**

The compost bin must be fitted with anti-rodent protection and a maximum opening of 7 mm x 7 mm.

If the compost bin is marketed for possible indoor use, there must be a facility for any seepage to be collected and drained.

The lid of the compost bin must be able to be closed so that it does not blow off. A hinged lid must be able to be locked while filling to stop it falling down.

Any insulating material must be protected against mechanical damage and ingress of water.

- Confirmation from manufacture describing anti-rodent protection, collection facility for seepage, hinging/closing of lid, and protection of insulating material.

**018 Product function test**

The compost bin must be tested in accordance with SP method 2856, issue 3, 19 September 2003, "Product function test of all-year compost bins", or later. The test is published only in Swedish. The test must be conducted by an independent test institute, e.g. SP Technical Research Institute of Sweden, Borås. The compost bin must fulfil the requirements of the test method without the use of a power supply.

The test method is carried out at varying temperatures for a minimum of 12 weeks.

The test method defines the organic material that must be added and the temperature that must be achieved in order for the compost bin to be approved.

- Copy of test report in accordance with SP method 2856, issue 3, 19 September 2003, "Product function test of all-year compost bins", or later versions, issued by an independent test institute.

- For licensees under version 2: Provided no changes of functional importance have been made, licensees with a licence under version 2 of the criteria are exempt from this requirement, i.e. no new test or report is necessary. Confirmation that no functional changes have been made must be enclosed.

**019 User instructions**

The compost bin must be supplied with user instructions in the language of the country in which it is sold. The user instructions must cover the points described in Appendix 8.

- Copy of user instructions.

**020 Warranty**

The compost bin must have a 5-year warranty. The warranty requirement does not apply to parts that are subject to a high level of wear and tear. Replacement parts must be specified in the user instructions and must be available throughout the warranty period, i.e. for a minimum of 5 years after the last compost bin is sold.

- Confirmation from manufacturer describing warranty and availability of replacement parts.

**2.6 Waste and packaging****021 Production waste**

Manufacturers of compost bins must have a waste plan that covers sorting relevant waste fractions by source material.

- Waste plan with description of how the waste is sorted according to source material.

**022 Packaging**

Halogenated plastics (such as PVC) can not be used as packaging.

- Description of the packaging material and confirmation that PVC is not used.

**3 Quality and regulatory requirements**

The following procedures must be implemented to ensure that the Nordic Ecolabelling requirements are fulfilled.

If the applicant has a certified environmental management system in accordance with ISO 14001 or EMAS in which the following procedures are implemented, it is sufficient for the accredited auditor to document that the requirements are implemented.

**023 Legislation**

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

**Signed application form serves as documentation. Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled after license is given.**

**024 Licence administrators**

The company must appoint an individual responsible for the Nordic Ecolabelling requirements being fulfilled and a contact person for communications with Nordic Ecolabelling.

- Organisational chart showing who is responsible for the above.

**025 Documentation**

The licensee must be able to provide a copy of the application and the supporting fact sheets and calculation data (including test reports, documents from subcontractors and so on) for the documentation submitted as part of the application.

🔑 On-site inspection.

**026 Product quality**

The licensee must guarantee that the quality of the production of the Nordic Swan Ecolabelled product is maintained throughout the licence period.

☒ Procedures for collating and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Swan Ecolabelled product.

**027 Planned changes**

Planned product- and market-related changes affecting the Nordic Ecolabelling requirements must be notified in writing to Nordic Ecolabelling.

☒ Procedures detailing how planned product- and market-related changes are dealt with.

**028 Unforeseen non-conformities**

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

☒ Procedures detailing how unforeseen non-conformities are handled.

**029 Traceability**

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

☒ Description of/procedures for how the requirement is fulfilled.

**030 Take-back system**

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

**031 Marketing**

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

# Regulations for the Nordic Ecolabelling of products

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

More information on graphical guidelines, regulations and fees can be found at [www.nordic-ecolabel.org/regulations/](http://www.nordic-ecolabel.org/regulations/)

## Follow-up inspections

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

The licence may be revoked if it is evident that the compost bin 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.

## History of the criteria

Nordic Ecolabelling adopted version 3 of the criteria for compost bins on 11 June 2014. The criteria are valid until 30 June 2019.

On 17 November 2014 the Board of Directors decided to remove requirement O31 Marketing. This has been done as an editorial change, the version has not been changed.

On 9 October 2017 Nordic Ecolabelling's Criteria Group decided to remove O30 Take-back system. Nordic Ecolabelling's Criteria Group decided on 16 August 2018 to prolong the criteria to 30 June 2021. The new version is called 3.1.

## New criteria

- Consider more stringent requirements for content of recycled plastics
- Consider larger composting plants
- Consider extended requirements for additives in plastics

## **Appendix 1 Marketing of Nordic Swan Ecolabelled compost bins - removed**

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

## Appendix 2 Declaration by plastics supplier

Type of plastic
Manufacturer/supplier

Do(es) the plastics material(s) contain(s) halogenated plastics, such as PVC?  
 Yes  No

What percentage of the plastics raw material is recovered? \_\_\_\_\_ %

*Recovered plastics shall apply to the definition of recovered plastics in the standard ISO 14021. According to ISO 14021 recovered material is defined as post-consumer recovered material such as scrapped plastics products or packaging or pre-consumed material such as reprocessed production waste. Production waste (scrap, rework, regrind) which can be directly reused in the process is not regarded as recycled.*

Does the recovered plastics raw material contain halogenated flame retardants? Yes  No

Have any of the following been actively added: halogenated paraffins, halogenated flame retardants, phthalates, pigments and additives based on copper, lead, boron, tin, cadmium, chromium<sup>VI</sup> or mercury, or their compounds? Yes  No

*The requirement does not apply to recycled plastics.*

Signature of the manufacturer/supplier:

Date	Company name
Contact person	Phone and email

## Appendix 3 Specification of wood raw materials (supplier)

To be completed by supplier of wood material

Supplier:
Product type (e.g. logs, whole tree, shavings, veneer):

Component/Part of the compost bin	Name of supplier	Tree species* (Nordic and latin name)	Geographical origin (country/state and region/province)

*\*Indicate here whether it is e.g. pine, spruce, birch, etc. and state Latin name*

Has the wood been treated after cutting with pesticides classified by WHO as type 1A or 1B?      Yes  No

Signature of the supplier/manufacturer:

Date	Company name
Contact person	Phone

## Appendix 4 Basis for calculation of certified amount wood raw material

To verify that, at least 70% of the wood raw material, on an annual basis, shall be derived from areas where forestry operations are certified pursuant to a forestry standard and certification system that meet the criteria stated in Appendix 5 the:

- Table and calculation below, shall be filled in by the manufacturer of the compost bin.
- Documentation shall be submitted, to verify that certified wood is delivered to the manufacturer of the Nordic Swan Ecolabelled product. For example a copy of a contract and/or specified invoices.

Financial figures are not relevant and are not necessary to be cleared.

Supplier	Type of wood	Amount*	Geographical origin (country/ state and region/ province)	Forest standard. Type of certification management system (FSC, PEFC)	Quantity (%) of timber from certified forests used in the product

*\*Either volume or weight can be used as long as the same unit is used all through the table.*

The amount of timber derived from certified forests = timber derived from certified forests/total amount timber in the compost bin.

Signature of the manufacturer:

Date	Company name
Contact person	Phone and email

## **Appendix 5 Directions for forestry certification**

Nordic Ecolabelling sets requirements on the standards to which forestry is certified. These requirements are described below. Each individual national forestry standard and each certification system is reviewed by Nordic Ecolabelling as to fulfilment of the requirements. When a forestry standard is revised, it is re-reviewed.

### **Requirements on forestry standards**

The standard must balance economic, ecological and social interests and comply with the Rio Declaration's forestry principles, Agenda 21 and the Forest Principles, and respect relevant international conventions and agreements.

The standard must contain absolute requirements and promote and contribute towards sustainable forestry. Nordic Ecolabelling places special emphasis on the standard including effective requirements to protect the forest from illegal felling and that the requirements protect the biodiversity of the forest.

The standard must be available to the general public. The standard must have been developed in an open process in which stakeholders with ecological, economic and social interests have been invited to participate.

The requirements related to forestry standards are formulated as process requirements. The basis is that if stakeholders agree on the economic, social and environmental aspects of the forestry standard, this safeguards an acceptable requirement level.

If a forestry standard is developed or approved by stakeholders with ecological, economic and social interests, the standard may maintain an acceptable standard. Accordingly, Nordic Ecolabelling requires that the standard balances these three interests and that representatives from all three areas are invited to participate in development of the forestry standard.

The standard must set absolute requirements that must be fulfilled for the certification of the forestry. This ensures that the forest management fulfils an acceptable level regards the environment. When Nordic Ecolabelling requires that the standard shall "promote and contribute towards sustainable forestry", the standard must be assessed and revised regularly to initiate process improvement and successively reduce environmental impact.

### **Requirements on certification system**

The certification system must be open, have significant national or international credibility and be able to verify that the requirements in the forestry standard are fulfilled.

**Requirements on certification body**

The certification body must be independent, credible and capable of verifying that the requirements of the standard have been fulfilled. The certification body must also be able to communicate the results and to facilitate the effective implementation of the standard.

The purpose of certification is to ensure that the requirements regarding forestry standards are fulfilled. The certification system must be designed to verify that the requirements of the forest standard are fulfilled. The method used for certification must be repeatable and applicable to forestry. Certification must be in respect to a specific forestry standard. The forest must be inspected prior to certification.

**Requirements on Chain of Custody (CoC) certification**

Chain of Custody certification must be issued by an accredited, competent third party (as for forest certification).

The system shall stipulate requirements regarding the chain of custody that assure traceability, documentation and controls throughout the production chain.

If recycled fibre, wood shavings or sawdust are used, the pulp manufacturer must verify that this originates from recycled materials.

**Documentation**

Copy of forestry/ fiber raw material standard, name, address and telephone number to the organization who has worked out the standard and audit reports.

References to persons who represents stakeholders with ecological, economic and social interests who have been invited to participate.

Nordic Ecolabelling may request further documents to examine whether the requirements of the forestry standard and certification system in question can be approved.

## Appendix 6 Declaration of classification of chemical products

Product name and area of use
Manufacture/importer of the product

Is the product classified in accordance with the table below? Yes  No

Classification according to CLP Regulation 1272/2008		Classification according to EU's Dangerous Preparations Directive 1999/45/EC, 2008
Hazard class and category	H-phrase	Hazard class and R-phrase
Toxic to aquatic organisms Category acute 1 Chronic 1-3	H400, H410, H411, H412,	N with R50, R50/53, R51/53, R52, R53 or R52/53 without N
Hazardous to the ozone layer	H420	R59
Acute toxicity Category 1-3	H300, H310, H330, H301, H311, H331,	Tx (T+ in Norway) with R26, R27, R28, R39, T with R23, R24, R25, R39, R48,
Specific target organ toxicity (STOT) with single and repeated exposure STOT SE category 1 STOT RE category 1	H370, H372	T with R39 and/or R48 Xn with R68
Carcinogenic Carc 1A/1B/2	H350, H350i, H351	T with R45 and/or R49 (Carc 1 or Carc 2) or Xn with R40 (Carc 3)
Mutagenic Mut 1A/1B/2	H340, H341	T with R46 (Mut 1 or Mut 2), Xn with R68 (Mut 3)
Toxic for reproduction Repr 1A/1B/2	H360, H361, H362	T with R60, R61(Repr 1 or Repr 2), Xn with R62, R63, R64

*The classification applies under the EU's Preparations Directive 1999/45/EC as amended and/or the CLP Regulation (EC) No 1272/2008 as amended. During the transition period, i.e. until 1 June 2015, classification under the EU's Preparations Directive or the CLP Regulation may be used. After the transition period, only classification under the CLP Regulation will apply.*

Be aware that it is the manufacturer of the chemical who is responsible for correct classification.

- Safety data sheet/product sheet for each product in accordance with current legislation in the country in which the application is being made, e.g. Appendix II of REACH (Regulation (EC) No 1907/2006).

Signature of the manufacturer/importer:

Date	Company name
Contact person	Phone and email

## Appendix 7 Constituent substances in chemical products

The declarations below are for use by the manufacturer of the ingredient in connection with Nordic Ecolabelling in accordance with the criteria for compost bins, version 3.

Unless otherwise stated, the constituent substances are all substances in the product, including additives (i.e. preservatives or stabilisers) in the raw materials, but not impurities from the raw material production. Impurities are defined as residual products from the raw material 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 a raw material 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.

This declaration states whether any of the substances/classifications below are constituent substances of the raw material, either as an impurity or not, and irrespective of the quantity.

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 new knowledge emerge, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

The declaration covers the following raw materials: \_\_\_\_\_  
\_\_\_\_\_

The undersigned hereby declares the following about the above raw materials:

### Does the raw material contain:

- persistent, bioaccumulative and toxic (PBT) organic substances\*      Yes  No
  - very persistent and very bioaccumulative (vPvB) organic substances\*      Yes  No
  - substances on the Candidate List\*\*      Yes  No
  - silicones and siloxanes      Yes  No
  - carcinogenic, mutagenic or reprotoxic (CMR) substances (category 1 and 2)\*\*\*      Yes  No
  - halogenated organic compounds      Yes  No
- (including chlorinated and fluorinated organic compounds, such as PFOA (perfluorooctanoic acid and salts/esters thereof), PFOS (perfluorooctyl sulphonate and its compounds), PTFE (polytetrafluoroethylene), etc.)

Exceptions to this are:

- The biocide CMIT: the mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one [CAS No. 247-500-7] and 2-methyl-4-isothiazolin-3-one [CAS No. 220-239-6]) must not exceed 0.0015% by weight

- Paint pigments that comply with EU requirements for pigments in materials that come into contact with food.
- alkylphenols, alkylphenoethoxylates or other alkylphenol derivatives\*\*\*\* Yes  No
- chlorophenols (their salts and esters) and dimethylfumerate (biocides) Yes  No
- isothiazolins in concentrations exceeding 0.15% by weight Yes  No
- bisphenol A compounds Yes  No
- phthalates Yes  No
- pigments and additives based on copper, lead, boron, creosote, tin, cadmium, chromiumVI or mercury, or their compounds. Yes  No

\* PBT and vPvB substances are defined in Annex XIII of REACH (Regulation (EC) 1907/2006). Substances that meet the PBT or vPvB criteria, and substances that form substances that meet the criteria, may be viewed on the website of the European Chemicals Bureau, ECB:

<http://ecb.jrc.it/esis/index.php?PGM=pbt>. Substances that are "excluded" or substances "under evaluation" are not considered to have the properties of PBT or vPvB.

\*\* The Candidate List can be found at ECHAs homepage: <http://echa.europa.eu/sv/candidate-list-table>

\*\*\* See riskphrases for CMR substances in the table

\*\*\*\* Alkylphenol derivatives are defined as substances that release alkylphenols when they break down.

Signature of the manufacturer:

Date	Company name
Contact person	Phone

## Appendix 8 Content of user instructions

The user instructions must contain the following points:

### **B8.1 Assembly and installation**

If the compost bin has to be assembled before use, illustrated assembly and installation instructions must be supplied.

### **B8.2 Description of area of use**

The area of use for the type of compost bin must be clear from the user instructions.

The capacity of the compost bin must be clearly stated as person-equivalents (pe).

The user instructions must contain a description of types of waste that are suitable and unsuitable for the compost bin.

### **B8.3 User instructions for the actual composting**

The user instructions must contain instructions for the actual composting process, covering the following points:

- information on regulatory requirements for household composting
- general principles for composting
- positioning of compost bin with respect to health considerations
- initiating composting
- adding waste and composting compounds
- mixing
- temperature range and suitable moisture level for composting
- average composting time in normal conditions
- assessing the ripeness of the compost
- weight of compost bin when full
- weight of lid
- working height
- recommendations regarding aftercomposting
- what to do if the compost freezes
- troubleshooting instructions for the most common problems, such as:
  - the compost fails to warm up
  - the compost smells
  - vermin in the compost
  - large quantities of water in the compost

Any recommendations on wood preservatives for untreated compost bins must meet the requirements for chemical products (O9 and O10).

**B8.4 Overview of replacement parts**

The user instructions must contain an overview of replacement parts available for parts subject to a high level of wear and tear.

**B8.5 Material description**

To make it easier to recycle or dispose of the compost bin itself, the user instructions must specify the materials used in the different parts of the bin and how they can be recycled.

## **Appendix 9 Background memorandum on compost bins**

### **History and licensing**

This appendix provides background information about the product group and some information regarding the basis for the different requirements. For a more detailed explanation of the different requirements it is referred to the corresponding requirements in other criteria document in which it is prepared a background document.

Since Nordic Ecolabelling of compost bins began in 1994, only minor adjustments have been made to the criteria because the products have not changed substantially over the years. The function test has proved sound, and the Nordic Ecolabelling test is the only one on the market carried out on these products by an independent third party. The function test has not been revised. This means that if the Nordic Swan Ecolabelled product still has the same functional structure (documentation required), current licensees do not need to repeat the function test in connection with reassessment of current licences.

There are a total of four licences in the Nordic region: one Finnish (also registered in Norway), one Swedish and two Norwegian. There are no Danish licences in this area (data from 2013). The licences have been in place for a number of years and contact with the licensees shows that they remain interested in Nordic Swan Ecolabelling of their products. They emphasised that the Nordic Swan Ecolabel is important because it is the only labelling scheme for these products where an independent third party can select the most environmentally friendly products.

### **Market information, environmental impact and product group delimitation in brief**

Private composting is declining in the Nordic region, with an ever-increasing number of municipalities organising collection of compostable waste from local residents. However, information from the Norwegian ecological consumer organisation Grønn Hverdag<sup>1</sup> shows that although more and more municipalities are introducing municipal collection of food waste, the same municipalities are expressing a wish for households with gardens to compost their food and garden waste themselves. Phosphorus from food and garden waste, for example, is then retained in a local cycle and there is no need to purchase phosphorus fertilisers. This is important, particularly in view of the fact that natural phosphorus resources are expected to decline significantly in 30-100 years and it is therefore important to make pre-emptive savings. A garden requires constant input of nutrients and soil improvers, and from an environmental perspective it is much better to produce this nutrient-rich soil improver locally in your own garden than to buy industrially manufactured products with an environmental impact in the form of raw material extraction (e.g. peat), manufacture and transport.

In the Nordic region, interest in Nordic Swan Ecolabelled compost bins is highest in Norway, and a number of municipalities offer households a discount on waste collection fees if they purchase and use a Nordic Swan Ecolabelled compost bin. An example of

---

<sup>1</sup> Nina Berge, telephone contact, January 2013

this is Asker municipality<sup>2</sup>. Moreover, Grønn Hverdag<sup>3</sup> recommends Nordic Swan Ecolabelled compost bins both on their website and on their composting courses. Grønn Hverdag considers Nordic Swan Ecolabelled compost bins to be significantly better than other compost bins because they:

- function well and achieve a good composting result
- are manufactured from strong, long-lasting material that tolerates cold
- offer good anti-rodent protection that stops rodents getting in the compost.

The parameter for compost bins that has the greatest environmental impact is how well the bin works. The criteria therefore seek to ensure that the bin provides effective composting of organic waste. Nordic Swan Ecolabelled compost bins must therefore undergo an extensive function test. The criteria previously covered both all-year compost bins and compost bins intended for use in the summer only. The revised criteria cover only all-year compost bins, as the function test has been developed for all-year compost bins to ensure effective composting in winter weather too. The test is conducted by SP (SP Technical Research Institute of Sweden – formerly the State Institute for Technical Research of Sweden – contact person: Catrin Lindblad), which developed the test in conjunction with Nordic Ecolabelling and subsequently made the test its own. The test is only available in Swedish.

In addition, the criteria comprise a number of material requirements. The environmental impact of the constituent materials derives mainly from the plastics. All compost bins contain plastics, and the main part – the bin itself – is made of plastic, e.g. polyethylene or polypropylene. The insulation comprises polystyrene or polyurethane. Sealing materials can comprise plastic/rubber and silicone. The table below shows examples of materials used in compost bins currently on the market.

Table B7-1 Example of materials in compost bins

<b>Material</b>
Polyethylene (main part)
Polyurethane (insulation)
Silicone in lid
EPDM rubber
Galvanised steel
Polyamide
Polythene
Polystyrene (insulation)
Base plate of perforated aluminium
Wood
Polypropylene (thin layer that protects insulation)

<sup>2</sup> <http://www.asker.kommune.no/Bolig-og-eiendom/Avfall-og-gjenvinning/Hjemmekompostering/> and <http://www.asker.kommune.no/Bolig-og-eiendom/Avfall-og-gjenvinning/Renovasjonsgebyr/>

<sup>3</sup> <http://www.gronnhverdag.no>, Nina Berge

## **Background to Nordic Ecolabelling's requirements for compost bins in brief**

### **Material and chemical requirements in version 2 of the current criteria**

The material requirements were previously

- 10% by weight recycled plastics (excluding insulation)
- polyethylene density
- metal parts in contact with a corrosive medium must be acid-resistant
- mercury thermometers not permitted.

Additionally, there were chemical requirements that were in part also material requirements:

- plastics materials must not include chemical compounds containing cadmium, lead, mercury, chlorinated/brominated paraffins, brominated diphenyl ethers or phthalates.

This requirement made it difficult to use PVC.

There were also the following chemical requirements:

- use of production chemicals (e.g. glue, wood preservatives, etc.) must not be classified as CMR
- substances classified as harmful to the environment must not exceed 2% by weight in any wood preservative used
- production of insulating material must not use gases classified as harmful to the ozone layer in accordance with the regulations in any Nordic country.

### **New material requirements in version 3 of the criteria**

In order to determine what material and chemical requirements are relevant to set today, a review was carried out of the materials used in current compost bins; see table B9-1. In table B9-2 there is an overview over the material requirements in version 3 of the criteria:

Table B9-2. Material requirements in version 3 of the criteria

Requirement	Introduced in version 2/version 3	Explanation
Ban on PVC	Partly introduced in version 3	The old material/chemical requirement that precluded a number of substances in plastics largely precluded the use of PVC. A ban in a separate requirement is therefore new, but there is no substantial difference in practice.
The percentage of recycled plastic is increased to 30%. The requirement applies if the plastic comprises more than 10% of the bin by weight, meaning that the requirement does not apply in the case of small parts made of plastics. Recovered plastics must not contain halogenated flame retardants.	Introduced in version 2, but made more rigorous in version 3	It is proposed that a requirement for a certain percentage of recycled plastics is retained. The supply of recycled plastic varies depending on the type of plastic. Based on information from the Norwegian recycling company Grønt Punkt, approx. 30% of EPS (expanded polystyrene (isopore)) undergoes material recovery. For hard plastics the figure is approx. 40% (not including drinks bottles). The current criteria require 10% by weight (excluding insulation). In version 3 this is increased to 30%. The insulating material is exempted. EPS is commonly used as insulating material, and recovered EPS is also available. It is very light and will as such not account for much when measured as % by weight. Polyurethane is also used as insulating material. This cannot currently be recovered. There is also a requirement that recovered plastics must not contain halogenated flame retardants, with a limit of 1000 ppm. High levels of flame retardants are used in plastics and it is therefore desirable for the content of flame retardants in a Nordic Swan Ecolabelled product to be limited. In addition, flame retardants are not permitted in virgin plastics (see chemical requirements)
Requirements regarding timber	Introduced in version 3	Version 2 of the criteria did not include any material requirements for timber. It is proposed that a traceability requirement is introduced (applicable to all wood used) and a requirement for the percentage to be certified if wood makes up more than 10% of the product. It is proposed that the requirements are formulated on the basis of Nordic Ecolabelling's Basic module for paper products.
Requirement regarding gas in production of insulating material	Introduced in version 2, but made more stringent in version 3.	The requirement is retained but reworded into a more current formulation that is more stringent than the present requirement.

The requirements regarding acid-resistant metal and polyethylene density have been moved to product function requirements. There has been discussion as to whether the requirement regarding polyethylene density should be retained, and the conclusion is that it should be. The requirement ensures that HDPE and not LDPE is used in the bin (LDPE is of too low a quality); the requirement of 935 kg/m<sup>3</sup> is based on standard ASTM D883 - 12 Standard Terminology Relating to Plastics.

The requirement banning mercury thermometers is retained, but is moved to chemical requirements.

### **Other materials for which no requirements are set**

It is proposed that no requirements are set for metal or rubber/silicone as they represent a small part of the product. Some compost bins may have an aluminium base plate, and screws and fittings may be metal, but these represent a small part of the product.

### **What is meant by recycled plastics in R3?**

The ISO standard 14021 distinguishes between post consumer waste and pre consumer waste. Pre consumer waste is defined in chapter 7.8.1.1 a) in the standard as:

”Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it”.

Chapter 7.8.1.1 b) in the standard defines «recycled material» as:

«Material that has been reprocessed from recovered [reclaimed] material by means of a manufacturing process and made into a final product or into a component for incorporation into a product.»

It is not entirely clear what is meant by "Capable" in a). And it is not entirely clear what is meant by "reprocessed" in b). Standard Norway was contacted<sup>4</sup> and it was agreed that this was not clear. It was referred to the ISO standard committee. The ISO standard committee was contacted<sup>5</sup> and it was stated that the wording in section 7.8.1.1 was set on the basis of the paper industry, as the cuttings can go right back to the bulk solution (pulp), which should not be considered "recovered." It may be a little more uncertain what is considered and not considered as recovered material for other processes

For R3 the following applies: If scrap (and regrind) is capable of being used directly within the same process, according to ISO 14021 it will not be regarded as recycled material. This applies to both external and internal processes. Scrap from the production of compost bins will normally be reprocessed (extruded). According to the description of recycled material in chapter 7.8.1.1. b) this will be regarded as recycled material. From this follows that scrap from the manufacturer's own production can be recycled material, as long as the scrap needs to be reprocessed. This is often done at an external site. The recycled material is Dette innebærer at også skrap fra egen prosess kan være gjenvunnet materiale, så lenge den må prosesseres på nytt for å kunne brukes igjen. Dette gjøres ofte hos en ekstern bedrift. Recycled material is repurchased, this can both be recovered materials from own process or from external processes.

### **New chemical requirements in version 3 of the criteria**

In proposing new chemical requirements, reference has mainly been made to the criteria for outdoor furniture and toys in formulating new chemical requirements.

---

<sup>4</sup> Phone conversation with Knut Jonassen i Standard Norge 28/3-14

<sup>5</sup> Meeting with Marianne Eskeland 28/3-14, member of the ISO committee and employee at Ecolabelling Norway

The following chemical requirement in version 3 of the criteria:

<b>Requirement</b>	<b>Introduced in version 2/version 3</b>	<b>Explanation</b>
Overview of production chemicals	Introduced in version 3	It is proposed that a requirement is introduced for an overview of production chemicals to be submitted in order to provide an overview of which chemicals are used and to ensure a declaration of classification requirements for the chemicals used. Plastics are exempt from the requirement.
Requirement regarding prohibited classification for production chemicals	Introduced in version 2, but extended to include more classifications (harmful to the environment, toxic++)	Impregnating agents for wood materials are partly exempt from the requirement. Effective impregnation requires the use of classified substances. However, a separate requirement is set for impregnating agents. Plastics are exempt from the requirement.
Requirement regarding constituent substances in chemical products	Introduced in version 3	The requirement will make the current criteria more stringent. The requirement will ban, for example, SVHC, PBT, vPvB ++++ substances. Plastics are exempt from the requirement.
Requirements regarding additives in plastics	Partly introduced in version 3	Requirements for additives were in place previously. Some of these have been retained, such as flame retardants and phthalates, whilst others have been removed as they were primarily used in PVC, which is banned in R2. Requirements regarding pigments have also been added.
Requirement regarding impregnating agents for wood	Partly introduced in version 3	There is a ban on active ingredients based on creosote and cobber. It is considered that the use of less substances with less environmental impact will provide compost container sufficient durability.
Requirement regarding maintenance products for wood	Partly introduced in version 3	The user instructions previously contained a requirement stating that substances classified as harmful to the environment must not exceed 2% by weight in maintenance products for wood. This has now been made a separate requirement in the chemicals chapter so that it is easier to see the requirements set for chemicals. The requirement also refers to the requirement regarding user instructions, such that this information is also included in the user instructions as before.
Requirements regarding mercury thermometers	Introduced in version 2	Requirement retained but has now been moved from the materials chapter to the chemicals chapter.

### **Other requirements**

No changes have been made to other requirements. Requirements regarding waste, packaging and function are therefore the same as in version 2 of the criteria.