Nordic Ecolabelling for

Greaseproof paper– Supplementary Module



Version 5.0 • 14 December 2023 – 31 December 2028

Nordic Ecolabelling

Contents

Why choose the Nordic Swan Ecolabel? 3
What can carry the Nordic Swan Ecolabel? 3
How to apply 4
1 Definitions 6
2 Environmental requirements 7
2.1 Information about production 7
2.2 Energy and greenhouse gases 8
2.3 Emissions to water and air 9
2.4 Chemicals 10
2.5 Packaging and labelling 13
3 Licence maintenance 15
Regulations for the Nordic Ecolabelling of products 17
Follow-up inspections 17
Criteria version history 17
New criteria 17

Appendix 1 Declaration from pulp/paper manufacturer (O4, O6, O9)
Appendix 2 Chemicals used for impregnation and coating (O10)
Appendix 3 Silicones used for coating/impregnation/added to the pulp/paper (O10)
Appendix 4 Declaration from packaging manufacturer (O13-O15)

049 Greaseproof paper – Supplementary Module, version 5.0, 14 December 2023

Contact information

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:

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What is Nordic Swan Ecolabel greaseproof paper?

The Nordic Swan Ecolabel on a greaseproof paper signifies that the product meets strict environmental requirements. This means that the paper has minimal environmental impact throughout its lifecycle.

Nordic Swan Ecolabel greaseproof paper:

- Is manufactured in an energy efficient way with absolute limit values for emissions of greenhouse gases, and with no dependence on fossil oil or coal in the production process.
- Meets strict requirements concerning chemicals that are hazardous to health and harmful to the environment. Fluorine and chromium compounds are prohibited.
- Is made of 100% traceable fibres sourced from controlled origins, with a minimum requirement of 70% of fibres originating from certified forests.
- Meets strict requirements for limiting emissions into the air and water during the manufacturing process.

Why choose the Nordic Swan Ecolabel?

- Greaseproof paper may use the Nordic Swan Ecolabel trademark for marketing. The Nordic Swan Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Swan Ecolabel is a simple way of communicating environmental work and commitment to customers.
- The Nordic Swan Ecolabel clarifies the most important environmental impacts and thus shows how a company can cut emissions, resource consumption and waste management.
- Environmentally suitable operations prepare greaseproof paper for future environmental legislation.
- Nordic Ecolabelling can be seen as providing a business with guidance on the work of environmental improvements.
- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements, since 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?

Greaseproof papers are in this criterion defined as cellulose based papers coated with various substances. Greaseproof paper marketed for use in contact with foodstuffs must be made from virgin fibres. The product group includes:

- greaseproof paper (parchment paper) such as baking paper, food paper, interlay paper, baking tray liner, sandwich paper and other greaseproof paper used for food wrapping.
- converted products made from the aforementioned paper types. Examples of converted products are baking cups (e.g. cupcake and muffin cups).

Greaseproof paper products have a close association with products included in the criterion for 'Disposables for Food' (047), as this product group also includes papers used for food packaging. When greaseproof paper is used to wrap food, e.g. sandwich paper, the paper can be Nordic Swan Ecolabelled under this product group for greaseproof paper. The same applies to greaseproof paper that is converted into various types of baking cases. However, if the greaseproof paper has been converted into/is used in other types of disposable items, such as paper laminated with a plastic coating, these cannot be Nordic Swan Ecolabelled through the criteria for greaseproof paper. They can, however, be labelled based on the criteria for Nordic Ecolabelling for Disposables for Food (047). These in turn require the greaseproof paper used in the disposable items to meet the requirements presented in these criteria for greaseproof paper.

Please contact Nordic Ecolabelling if you have any queries concerning which products can be labelled by these requirements.

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 or www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049 Contact information is in the beginning of this document.

What is required?

The application must consist of an application form/web form and documentation showing that the requirements are fulfilled. Applications are to be submitted with the aid of the web-based application tool

Pulps used in the paper must be declared and listed at the Nordic Ecolabelling's website or in My Swan Account. The pulp producer is responsible for the application fee and annual listing fee for the pulp.

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:

Upload

State data in web-based application tool

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.

Licence validity

The Nordic Swan Ecolabel licence is valid provided that 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 contact information in the beginning of this document. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website or www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049 for further information.

1 Definitions

Term	Definition
ADt	Air dry tonne (ADt) is dry solid content of pulp and paper where specific chemical and energy consumption and emissions are expressed. ADt for pulp is 90%, while ADt for paper means a solid content of 94%
BAT-AELs	The range of emission levels obtained under normal operating conditions using a best available technique or a combination of best available techniques, as described in BAT conclusions, expressed as an average over a given period of time, under specified reference conditions (Art 3.13. of Directive 2010/75/EU).
Broke	Broke is waste from production (scrap, strips from cutting the rolls at the paper mill etc.) and is not classified as recycled fibre, see also recycled fibre.
CEPI	Confederation of European Paper Industry
COD	Chemical oxygen demand (COD) indicating the amount of chemically oxidisable organic matter in wastewater.
Coating	Process of applying, to the surface of a paper, one or more layers of coating slip or other material in fluid form. Greaseproof paper can e.g. be coated with fluorinated substances, silicones and waxes to attain the desired grease/liquid-repellent properties.
Converting	Manufacturing of a greaseproof paper product by a process or operation applied after the papermaking process.
Fossil fuels	Coal, natural gas, peat and petroleum products (such as oil) from the decayed bodies of animals and plants that died millions of years ago.
Plant based fibres	Cellulosic fibres such as those from wood and bamboo can be used in production of Nordic Swan Ecolabel paper products. If fibres from other plants are included in the product group, contact Nordic Ecolabelling. Nordic Ecolabelling will determine which new fibres may be included in the product group.
Production chemical	Collective term for chemical products used during production of pulp and paper. It can refer to chemical additives, auxiliary chemicals and process chemicals. The term is further used to refer to starch, filler material and so on. Even wastewater treatment chemicals are included, see closely the Chemical Module.
Recycled fibre	Recycled material is defined in accordance with ISO 14021 in the following two categories. Material in the pre-consumer phase. Material that has been taken from the waste flow during the manufacturing process. The exception is the re-use of material that is generated in a process, e.g. waste that can be recycled within the same process that generated it. Material in the post-consumer phase. Material generated by households or by trade, industry or institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes the return of materials from the distribution chain.
Residue	Residue means a substance that is not the end product(s) that a production process directly seeks to produce; it is not a primary aim of the production process and the process has not been deliberately modified to produce it.
Reel/roll	Reel/Roll is form in which the paper is produced at the end of the paper machine, a semi-finished product intended to be converted to a finished product
Sales packaging	Sales packaging means packaging conceived so as to constitute a sales unit consisting of products and packaging to the final user or consumer at the point of sale (in line with EU proposal for a Regulation of Packaging and Packaging Waste, November 2022).
Tip fuel	Peak load fuel is only used for short periods when it is really cold.
Wood fibre	Wood fibre may consist of virgin fibre from timber or sawmill chippings. Wood shavings and sawdust are residuals and not regarded as virgin fibres.

2 Environmental requirements

2.1 Information about production

O1 Description of the product

Applicant shall provide the following information about the greaseproof paper and product(s):

- Trademark/trade name of the greaseproof paper and product, paper manufacturer, type (e.g. baking paper, cooking paper, sandwich paper, cupcake cups) and grammage (g/m^2) for which paper(s) is/are available.
- Describe the manufacturing process for the product, including conversion and waste water treatment. State also annual production volumes.
- Compile a list of constituent materials, e.g. production chemicals, pulps and packaging materials used. In the case of production chemicals, report all production chemicals used in the production of paper and in conversion, providing documentation regarding the product's complete name, function, process in the mill, supplier and quantities used in kg/ADt paper. For pulps, the production site must be stated.

The documentation required is to be submitted with the aid of the web-based application tool.

Overview of the above points in the web-based application tool.

Representative product samples are to be supplied upon request from Nordic Ecolabelling.

O2 Pulp

All pulps used in the manufacture of Nordic Swan Ecolabel greaseproof paper and products must meet the requirements stipulated in the Basic Module and the Chemical Module, generation 3 or later unless otherwise indicated in the requirements below. This also applies to on-site manufactured pulp.

If the pulp has already been inspected by Nordic Ecolabelling, the requirement is fulfilled. Provide information on the trade name, production site and the manufacturer of the inspected pulp.

Pulp inspected by Nordic Ecolabelling: enclose information on the trade name, production site and the manufacturer of the pulp.

Pulp not inspected by Nordic Ecolabelling: **the pulp manufacturer** shall submit documentation required from the pulp mill with the aid of the web-based application tool.

O3 Greaseproof paper and products

Manufacturing of the greaseproof paper and finished product must meet the requirements of the Basic Module and the Chemical Module, generation 3 or later, where relevant, unless otherwise indicated in the requirements below. This also applies to converters (e.g. requirement for waste).

It must be possible to reuse baking paper, see also O16 Labelling.

The greaseproof paper and product manufacturer shall submit documentation demonstrating compliance with relevant requirements in the Basic and Chemical Modules, generation 3 with the aid of the web-based application tool.

O4 Requirement for pulp used to manufacture paper for contact with food

Only virgin fibres shall be used in the pulp used to manufacture paper for use in contact with food.

The paper manufacturer shall demonstrate compliance with the requirement in the web-based application tool. Appendix 1 can be used.

2.2 Energy and greenhouse gases

Energy consumption is regulated through requirements on amount of fuel and electricity used while fuel type used for production of heat is regulated by the greenhouse gas emission requirement. The requirements are based on information of actual energy use in production in relation to a specified reference value. The ratio between actual energy consumption and the reference value translates to an energy score.

Calculations of the energy consumption and emissions of CO_{2e} encompasses the entire production process – both greaseproof paper manufacturing and the constituent pulp. Energy calculations do not include energy consumed during transport of raw materials or in conversion and packaging. The paper manufacturer shall verify fulfilment of the requirements. Pulp manufacturers shall, however, provide details of energy use and greenhouse gas emissions to paper producer. See also Appendix 4 in the Basic Module, generation 3 where instructions for calculations are given.

O5 Energy

The total electricity and fuel points scores for Nordic Swan Ecolabel greaseproof paper and product must be less than 2.3.

$P_{electricity_total} < 2.3$

$P_{fuel_total} < 2.3$

$P_{electricity_total}$ and P_{fuel_total} include the energy scores from paper production and the pulps that are used.

A more detailed description of documentation requirements and calculation methods is provided in Appendix 4 of the Basic Module, generation 3 or later, in which $P_{electricity}$ and P_{fuel} are also defined.

The reference values for the manufacturing of greaseproof paper consumption offuel are set at 3000 kWh/ADt, and for electricity at 1400 kWh/ADt.

If steam from electric boilers is used, the energy content of steam must be converted to fuel. The energy of the steam is converted into fuel by multiplying the amount of electricity used by 1.25. The resulting amount of energy is added to the fuel consumption of the production. See closely Appendix 4 in the Basic Module, generation 3.

The paper manufacturer shall submit calculations in accordance with Appendix 4 of the Basic Module, generation 3 showing compliance with the limit values. Worst case calculations shall be enclosed to demonstrate that each pulp recipe meets the requirements in case pulp mixture specific calculations are not documented for each pulp mix. Nordic Ecolabelling also provides a spreadsheet that is to be used for these calculations.

O6 Fossil fuels

Fossil oil and coal must not be used as fuels* for production of process heat in the greaseproof paper mill.

Energy from fossil oil may only be used e.g. inplanned maintenance stops, emergency maintenance stops, as a reserve and tip fuel (peak load fuel) or at start-ups for regulation of the combustion temperature in a heat and co-generation boiler is allowed.

**Use of natural gas and liquefied petroleum gas (LPG) is allowed.*

The paper manufacturer shall confirm that fossil oil and/or coal are not used as fuels to produce process heat in the greaseproof paper mill. Appendix 1 can be used.

In case fossil oil is used as reserve or tip fuel, the paper manufacturer shall report why the use of fossil oil is necessary.

O7 Emissions of greenhouse gases

Emissions of greenhouse gases from fuels and electricity used for production of process heat must not exceed 900 kg CO_{2e} /ADt paper. CO_{2e} calculations include emissions from production of both greaseproof paper and constituent pulps.

If process heat is generated by electricity, CO_{2e} emissions related to electricity are calculated by factor 231 g CO_2/kWh. However, if the greenhouse gas emission intensity of electricity generation given by European Environment Agency* indicates a higher emission calculation factor for the country where the paper mill is located, this shall be used.

* *https://www.eea.europa.eu/data-and-maps/daviz/co2-emission-intensity-10#tab-googlechartid_googlechartid_googlechartid_googlechartid_chart_11111*

If steam from electric boilers is used, the energy content of steam must be converted to fuel. The energy of the steam is converted into fuel by multiplying the the energy content of electricity by 1.25. See closely Appendix 4 in the Basic Module, generation 3.

The paper manufacturer shall submit calculations in accordance with Appendix 4 of the Basic Module, generation 3 to demonstrate fulfilment of the requirement. Nordic Ecolabelling also provides a spreadsheet that is to be used for these calculations.

2.3 Emissions to water and air

The requirements on emissions to water and air are structured in such a way that the greaseproof paper manufacturer calculates total emissions from pulp and paper production. To do this, the paper manufacturer will need information on the specific emissions from the pulp production.

Measured emissions are compared with the reference values for emissions. The reference values for pulps can be found in Appendix 5 Table 5.1 in the Basic Module, generation 3 or later. These reference values shall be used in the calculation for individual emission parameters. The emission scores for chemical oxygen demand (COD), phosphorus (P), sulphur (S) and nitrogen oxides (NOX) are finally summed to a total emissions score. Requirements regarding the emission of AOX can be found in the Basic Module, generation 3 or later (O14).

The emission value that is reported is primarily based on measured emissions. Instructions for measuring emissions are found in Appendix 5 in the Basic Module. Requirements are also imposed on the laboratory, the method of measurement and frequency of measurement.

O8 Total emissions score

Emissions to air and/or water from the production of pulp and greaseproof paper must be specified in terms of emissions scores for each of the four parameters (P_{COD}, P_P, P_S, P_{NOx}). The measured emissions shall be compared to reference values relating to specific production methods.

The individual point score for P_{COD}, P_P, P_S, and P_{Nox} must not exceed 1.3.

The total emissions score, $P_{emissions\ total}$:

$P_{emissions\ total} = P_{COD} + P_P + P_S + P_{Nox}$ must not exceed 4.0.

The calculation of the product's total emissions for greaseproof paper production ($P_{emission\ total}$) uses the product-specific reference values given in Table 1.

To calculate the individual emission scores for P_{COD}, P_P, P_S, and P_{Nox} and for reference values for difference pulp types, please refer to the Basic Module, generation 3 or later (Appendix 5, Table 5.1).

Table 1 Reference values for emissions of greaseproof paper.

Type of paper	Reference values for emissions (kg/ADt)			
	COD_{ref}	P_{ref}	S_{ref}	NOx_{ref}
Greaseproof paper	2.0	0.007	0.15	0.8

Emissions from the paper mill shall be reported after the wastewater treatment. Water samples must be taken after treatment of the wastewater in a treatment plant and the water flow at the time of sampling must be stated. If the wastewater is treated together with other wastewater, or if campaigns are run, samples must be taken before the treatment plant and before being mixed with other water. The results of the analysis are then reduced by the efficiency of the treatment plant, which must be documented. See also Appendix 5 in the Basic Module, generation 3.

⇪ **The paper manufacturer** shall submit calculations in accordance with Appendix 5 of the Basic Module, generation 3 to demonstrate fulfilment of the requirement. Nordic Ecolabelling also provides a spreadsheet that is to be used for these calculations.

⇪ **The paper manufacturer** shall submit the specific emissions (kg/ADt) of COD, P, S and NOx during the production of greaseproof paper. For each emission parameter, test results, method of analysis, test frequency, sampling points for emissions and the compliance of laboratories with laboratory requirements shall Product safety and quality

2.4 Chemicals

All production chemicals involved in the production of greaseproof paper and finished products must comply with the requirements set out in the Chemical Module, generation 3 or later, and the requirements specified in the Supplementary Module for Greaseproof Paper.

Requirements in respect of production chemicals not presented below, e.g. paper colourants, are set out in the Chemical Module, generation 3. See Table 2 below for an overview of the chemical requirements stipulated in the Chemical Module and the Supplementary Module for Greaseproof Paper.

Table 2 Overview of chemical requirements, indicating in which module the requirement is stipulated.

Chemicals	Chemical Module, generation 3	Supplementary Module for Greaseproof Paper and products, generation 5
All production chemicals - Classification (O1) - Prohibited substances (O2)	O1, O2	
Cleaning agents and dispersants	O3	
Deinking chemicals	O4	
Biocidal products and slimicides	O5	
Retention agents and flocculants	O6	
Wet strength agents	O7	
Foam inhibitors and defoamers	O8	
Optical brighteners and antibacterial substances		O9
Chemicals used for impregnation and coating		O10
Paper colourants - Metals (O9) - Amines and phthalates (O10)	O9, O10	
Adhesives	O11	
Starch - GMO	O12	
Colourants and printing inks		O11
Paper in contact with food		O12

O9 Optical brighteners and antimicrobial substances

Optical brighteners must not be used.

Chemicals intended to provide antimicrobial properties of the product must not be added.

An antimicrobial agent is a chemical/product that inhibits or stops growth of microorganism such as bacteria, fungi, or protoza (single-celled organism) and can be applied on a treated article or constituent in a chemical product. Antimicrobial agents such as triclosan, triclocarban and silver are examples. The requirement does not apply to preservatives used to preserve the chemical product, so-called in-can preservatives.

The paper manufacturer shall demonstrate compliance with the requirement in the web-based application tool. Appendix 1 can be used.

O10 Chemicals used for impregnation and coating

Chemicals intentionally added to the pulp or to impregnation/coating of paper must not contain

- chromium or fluorinated substances.
- 34 bisphenols[1] that have been identified by ECHA for further EU regulatory risk management that are known or potential endocrine disruptors for the environment or human health, or that can be identified as toxic to reproduction.

If fluorinated substances are used for impregnation/coating of non-ecolabelled paper and products in the mill, total organic fluorine (TOF) in the Nordic Swan

[1] Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section2.1:Bisphenols for which further EU RRM is proposed – restriction https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02

Ecolabel paper shall be analysed according to EN ISO 10304-1* (D20) or equivalent standard**. The analysis must be documented on application, and tested annually.

** The content of inorganic fluorine compounds is subtracted from the results of the TOF analysis. The indicator value of 20 mg/kg shall not be exceeded in the Nordic Swan Ecolabel paper.*
*** Equivalent standard must be approved by Nordic Ecolabelling.*

The following requirements must be met in connection with silicone treatment of the paper:

- Solvent-based painting/coating agents must not be used.
- Octamethylcyclotetrasiloxane, D4, (CAS 556-67-2), decamethylcyclopenta-siloxane, D5, (CAS 541-02-6) and dodecamethylcyclohexasiloxane, D6, (CAS 540-97-6), must not be used. Impurities of D4, D5 and D6 are exempt from this requirement*.
- Organotin catalysts must not be used.

** Impurity refers to residues from primary production which may be found in the commercial product at concentrations below 1000 ppm on dry silicone basis (0.1% by weight, 1000 mg/kg dry silicone). The limit value is applied to each substance separately. Impurities do not refer to substances which have been added to a raw material or the product actively and for a particular purpose, irrespective of quantity. The commercial product refers to a single component (e.g. silicone polymer, silicone emulsion and catalyst emulsion) in a multicomponent silicone release coating system.*

Regarding fluorinated substances, chromium and bisphenols, **pulp-/paper manufacturer** shall demonstrate compliance with the requirement in the web-based application tool. Appendix 2 can be used. If fluorinated substances are used e.g. for impregnation/coating of paper in the mill, the **paper manufacturer** shall enclose

- test results of the Nordic Swan Ecolabel paper from an independent third party. Testing shall comply with the method described in the requirement.

- a written procedure showing how an annual test is performed in line with the requirement to ensure that Nordic Swan Ecolabel paper does not contain fluorinated substances.

Regarding silicone treatment, **the chemical supplier** shall demonstrate compliance with the requirement in the web-based application tool. See also Appendix 3 in this Criteria document.

O11 Colourants and printing inks

If colourants* and printing inks are used in the greaseproof paper and converted products in contact with food, they must comply with:

- BfR's recommendation XXXVI. Paper and board for food contact, April 2021 or more recent versions and subsequent subdocuments such as BfR's recommendation XXXVI/2. Paper and Paperboard for baking purposes, April 2022 or more recent versions[2].

or

- EuPIA "Guideline on Printing Inks applied to Food Contact Materials" April 2020 or later

and

[2] BfR Recommendations on Food Contact Materials - BfR (bund.de)

- Swiss Ordinance Annex 10.

In addition, the printing ink shall be manufactured in accordance with the EuPIA "Good Manufacturing Practices (GMP) - Printing Inks for Food Contact Materials". A statement of Composition (SoC) shall be available for each printing ink.

The colourant and printing ink must also meet the requirements set out in the Chemical Module for Paper Products, v.3 or later.

**Colourants - product sold by a manufacturer that is used for dyeing, shading or colouring of paper or pulp.*

For colourants, **the paper and product manufacturer** shall enclose confirmation from an independent third-party that BfR's recommendations are followed.

For printing inks, **the paper and product manufacturer** shall enclose Declaration of Compliance (DoC) in line with Swiss Ordinance and the EUPIA's Guidelines including a statement of Composition (SOC).

The chemical supplier must demonstrate compliance with the requirements set in the Chemical Module, v.3 in the web-based application tool.

O12 Greaseproof paper and product in contact with food

Greaseproof paper and product marketed for use in contact with food must comply with EU Regulation no. 1935/2004/EC on materials and articles intended to come into contact with food and be labelled as such according to article 15 of EU regulation no. 1935/2004/EC.

Paper, depending on product type, must also comply with:

- BfR's recommendation XXXVI. Paper and board for food contact, April 2021 or more recent versions or with the subsequent subdocuments such as BfR's recommendation XXXVI/2. Paper and Paperboard for baking purposes, April 2022 or more recent versions[3].

and

- Cepi's Food Contact Guidelines for the Complience of Paper & Board Materials and Articles, 2019[4] or more recent versions.

The paper and product manufacturer shall enclose confirmation from an independent third-party that the Framework Regulation and BfR's recommendations are followed. Declaration of Compliance (DoC) in line with the Cepi's Guidelines shall also be enclosed.

The product manufacturer shall enclose sample of information printed on the product's exterior packaging.

2.5 Packaging and labelling

O13 Raw materials in sales packaging

The requirement covers sales packaging* for the Nordic Swan Ecolabel product.

** Sales packaging means packaging conceived so as to constitute a sales unit consisting of products and packaging to the final user or consumer at the point of sale. Packaging of paper reels (paper to converter) is out of scope of the requirement.*

[3] https://www.bfr.bund.de/en/bfr_recommendations_on_food_contact_materials-308503.html
[4] https://www.cepi.org/wp-content/uploads/2020/09/Food-Contact-Guidelines_2019.pdf

Plastic packaging

Plastics must contain at least 35% recycled** plastics.

Paper packaging

Paper packaging refers to all paper-based packaging (paper, board etc.). On an annual basis,

1. A minimum of 70% of the fibre raw material that is used in the paper packaging shall originate from forestry certified under the FSC or PEFC schemes,

   or

2. The paper packaging must consist of a minimum of 70% of recycled fibres** or be labelled as FSC or PEFC recycled,

   or

3. A combination of certified and recycled fibres. If the paper packaging contains both recycled and certified fibres, the sum of these fibres shall in total be a minimum of 70%.

The remaining proportion of fibre raw material must be covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources).

** *Recycled material defined according to ISO 14021 in the following two categories:*

Pre-consumer recycled material: Material diverted from the waste stream during a manufacturing process, requires a reprocessing (e.g. in case of recycled plastic sorting, reclamation and granulation) before it can be reused regardless of whether it is produced in-house or externally. Excluded is reuse of materials such as e.g. in paper mills broke generated in a process and capable of being reused within the same process that generated it.

Post-consumer material: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

The product manufacturer shall enclose documentation showing the fulfillment of the requirement e.g. in the form of technical data sheets and through invoices that are checked in connection with an on-site inspection. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used for the documentation.

O14 Recyclable packaging material in the sales packaging

It shall be possible to recycle* the main material** in the sales packaging via existing recycling systems. Furthermore, sales packaging made of plastic must be made of mono-materials***.

* *Incineration for energy recovery is not classed as material recycling. Biodegradable/compostable/oxo-degradable plastics cannot be recycled at today's recycling facilities.*

** *The main material is defined as the material that makes up 90 wt% or more of the total packaging.*

*** *A mono-material is defined as material components that are not composed of multiple material types, e.g. the same plastic type and cardboard are mono-materials.*

The product manufacturer shall demonstrate compliance with the requirement by enclosing a description of the main material in the packaging and how the material can be recycled in existing waste and resource systems in

the Nordic region. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used for the documentation.

O15 Chlorinated plastic

Chlorinated plastic, e.g. polyvinyl chloride (PVC) and polyvinylidene chloride (PVDC), must not be used in the packaging (article, group or transport packaging).

The product manufacturer shall declare that chlorinated plastic is not used in the packaging. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used for the documentation.

O16 Labelling

Greaseproof paper products:

The following text must be visibly printed on packaging of baking paper: “The pure paper can be used more than once”.

If the product or its packaging carries information on sorting and recycling of product, the information must comply with established sorting and recycling systems available in the country in which the product is to be sold.

Packaging:

The packaging shall carry information on how packaging can be sorted for recycling. This information shall be stated using text or symbols.

For business-to-business, labelling is allowed to be placed in other places than on the packaging, e.g. on the declaration of compliance document.

The product manufacturer shall enclose sample of information printed on the product’s exterior packaging showing the fulfillment of the requirement or in case of business-to-business, e.g. the declaration of compliance document.

3 Licence maintenance

The purpose of the licence maintenance is to ensure that fundamental quality assurance is dealt with appropriately.

O17 Customer complaints

The licensee must guarantee that the quality of the Nordic Swan Ecolabel product does not deteriorate during the validity period of the licence, therefore, the licensee must keep an archive over customer complaints.

Note that the original routine must be in one Nordic language or in English.

Routines for handling and archiving customer complaints.

O18 Traceability

The licensee must be able to trace the Nordic Swan Ecolabel products in the production. A manufactured/sold product should be able to trace back to the occasion (time and date) and the location (specific factory) and, in relevant cases, also which machine/production line where it was produced. In addition, it should be possible to connect the product with the actual raw material used.

Description of the mill's traceability system/routines for the fulfilment of the requirement.

O19 Annual follow-up

Every year a follow-up of the environmental requirements must be made in line with instructions from Nordic Ecolabelling, see also requirement O16 in the Basic Module, generation 3 or later.

Nordic Ecolabelling may examine a selection, or all, of the requirements.

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 https://www.nordic-swan-ecolabel.org/regulations/

Follow-up inspections

Nordic Ecolabelling may decide to check whether greaseproof paper fulfils Nordic Ecolabelling 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 the greaseproof paper product does not meet the requirements.

Criteria version history

Nordic Ecolabelling adopted version 5.0 of the criteria for Greaseproof Paper on 14 December 2023. The criteria are valid until 31 December 2028.

New criteria

In the next generation of the criteria, the following requirements shall be revised

• Energy and emissions on greenhouse gases (O5-O7), regarding reference values for energy consumption and limit value for emissions of CO_{2e}.

Appendix 1 Declaration from paper manufacturer (O4, O6, O9)

Declaration from the paper manufacturer, to be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of greaseproof paper.

Paper manufacturer:

O4 Requirement for fibres used to manufacture paper for contact with food	Yes	No
Does the paper contain recycled fibers?	☐	☐

O6 Fossil fuels	Yes	No
Are fossil oil and/or coal used as fuels* to produce process heat in the greaseproof paper mill? *Energy from fossil oil may only be used in connection with e.g. planned maintenance stops, emergency maintenance stops, as a reserve and tip fuel (peak load fuel) or at start-ups for regulation of the combustion temperature in a heat and co-generation boiler is allowed.* *****Use of natural gas and liquefied petroleum gas (LPG) is allowed.*	☐	☐
Is fossil oil used as a reserve or tip fuel in the greaseproof paper mill? In case fossil oil is used as reserve or tip fuel, the paper manufacturer shall report why the use of fossil oil is necessary. Upload the report.	☐	☐

O9 Optical brighteners and antimicrobial substances	Yes	No
Are optical brighteners used?	☐	☐
Are antimicrobial or disinfecting ingredients* added to the paper? ** An antimicrobial agent is a chemical/product that inhibits or stops growth of microorganism such as bacteria, fungi, or protoza (single-celled organism) and can be applied on a treated article or constituent in a chemical product. Antimicrobial agents such as triclosan, triclocarban and silver are examples. The requirement does not apply to preservatives used to preserve the chemical product, so-called in-can preservatives.*	☐	☐

We declare that the requirements have been met and that the information provided is correct. In the event of any change to the composition of the product, that impacts the product's fulfilment of the requirements, a new declaration of fulfilment of the requirements is to be submitted to Nordic Ecolabelling.

Place and date:	Company name/stamp:
Person responsible:	Signature of responsible person:
Phone:	E-mail:

Appendix 2 Chemicals used for impregnation and coating (O10)

Declaration from the pulp and paper manufacturer, to be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of greaseproof paper.

Pulp or paper manufacturer:

O10 Chemicals used for impregnation and coating	**Yes**	**No**
What chemicals are used to impregnate/coat the paper or added to the pulp? _____ _____ _____ _____		
Do any of the chemicals listed above contain chromium or fluorinated substances?	☐	☐
Are fluorinated substances used for impregnation/coating of non ecolabelled paper and products in the greaseproof paper mill?	☐	☐
If fluorinated substances are used for impregnation/coating of non ecolabelled paper in the mill, test results on the Nordic Swan Ecolabel paper from the paper manufacturer shall be enclosed from an independent third party. Testing shall comply with the method described in the requirement.* **Total Organic Flourine, TOF, method EN ISO 10304-1 (D20) or equivalent standard which must be approved by Nordic Ecolabelling. The content of inorganic fluorine compounds is subtracted from the results of the TOF analysis. The indicator value of 20 mg/kg shall not be exceeded in the Nordic Swan Ecolabel paper.* Please state name of attached test report below: _____		
Do any of the chemicals listed above contain 34 bisphenols** that have been identified by ECHA for further EU regulatory risk management that are known or potential endocrine disruptors for the environment or human health, or that can be identified as toxic to reproduction? ** *Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section2.1:Bisphenols for which further EU RRM is proposed – restriction https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02*	☐	☐

We declare that the requirements have been met and that the information provided is correct. In the event of any change to the composition of the product, that impacts the product's fulfilment of the requirements, a new declaration of fulfilment of the requirements is to be submitted to Nordic Ecolabelling.

Place and date:	Company name/stamp:
Person responsible:	Signature of responsible person:
Phone:	E-mail:

Appendix 3 Silicones used for coating/ impregnation/ added to the pulp/paper (O10)

Declaration from the chemical supplier, to be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of greaseproof paper.

Product name:
Function:
Chemical producer/supplier:

O10 Chemicals used for impregnation and coating	**Yes**	**No**
Is the product solvent-based?	☐	☐
Are organotin compounds used?	☐	☐
Does the product contain octamethylcyclotetrasiloxane, D4, (CAS 556-67-2), decamethylcyclopentasiloxane, D5, (CAS 541-02-6) and dodecamethylcyclohexasiloxane, D6, (CAS 540-97-6)? Impurities of D4, D5, and D6 are exempt.*	☐	☐
Please state the unambiguous chemical name, CAS number and concentration (in ppm) for each substance, D4, D5 and D6: _____ _____ _____		
** Impurity refers to residues from primary production which may be found in the commercial product at concentrations below 1000 ppm on dry silicone basis (0.1% by weight, 1000 mg/kg dry silicone). The limit value is applied to each substance separately. Impurities do not refer to substances which have been added to a raw material or the product actively and for a particular purpose, irrespective of quantity. The commercial product refers to a single component (e.g. silicone polymer, silicone emulsion and catalyst emulsion) in a multicomponent silicone release coating system.*		

We declare that the requirements have been met and that the information provided is correct. In the event of any change to the composition of the product, that impacts the product's fulfilment of the requirements, a new declaration of fulfilment of the requirements is to be submitted to Nordic Ecolabelling.

Place and date:	Company name/stamp:
Person responsible:	Signature of responsible person:
Phone:	E-mail:

Appendix 4 Declaration from packaging manufacturer (O13-O15)

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of Greaseproof paper. You may also enclose other documentation such as technical data sheets.

This declaration is based on the knowledge we have at the time of the application, based on tests and/or declarations from raw material manufacturers, with reservations for new advances and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

Manufacturer/distributor
Packaging material (type of paper, board, plastic etc.) List all materials included in the packaging.

General requirements (O14-O15)

O14 Recyclability packaging material in the sales packaging	**Yes**	**No**
Is the main material* in the packaging recyclable** via the existing recycling systems? ** The main material is defined as the material that makes up 90 wt% or more of the total packaging.* ** Incineration for energy recovery is not classed as material recycling. Biodegradable/compostable/oxo-degradable plastics cannot be recycled at today's recycling facilities.* Describe the main material in the packaging and how it can be recycled. _____ _____	☐	☐

O15 Chlorinated plastic	**Yes**	**No**
Is chlorinated plastic e.g. polyvinyl chloride (PVC) and polyvinylidene chloride (PVDC) used in the packaging?	☐	☐

Requirements for plastics packaging (O13):

O13: Recycled raw material in sales packaging - plastic	**Yes**	**No**
Does the packaging contain recycled plastics*? **Recycled material defined according to ISO 14021 in the following two categories:* *Pre-consumer recycled material: Material (e.g. rework, regrind or scrap) diverted from the waste stream during a manufacturing process, requires a reprocessing (e.g. sorting, reclamation and granulation) before it can be reused regardless of whether it is produced in-house or externally. Excluded is reuse of materials such as rework, regrind or scrap generated in a process which is capable of being reused within the same process that generated it.* *Post-consumer material: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.* **If yes**, state the percentage of recycled plastics (weight- %): _____	☐	☐
Is the plastic packaging made of mono-material**? ***A mono-material is defined as material components that are not composed of multiple material types, e.g. the same plastic type and cardboard are monomaterials.*	☐	☐

Requirements for paper packaging (O13):

Paper packaging refers to all paper-based packaging (paper, board etc.).

O13: Raw material in sales packaging - Paper	**Yes**	**No**
Does the paper packaging contain recycled material*? *** Recycled material defined according to ISO 14021 in the following two categories:* *Pre-consumer material: Material diverted from the waste stream during a manufacturing process. Excluded is reuse of materials such as broke generated in a process and capable of being reused within the same process that generated it.* *Post-consumer material: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.* **If yes**, state the percentage of recycled material in packaging (weight- %): _____	☐	☐
Does the paper packaging contain certified fibres that originates from forestry certified under the FSC or PEFC schemes? **If yes**, state the percentage by weight of the pulp/paper that originates from forestry certified under the FSC or PEFC schemes: _____	☐	☐
With reference to the percentage recycled material/certified fibres in the paper: Is the remaining proportion of fibre raw material covered by the FSC/PEFC control schemes (FSC controlled wood/PEFC controlled sources)?	☐	☐

Place and date:	Company name/stamp:
Person responsible:	Signature of responsible person:
Phone:	E-mail: