# Nordic Ecolabelling for

# **Greaseproof paper- Supplementary Module**



Version 5.0 • 11 May 2023 − 30 June 2023 Consultation version



# Contents

Wh	y choose the Nordic Swan Ecolabel?	3
Wh	at can carry the Nordic Swan Ecolabel?	3
Hov	w to apply	4
1	Definitions	6
2	Environmental requirements	7
2.2 2.3 2.4	Information about production  Energy and greenhouse gases  Emissions to water and air  Product safety and quality  2.4.1 Chemicals  2.4.2 Product function  Packaging and labelling	8 11 11 11
3	Licence maintenance	16
Reg	gulations for the Nordic Ecolabelling of products	17
Foll	low-up inspections	17

Appendix 1 Declaration from pulp/paper manufacturer (O4, 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 (O14-O16)

049 Greaseproof paper- Supplementary Module, version 5.0, 11 May 2023

# **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 Fonden Dansk Standard Göteborg Plads 1, DK-2150 Nordhavn Fischersgade 56, DK-9670 Løgstør Tel: +45 72 300 450 info@ecolabel.dk www.svanemaerket.dk

#### Finland

Ecolabelling Finland Annankatu 25 FI-00100 Helsingfors Tel: +358 9 61 22 50 00 joutsen@ecolabel.fi www.ecolabel.fi

## Iceland

Ecolabelling Iceland Norræn Umhverfismerking á Íslandi Suðurlandsbraut 24 IS-108 Reykjavik Tel: +354 591 20 00 svanurinn@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 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.

# Sweden

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

# 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 a climate- and energy efficient way, with reduced energy consumption and reduced emissions of greenhouse gases. Fossil oil and coal are excluded in production.
- Meets strict requirements concerning chemicals that are hazardous to health and harmful to the environment. Among others, fluorine and chromium compounds are strictly forbidden.
- Is made of 100% traceable fibres from controlled sources. At least 70 % of the fibres must come from certified forests.
- Meets strict requirements for emissions to air and water during manufacturing.

# 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 wellreputed 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 othertypes 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 <a href="www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049">www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049</a> For addresses see page 2.

# 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:

- 알 Upload
- State data in web-based application tool
- P 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 page 2 for addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website or <a href="www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049">www.nordic-ecolabel.org/product-groups/group/?productGroupCode=049</a> for further information.

Nordic Ecolabelling 049/ 5.0 11 May 2023 Consultation version

# 1 Definitions

Residue

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 reuse 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 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 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):

- Name of the greaseproof paper and paper manufacturer.
- Trademark/trade name of the greaseproof paper and product, type (e.g. baking paper, cooking paper, sandwich paper, cupcake cups) and grammage (g/m²) 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, area of use 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 assessed by Nordic Ecolabelling, the requirement is fulfilled. Provide information on the trade name, production site and the manufacturer of the assessed pulp.

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

Pulp not assessed 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).

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. See also Appendix 1 in this Criteria document.

# 2.2 Energy and greenhouse gases

Energy consumption is regulated through requirements on fuel and electricity 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.

The energy and emissions of CO<sub>2e</sub> calculation 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.

Pelectricity total < 2.3

 $P_{\text{fuel total}} < 2.3$ 

 $P_{\rm electricity\_total}$  and  $P_{\rm fuel\_total}$  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  $P_{\text{electricity}}$  and  $P_{\text{fuel}}$  are also defined.

The reference values for the manufacturing of greaseproof paper consumption of fuel are set at 2500 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 energy content of electricity 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. In case of electrical hoods, electricity consumption is multiplied by 1.25 and the resulting amount of energy is added to the fuel consumption of the production.

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.

Necessary use of fossil oil e.g. in 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.

- 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.
- 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 700 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.

Nordic Ecolabelling 049/ 5.0 11 May 2023 Consultation version

# 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 PCOD, PP, PS, and PNox must not exceed 1.3.

The total emissions score, P<sub>emissions total</sub>:

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

The calculation of the product's total emissions for greaseproof paper production (P<sub>emission total</sub>) 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 <sub>ref</sub>	P <sub>ref</sub>	S <sub>ref</sub>	NOx <sub>ref</sub>
Greaseproof paper	2.0	0.007	0.15	0.5

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 be enclosed (see also Section 5.3, Analyses in the Basic Module, generation 3).

# 2.4 Product safety and quality

#### 2.4.1 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	07	
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		011
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. See also Appendix 1 in this Criteria document.

# O10 Chemicals used for impregnation and coating

Chemicals added to the pulp or to impregnation/coating must not contain chromium or fluorinated substances.

If fluorinated substances are used for other purposes in the mill, total organic fluorine (TOF) in the Nordic Swan Ecolabel paper shall be analysed according to EN ISO 10304-1\* (D20) or equivalent standard\*\*. The analysis must be documented on application, with subsequent annual checks via self-assessment.

- \* 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), decamethylcyclopentasiloxane, 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 400 ppm (0.04% by weight, 400 mg/kg emulsion). The limit value is applied to each substance separately. The total content of D4, D5 and D6 must not exceed 1000 ppm in the commercial product. 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 emulsion and catalyst emulsion) in a multicomponent silicone release coting system.
- Regarding fluorinated substances and cromium, **pulp-/paper manufacturer** shall demonstrate compliance with the requirement in the web-based application tool. See also Appendix 2 in this Criteria document.
- 달 If fluorinated substances are used in the mill,
  - test results of 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.
  - The paper manufacturer shall enclose a written procedure showing how an annual test is performed in line with the requirement, along with annual inhouse checks of compliance with the requirement.
- 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 the greaseproof paper and converted products, 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.

or

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

and

• Swiss Ordinance Annex 10.

The colourant/printing ink shall be manufactured in accordance with the EuPIA "Good ManufacturingPractices (GMP) - Printing Inks for Food Contact Materials". A statement of Composition (SoC) shall be available for each colourant/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 printing, dyeing, shading or colouring of paper or pulp.

- The paper manufacturer shall demonstrate compliance with the requirement in the web-based application tool.
- The manufacturer of the colourant/printing ink shall enclose a SoC according to EuPIA "Guideline on Printing Inks applied to Food Contact Materials" stating that they fulfil the requirements.

## 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<sup>1</sup>.

and

- Cepi's Food Contact Guidelines for the Complience of Paper & Board Materials and Articles, 2019<sup>2</sup> 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.

<sup>&</sup>lt;sup>1</sup> https://www.bfr.bund.de/en/bfr recommendations on food contact materials-308503.html

<sup>&</sup>lt;sup>2</sup> https://www.cepi.org/wp-content/uploads/2020/09/Food-Contact-Guidelines 2019.pdf

#### 2.4.2 Product function

# O13 Function properties

The product must meet the function requirements applicable within the industry. At a minimum, the following test shall be declared depending on the product type:

- All kinds of greaseproof paper: Oil and Grease Resistance (OGR)
- Baking and cooking paper: Water absorptiveness "Cobb value" and "Nonstick performance"
- Wrapping paper for hot foods: Water vapour moisture (WVM)

It must be possible to reuse baking paper, see also O17 Labelling.

The paper and product manufacturer shall enclose overview of tested function properties and the associated test results.

# 2.5 Packaging and labelling

# O14 Recycled raw material 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.

# 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,

 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 paper product manufacturer shall enclose a description of the material composition of the packaging e.g. in the form of technical data sheets. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used as part of the documentation. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used as part of the documentation.

# O15 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 monomaterials.
- The paper 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 as part of the documentation.

# O16 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 paper 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 as part of the documentation.

#### O17 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".

The packaging shall only carry information on sorting and recycling of product that is established 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.

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

# 3 Licence maintenance

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

# O18 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.

운 Routines for handling and archiving customer complaints.

# O19 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.

## O20 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.

Nordic Ecolabelling 049/ 5.0 11 May 2023 Consultation version

# 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/

# 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.

# Appendix 1 Declaration from pulp/paper manufacturer (O4, O9)

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.

paper.			
Pulp or paper manufacturer:			
O4 Requirement for pulp used to manufacture paper for conta	act with food	Yes	No
Does the paper contain recycled fibers?			
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 incan 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 p	oerson:	
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
O To Orientedia daed for impregnation and coating		103	140
What chemicals are used to impregnate/coat or added to to	he pulp?		
Do any of the chemicals listed above contain chromium or	fluorinated substances?		
Are fluorinated substances used for other purposes in the	mill?		
If fluorinated substances are used in the mill, test results o	n the Nordic Swan Ecolabel paper		
from the paper manufacturer shall be enclosed from an inc			
comply with the method described in the requirement.*			
Please state name of attached test report below:			
*Total Organic Flourine, TOF, method EN ISO 10304-1 (aby Nordic Ecolabelling. The content of inorganic fluorine of			
analysis. The indicator value of 20 mg/kg shall not be exc			0 1 0 1
We declare that the requirements have be	een met and that the inforr	nation	
provided is correct. In the event of any cha	_	_	
that impacts the product's fulfilment of th	-		n of
fulfilment of the requirements is to be sub	omitted to Nordic Ecolabell	ing.	
Place and date:	Company name/stamp:		
Person responsible:	Signature of responsible person:		
i erson responsible.	olgitature 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, Dd decamethylcyclopentasiloxane, D5, (CAS 541-02-6) and C(CAS 540-97-6)? Impurities of D4, D5, and D6 are exempted.	lodecamethylcyclohexasiloxane, D6,		
Please state the unambiguous chemical name, CAS numbers each substance, D4, D5 and D6:	per and concentration (in ppm) for		
* Impurity refers to residues from primary production commercial product at concentrations below 400 pp emulsion). The limit value is applied to each substated D4, D5 and D6 must not exceed 1000 ppm in the do not refer to substances which have been added actively and for a particular purpose, irrespective of product refers to a single component (e.g. silicon er a multicomponent silicone release coating system.	om (0.04% by weight, 400 mg/kg nce separately. The total content commercial product. Impurities to a raw material or the product quantity. The commercial		
We declare that the requirements have be provided is correct. In the event of any ch that impacts the product's fulfilment of the fulfilment of the requirements is to be sul	ange to the composition of ne requirements, a new dec	the pro laration	
Place and date:	Company name/stamp:		
Person responsible:	Signature of responsible person:		
Phone:	E-mail:		
	l .		

# Appendix 4 Declaration from packaging manufacturer (O14-O16)

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 (O15-O16)

O15 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		
How should the packaging be recycled?		

O16 Chlorinated plastic	Yes	No
Is chlorinated plastic e.g. polyvinyl chloride (PVC) and polyvinylidene chloride (PVDC) used in the packaging?		

# Requirements for plastics packaging (O14):

O14: 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 inhouse 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 (O14):

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

O14: 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: