Nordic Ecolabelling for

Windows and External Doors

Version 5.0 • 19 December 2024 – 28 February 2030

Nordic Ecolabelling

Content

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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:

Denmark
Ecolabelling Denmark
info@ecolabel.dk
www.svanemaerket.dk

Iceland
Ecolabelling Iceland
svanurinn@ust.is
www.svanurinn.is

Finland
Ecolabelling Finland
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info@svanen.se
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What is a Nordic Swan Ecolabelled Window and External Door?

Nordic Swan Ecolabelled windows, window doors and external doors have a reduced environmental and climate impact throughout their life cycle. Nordic Ecolabelling has assessed all the relevant environmental aspects throughout the life cycle of these products and made strict requirements concerning the topics and processes in the life cycle where ecolabelling can have the greatest effect.

Nordic Swan Ecolabelled windows, window doors and external doors:

- Are energy efficient, thus have a low climate impact due to low energy losses in the use phase
- Meet strict environmental and health requirements for materials and chemicals
- Contribute to circular economy through design for disassembly, material recycling and production waste management
- Must document good function and quality
- Offer a long service life
- Have clear instructions for installation and maintenance

What can carry the Nordic Swan Ecolabel?

Nordic Swan Ecolabelled products are windows, window doors and external doors which separates the internal climate from the external climate of a construction.

Nordic Ecolabelling's criteria for Windows and External Doors cover products pursuant to standard EN 14351-1. This means that the following products may carry the Nordic Swan Ecolabel:

- Fixed and opening facade and roof windows (manually or electrically operated).
- Window doors (e.g. balcony and terrace doors).
- External doors.

Windows, window doors and external doors not covered by the standard EN 14351-1 are not covered by these criteria.

Interior doors are not included in these criteria as they can be labelled under the Nordic Ecolabelling criteria for the product group Furniture and Fitments.

The frame, casement and door leaf in Nordic Swan Ecolabelled windows, window doors and external doors must be made from the following materials:

- wood
- metal, aluminium or steel
- a combination of these materials, e.g. wooden windows with aluminium cladding or windows with combined wooden and aluminium casement.

PVC is **not** allowed as a primary material to be used in frames, casements and door leaves in Nordic Swan Ecolabelled windows, window doors and external doors.

Windows, window doors and external doors manufactured from primary materials other than those listed above must be assessed by Nordic Ecolabelling before they possibly can be considered for labelling. Nordic Ecolabelling will determine which new materials that possibly may be included in the product group.

How to apply

Application and costs

For information about the application process and fees for this product group, please refer to the respective national web site. For contact information see first in this document.

What is required?

The application consists of an application form and documentation showing that the requirements are fulfilled.

In this criteria document each requirement is marked with the letter O (obligatory requirement) and a number. All requirements must be fulfilled to be awarded a licence.

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

✉ Enclose

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 providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

On-site inspection

In connection with handling of the application, Nordic Ecolabelling normally performs an on-site inspection visit 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 info first in this document. Further information and assistance (such as calculation sheets or electronic application help) is available. Visit the relevant national website for further information.

1 Requirements

This chapter presents all requirements and the chosen requirement levels.

1.1 Definition of the product group

Nordic Swan Ecolabelled products are windows, window doors and external doors which separates the internal climate from the external climate of a construction.

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Interior doors are not included in these criteria as they can be labelled under the Nordic Ecolabelling criteria for the product group Furniture and Fitments.

The frame, casement and door leaf in Nordic Swan Ecolabelled windows, window doors and external doors must be made from the following materials:

- wood
- metal, aluminium or steel
- a combination of these materials, e.g. wooden windows with aluminium cladding or windows with combined wooden and aluminium casement.

PVC is **not** allowed as a primary material to be used in frames, casements and door leaves in Nordic Swan Ecolabelled windows, window doors and external doors.

Windows, window doors and external doors manufactured from primary materials other than those listed above must be assessed by Nordic Ecolabelling before they possibly can be considered for labelling. Nordic Ecolabelling will determine which new materials that possibly may be included in the product group.

1.2 Definitions

Table 1 Definitions

Term	Definition/explanation
Air permeability	Amount of air passing through all joints between casement or leaf and frame profiles of a test specimen caused by the test pressure.
Daylight transmittance	Daylight transmittance, expressed in %, is a measure of the amount of daylight that enters through the window.
DVV	Dansk Vindues Verifikation
External door	A door which separates the internal climate from the external climate of a construction. The main intended use is the passage of pedestrians.
External cladding	External cladding refers to wooden windows, where the external components of the window, i.e. the wooden frame and/or casement, are covered usually in aluminium. The purpose is to provide weatherproofing, increase durability and reduce the need for regular maintenance.
Float glass	Also called flat glass and typically used in window glass. Made by pouring molten glass on a bed of molten metal (mostly tin). Through this process the glass gets a uniform thickness and a flat surface.
GWP	GWP stands for Global Warming Potential. This is a measure used to compare the potency of various greenhouse gases in causing global warming over a specified time period, typically 100 years, relative to carbon dioxide (CO_2). Gases with higher GWP values have a greater potential to contribute to global warming than those with lower values.
Insulation glass	Consists typically of units with 2, 3 or 4 panes of glass separated by a space filled with gas (argon for example). The purpose of such insulation glass units is to reduce heat transfer through windows/window doors.
LCA	Life Cycle Assessment
MECO-analysis	MECO stands for materials/resources (M), energy (E), chemicals (C) and other impact areas (O). The purpose of the MECO-analysis is to assess all the relevant environmental aspects throughout the life cycle of a product.
Nanomaterials/-particles	Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01): 'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50% or more of these particles in the number-based size distribution fulfil at least one of the following conditions: (a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm; (b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm; (c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.
NDVK	Norsk dør- og vinduskontroll
Primary material	The main materials in the frame, casement and door leaves, including cladding. Materials in small parts like hinges, handles, fittings, kick plates, lists, gaskets or very thin laminates/films are not seen as primary material.
PVC	Polyvinyl chloride, a chlorinated polymer/plastic.
RPS-analysis	Nordic Ecolabelling sets requirements concerning the topics and processes in the life cycle that have a high environmental impact – also called hotspots. An RPS-analysis is used to identify where ecolabelling can have the greatest effect. R represents the environmental relevance; P is the potential to reduce the environmental impact, and S is the steerability on how compliance with a requirement can be documented and followed up.
Solar energy transmittance (g-value)	Solar energy transmittance, expressed as the g-value (%), specifies how much solar radiation that enters through the window.
Steel	Steel is used about carbon steel and stainless steel.
Thermal transmittance (U-value)	Thermal transmittance, expressed as the U-value (W/m^2K), is the rate of heat transfer, for example through a window.

VOC	Volatile Organic Compound, i.e. any organic compound having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use, as defined in Directive 2010/75/EU.
Water tightness	A measure of tightness to avoid water leakages during precipitation and wind.
Window door	Constructed as a window, which extends to floor level and allows access or passage for persons. Can be partially or fully glazed like balcony and terrace doors.
Wood preservative	Wood preservative means an agent used in impregnation, primer or surface treatment that makes the wood resistant to fungal attack/rot.

1.3 Description of the product and the production

O1 Description of the product and the production

Applicants must provide the following information about the product and the production process per model:

- Name and technical drawing/picture of the product.
- Description of all suppliers and producers and of all components, materials and chemical products used for production of the product or product parts.
- Declaration of performance (DoP) in accordance with the EU Construction Products Regulation.
- State the weight of each material and component for the standard/reference size.
- Calculation of the percentage by weight for each material related to the total weight of the product except the weight of the insulation glass*.
- Description e.g. a flowchart, of the production process.

**Chemical products must be listed, but it is not necessary to specify the percentage by weight for chemicals.*

✉ An overall product description per model. An excel template is made by Nordic Ecolabelling that can be used for this purpose. Please contact Nordic Ecolabelling to get the template.

✉ Description of the production process.

1.4 Energy requirements

The energy requirements cover thermal transmittance, daylight transmittance, air permeability and climate testing.

O2 Thermal transmittance

The thermal transmittance (the U-value) of windows and window doors must not exceed the values in Table 2 for each product category and material.

The thermal transmittance of external doors, irrespective of material must not exceed 1.0 W/m²K.

Table 2 Maximum U-values, W/m²K

Product material	Facade window	Window door	Roof window
Wood & Wood/Alu*	0.84	0.93	1.10
Non-renewable material	0.80	0.85	1.00

**Window or window door where the total weight of the product except the weight of the glass consists of maximum 25 weight% aluminium.*

The U-value shall be set for a model of windows, window doors or external doors according to the product standard EN 14351-1. Presented U-values shall be determined by or reviewed by an accredited party or by a corresponding independent body and calculated or tested according to the standards EN ISO 10077 or EN ISO 12567, see Appendix 1.

The U-value is to be measured for the whole window/door, including the frame, according to the sizes in the product standard EN 14351-1.

The U-value is to be given with two significant digits.

✉ The calculations or testing results of the U-value and a report on how the calculations/testing were performed.

O3 Daylight transmittance

The requirement is applicable to windows and window doors, not external doors.

The daylight transmittance of the insulation glass must be 0.63 (63%) or higher.

The daylight transmittance of the insulation glass shall be determined and presented based on the methods stated in product standard EN 14351-1. Presented values shall be determined by or reviewed by an accredited party or by a corresponding independent body and calculations or test results according to EN 410, see Appendix 1.

✉ The results from calculations or testing of the daylight transmittance of the insulation glass. Report on how the calculations/testing were performed.

O4 Air permeability and climate testing

Windows and window doors

Windows and window doors must be tested pursuant to EN 1026 and fulfil at least Class 4 according to EN 12207 for air permeability under negative and positive pressure.

External doors

External doors must be tested pursuant to EN 1026 and fulfil Class 4 according to EN 12207 for air permeability under negative and positive pressure in combination with climate a and d* test according to EN 1121.

The external doors must undergo differential climate (a/d) testing pursuant to standard EN 1121 and fulfil at least Class 2 according to EN 12219. Unless otherwise stated, a door of normal size is to be tested.

**Climate d corresponds best to winter climate in Nordic countries (+23°C / -15°C)*

Air permeability and differential climate testing are to be measured through tests or calculations based on the methods stated in product standard

EN 14351-1. Presented values shall be determined by or reviewed by an accredited party or by a corresponding independent body, see Appendix 1.

✉ Test report of the air permeability test.

✉ For external doors, test report from differential climate testing.

1.5 Material requirements

In this section the material requirements are given for the following frame, casement and door leaf primary materials:

- Wood
- Aluminium
- Steel

Requirements are also given for the insulation materials and for filler gases used in the insulation glass units. Window, window doors and external door frames, casements and door leaves manufactured from primary materials other than those listed above must be assessed by Nordic Ecolabelling before they can be considered for labelling.

PVC is not allowed to be used as a primary material.

Smaller parts like lists, gaskets, foils etc. can be made in **materials without requirements**, i.e. plastic, rubber, composite etc. as long as they constitute less than 10 weight% of the product without glass for each specific material.

Foils covering more than 30% of the product surface, must fulfil requirement O14 Prohibited substances.

There are no material requirements for the glass material used in window and door glass/insulation glass units. Chemicals used to produce glass must fulfil the chemical requirements.

1.5.1 Wood

The following requirements are applicable to all wood raw material except for wooden plugs or other smaller wooden parts with a weight of 100g or less per unit.

Wood that are certified according to Nordic Ecolabelling's criteria for Durable Wood automatically comply with the requirements in this section.

O5 Tree species with restricted use

Nordic Ecolabelling's list of restricted tree species* consist of virgin tree species listed on:

a) CITES (Appendices I, II and III)

b) IUCN red list, categorized as CR, EN and VU

c) Rainforest Foundation Norway´s tree list

d) Siberian larch (originated in forests outside the EU)

Tree species listed on a) CITES (Appendices I, II and III) are not permitted to be used.

Tree species listed on either b), c) or d) may be used if it meets all of the following requirements:

- the tree species does not originate from an area/region where it is IUCN red listed, categorized as CR, EN or VU.
- the tree species does not originate from Intact Forest Landscape (IFL), defined in 2002: http://www.intactforests.org/world.map.html
- the tree species must originate from FSC or PEFC certified forest/plantation and must be covered by a valid FSC/PEFC chain of custody certificate documented/controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.
- tree species grown in plantation shall in addition originate from FSC or PEFC certified forest/plantation, established before 1994.

**The list of restricted tree species is located on the website: Forestry requirements (nordic-swan-ecolabel.org)*

✉ Declaration from the applicant/manufacturer/supplier that tree species listed on a-d) are not used.

If species from the lists b), c) or d) are used:

✉ The applicant/manufacturer/supplier are required to present a valid FSC/PEFC Chain of Custody certificate that covers the specific tree species and demonstrate that the tree is controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.

✉ The applicant/manufacturer/supplier are required to document full traceability back to the forest/certified forest unit thereby demonstrating that;

- the tree does not originate from an area/region where it is IUCN red listed, categorized as CR, EN or VU;
- the tree species does not originate from Intact Forest Landscape (IFL), defined in 2002 http://www.intactforests.org/world.webmap.html
- for plantations, the applicant/manufacturer/supplier must document that the tree species does not originate from plantations established on areas converted from forest after 1994.

O6 Traceability and certification of wood

Species name

Applicant/manufacturer/supplier must state the name (species name) of the wood raw materials that are used in the Nordic Swan Ecolabelled windows and doors.

Chain of custody certification

The applicant/manufacturer of the window/door or the applicant's/manufacturer's subcontractors of wood raw materials must have FSC/PEFC chain of custody (CoC) certification.

Certified wood raw materials

A minimum of 70% by weight of all wood raw materials used in the Nordic Swan Ecolabelled product must origin from forest managed according to sustainable

forestry management principles that meet the requirements set out by FSC or PEFC.

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

If the manufacturer is chain of custody certified the following applies:

The manufacturer must provide evidence with a balance sheet from the company's accounting system correctly showing account for and allocated inputs and outputs of certified wood raw material and of any material from "controlled" sources, to their manufacturing facility and resulting Nordic Swan Ecolabelled products.

If the subcontractor is chain of custody certified the following applies:

The manufacturer must submit documentation on the purchase of wood raw material from the CoC-certified subcontractor which shows that the certification requirement of at least 70% certified is fulfilled and that the remaining share is covered by the control schemes (FSC controlled wood / PEFC controlled sources). This must be specified on the invoice / delivery note with certification claim. The manufacturer must ensure that the wood raw material specified on the invoice is used in the production of the Nordic Swan Ecolabelled product.

✉ The names (species names) of the wood raw materials that are used.

✉ The applicant/manufacturer or supplier must provide valid FSC/PEFC CoC certification that includes all wood raw materials used in the Nordic Swan Ecolabelled product.

If the manufacturer is chain of custody certified:

✉ The applicant shall provide audited accounting documents that demonstrate that at least 70% of the materials allocated to the Nordic Swan Ecolabelled product or production line originate from forests or areas managed according to sustainable forestry management principles that meet the requirements set out by FSC or PEFC chain of custody scheme. If the product or production line includes uncertified virgin material, proof shall be provided that the content of uncertified virgin material does not exceed 30% and is covered by a verification system that ensures that it is legally sourced and meets any other requirement set out by FSC or PEFC with respect to uncertified material.

If the subcontractor is chain of custody certified:

✉ Documentation from the manufacturer for the purchase of wood raw material from the CoC-certified subcontractor which shows that the certification requirement of at least 70% certified is fulfilled and that the remaining share is covered by the control schemes (FSC controlled wood / PEFC controlled sources). This must be specified on the invoice / delivery note with certification claim. The manufacturer must declare that the wood raw material that fulfils the requirement is used in the Nordic Swan Ecolabelled production.

1.5.2 Metals

The following requirements are applicable for respectively steel and aluminium.

- The steel requirements apply when steel constitutes more than 30 weight% of the total weight of the product except the weight of the glass.
- The aluminium requirements apply when aluminium constitutes more than 20 weight% of the total weight of the product except the weight of the glass.
- The metal requirements are not appliable for the following parts i.e. these parts must be included in the product weight calculation, but do not need to comply with the metal requirements:
    1. hinges, handles, fittings and kick plates
    2. other smaller parts with a weight of 100g or less per unit

Separate requirements are set for the production of steel and the production of aluminium. The requirements can either be met by having a high proportion of recycled steel or aluminium, or by meeting requirements for virgin steel production and primary aluminium production.

O7 Production of steel

The requirement applies if steel constitutes more than 30 weight% of the total weight of the product except the weight of the glass.

The requirement can be met by documenting either A) High proportion recycled or B) Virgin steel production (option B consist of 3 alternatives):

A) High proportion recycled

A minimum of 75% by weight of the steel must be recycled.

Recycled steel is defined as both pre- and post-consumer, according to definitions in ISO 14021.

The requirement can be verified either by:

- A signed declaration from the steel supplier stating the recycling rate with relevant assumptions and that it conforms with the requirement, or
- eBVD or EPD based on product-specific data/data from the steel producer´s own production specifically stating the content of recycled steel in the product.

or

B) Virgin steel production

The requirement can be met by one of the 3 alternatives (1-3) below:

The requirement can be verified using either: direct traceability through the supply chain, mass balance approach[1] or by all major suppliers[2].

1. Steel produced from traditional methods

Steel used in the Nordic Swan Ecolabelled product comes from a steel producer who:

- has implemented at least 2 of the energy efficiency measures stated as BAT in the BREF document for iron and steel production (2013 or later version). The energy efficiency measures are listed in Table 1 in Appendix 2, and
- has an active sustainability strategy focusing on reducing energy consumption and greenhouse gas emissions. The strategy for reducing energy consumption and greenhouse gas emissions shall be quantitative and time-based, and they shall be determined by the company management.

or

2. Steel production - Responsible steel certified production site

A minimum of 50% by weight of the steel used in the Nordic Swan Ecolabelled product comes from a production site that are certified according to the standard Responsible Steel[3], version 1.0, 2019 or later versions.

or

3. Steel production based on new technologies with reduced greenhouse gas emissions

Steel used in the Nordic Swan Ecolabelled product comes from steel production sites that have implemented one of the following technologies:

- blast furnace top gas recycling with carbon capture and storage
- direct smelting reduction processes
- hydrogen steelmaking in shaft furnaces using green H_2
- direct electrolysis of iron ore

Recycled steel (A):

☒ Alternative 1: Signed declaration by the steel supplier stating the recycling rate with relevant assumptions and that it conforms with the requirement. The declaration from the steel supplier can be based on purchase records/average data from several steel suppliers, or

[1] In case of several potential steel producers, the supplier of the metal components can verify the requirement by using a mass balance approach if there is an account documenting the annual volumes purchased from the individuals steel producers. The volumes must correspond to volumes sold to the producer of Nordic Swan Ecolabelled product (e.g., cannot sell a larger volume than the corresponding quantity purchased from the individual steel producers)
[2] All major suppliers are compliant with one of the 3 alternatives. Major suppliers are here defined as suppliers delivering 75% of the total volume (w/w) of steel components in the Nordic Swan Ecolabelled product.
[3] Overview of certified steel producers, https://www.responsiblesteel.org/certification/issued-certificates/

☒ Alternative 2: eBVD or EPD based on product-specific data/data from the steel producer´s own production stating the content of recycled steel in the product.

Virgin steel production (B):

Alternative 1:

☒ Enclose latest sustainability strategy report or equivalent documentation from the steel producer showing fulfilment of the requirement. The steel producer can also present specific targets from annual business report with reference to specific numbers and assumptions. Average numbers from steel producers with several steel melting plants is accepted.

☒ Description of which energy efficiency measures stated as BAT have been implemented at the production site.

☒ Information on type of traceability used to document the requirement.

Alternative 2:

☒ Enclose valid Responsible Steel certificate from the steel producer.

☒ Information from the supplier/manufacturer of the constituent steel part about which metal parts are from certified metal production (purchase records).

☒ Information from the supplier/manufacturer of the constituent steel parts on type of traceability used to document the requirement.

☒ Documentation from the manufacturer of the Nordic Swan Ecolabelled product that the requirement for share of purchased steel from certified steel producers is fulfilled – e.g., invoices or other documentation from suppliers.

Alternative 3:

☒ State the name of the steel producer and production site where the steel comes from, as well as a brief description of which technology is used.

☒ Information on type of traceability used to document the requirement.

O8 Production of aluminium

The requirement applies if aluminium is included with more than 20% by weight related to the total weight of the product except the weight of the glass.

The requirement can be met by documenting either A) High proportion recycled or B) Primary aluminium production. (option B consist of 4 alternatives):

A) High proportion recycled

A minimum of 75% by weight of aluminium must be recycled.

Recycled aluminium is defined as both pre- and post-consumed, cf. definition in ISO 14021.

The requirement can be verified either by:

- A signed declaration by the aluminium supplier stating the recycling rate with relevant assumptions and that it conforms with the requirement, or
- eBVD or EPD based on product-specific data/data from the aluminium producer´s own production specifically stating the content of recycled aluminium in the product, or
- Valid Hydro Circal certificate.

or

B) Primary aluminium production

The requirement can be met by one of the 4 alternatives (1-4) below.

The requirement can be verified using either: direct traceability through the supply chain, mass balance approach[4] or by all major suppliers[5].

1. Aluminium production – active sustainability strategy

Aluminium used in the Nordic Swan Ecolabelled product comes from a primary aluminium producer who has an active sustainability strategy focusing on reducing energy consumption and greenhouse gas emissions. The strategy for reducing energy consumption and greenhouse gas emissions shall be quantitative and time-based, and they shall be determined by the company management.

or

2. Aluminium production – low direct climate effecting emissions

Aluminium used in the Nordic Swan Ecolabelled product comes from a primary aluminium producer whose direct climate-affecting emissions from primary aluminium production does not exceed 1,5 tonnes of CO_2e/ton of aluminium produced.

or

3. Aluminium production – low electricity consumption for electrolysis

Aluminium used in the Nordic Swan Ecolabelled product comes from a primary aluminium producer whose electricity consumption for electrolysis does not exceed 15.3 MWh / ton produced aluminium.

or

[4] In case of several potential steel producers, the supplier of the metal components can verify the requirement by using a mass balance approach if there is an account documenting the annual volumes purchased from the individuals steel producers. The volumes must correspond to volumes sold to the producer of Nordic Swan Ecolabelled product (e.g., cannot sell a larger volume than the corresponding quantity purchased from the individual steel producers)

[5] All major suppliers are compliant with one of the 3 alternatives. Major suppliers are here defined as suppliers delivering 75% of the total volume (w/w) of steel components in the Nordic Swan Ecolabelled product.

4. Aluminium production – ASI certified site

A minimum of 50% by weight of aluminium used in the Nordic Swan Ecolabelled product comes from a production site that are certified to the ASI Performance standard[6].

Recycled aluminium (A):

Alternative 1:

☒ There must be a signed declaration by the aluminium supplier stating the recycling rate with relevant assumptions and that it conforms with the requirement. The declaration from the supplier of aluminium can be based on purchase records/average data from several aluminium suppliers.

Alternative 2:

☒ eBVD or EPD can be used as documentation if these are based on product-specific data/data from the aluminium producer´s own production and specifically state the content of recycled aluminium in the product.

Alternative 3:

☒ Valid Hydro Circal certificate[7].

Primary aluminium production (B):

Alternative 1:

☒ Enclose latest sustainability strategy report or equivalent documentation from the producer of primary aluminium showing fulfilment of the requirement. The producer of primary aluminium can also present specific targets from annual business report with reference to specific numbers and assumptions. Average numbers from the producer of primary aluminium with several steel melting plants is accepted.

☒ Information on type of traceability used to document the requirement.

Alternative 2:

☒ Declaration that the requirement is met, as well as calculation and indication of direct emissions in tonnes of CO_2e/ton of aluminium produced.

☒ Information on type of traceability used to document the requirement.

Alternative 3:

☒ Declaration that the requirement is met, as well as calculation and indication of electricity consumption in MWh/ton produced aluminium.

[6] https://aluminium-stewardship.org/asi-standards/asi-performance-standard (visited November 2022)
[7] https://www.hydro.com/en-DK/about-hydro/publications/certificates/ (November 2022)

✉ Information on type of traceability used to document the requirement.

Alternative 4:

✉ Enclose valid ASI Performance certificate from the primary aluminium producer.

✉ Information from the supplier/manufacturer of the constituent aluminium part about which aluminium parts are from certified aluminium production (purchase records).

✉ Information from the supplier/manufacturer of the constituent aluminium parts on type of traceability used to document the requirement.

✉ Documentation from the manufacturer of the Nordic Swan Ecolabelled product that the requirement for share of purchased aluminium from certified aluminium producers is fulfilled – e.g., invoices or other documentation from suppliers.

1.5.3 Insulation materials

The following requirements are applicable for all insulation materials used in windows and doors like for instance XPS, EPS, mineral wool, polyuretane, polyisocyanurate, natural fiber etc.

O9 Excluded substances in insulation materials

The following substances must not be an ingoing substance in the insulation materials:

Ingoing substance means all substances in the insulation material that are present in concentrations higher than 100 ppm (0.010 w%, 100 mg/kg).

- Substances on the EU REACH Candidate list of SVHC.
- Substances evaluated by the EU to be persistent, bioaccumulative, and toxic (PBT) or very persistent and very bioaccumulative (vPvB), in accordance with the criteria in Annex XIII of REACH.
- Substances classified as carcinogenic, mutagenic, or toxic for reproduction (CMR) Category 1A or 1B.
- Endocrine disruptors: Substances on the EU member state initiative "Endocrine Disruptor Lists", List I, II and III, see the following links.
    - https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu

      Propiconazole (CAS No. 60207-90-1) used as wood preservative is exempted.
    - https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption
    - https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities

A substance that is transferred to one of the corresponding sublists called "Substances no longer on list" and no longer appears on any of Lists I–III, is no longer excluded. The exception is those substances on sublist II

that were evaluated under a regulation or directive that does not have provisions for identifying EDs (e.g., the Cosmetics Regulation, etc.). For those substances, ED properties may still have been confirmed or suspected. Nordic Ecolabelling will evaluate the circumstances case-by-case, based on the background information indicated in sublist III. In addition, the following individual substances and substance groups are prohibited or restricted. There may be an overlap between the substances listed below and substances categorised above.

- Short-chain chlorinated paraffins (C10-C13) and medium-chain chlorinated paraffins (C14-C17).
- Perfluoroalkyl and polyfluoroalkyl substances (PFASs).
- Alkylphenols, alkylphenol ethoxylates (APEO) and other alkylphenol derivates (APD).
- Brominated flame retardants.
- Phthalates (Esters of phthalic acid (orthophthalic acid / phthalic acid /1,2- benzene dicarboxylic acid).

  An exemption is made for diisononyl phthalate (DINP) used in polyurethane filler/sealant.
- The heavy metals lead, cadmium, arsenic, chromium (VI), mercury and their compounds.
- Bisphenol A (CAS No. 80-05-7), bisphenol S (CAS No. 80-09-1) and bisphenol F (CAS No. 620-92-8).
- Boric acid, sodium perborate, perboric acid, sodium borate (borax) and any other boron compounds classed as carcinogenic, mutagenic or reprotoxic in category 1A/1B/2/Lact.
- Organotin compounds.

✉ Declaration from the manufacturer of the insulation material in accordance with Appendix 3.

1.5.4 Filler gas

The following requirements are applicable for filler gas.

O10 Requirements for filler gas

The following requirements are applicable for filler gas:

- Filler gas used for insulation in insulation glasses must not contribute to the greenhouse effect i.e. the GWP (Global Warming Potential) must be zero over a period of 100 years. Noble gases have GWP=0.
- Krypton and xenon must not be used as filler gases due to the high energy consumption at production.

✉ Details of which filler gases are used for insulation and confirmation for gases other than noble gases that they do not contribute to the greenhouse effect.

1.6 Chemical requirements

Introduction to chemical requirements

The chemical requirements apply to all chemical products, for example impregnation, paints, lacquers, glues, putty, fillers and sealants used by the manufacturer of the Nordic Swan Ecolabelled products and their suppliers of parts for Nordic Swan Ecolabelled products like for instance glass in windows and doors.

The requirement for nanomaterials applies to both chemical products and the glass in windows and doors.

For foils covering more than 30% of the product surface, requirement O14 Prohibited substances apply.

The chemical requirements do not apply to touch-up paint or other patching products used by the manufacturer or their supplier if a small amount of damage occurs to the surface layer during manufacture, storage, transportation or installation.

Filler gas and insulation materials are not covered by the requirements in this section. Filler gas and insulation materials are instead covered by the requirements in respectively section 1.5.4 Filler gas and in 1.5.3 Insulation materials.

Chemical products that are ecolabelled with the Nordic Swan or the EU Ecolabel, do not need to document compliance with these chemical requirements.

Definitions

The requirements in the criteria document apply to all ingoing substances in the chemical product. Impurities are not regarded as ingoing substances and are therefore exempt from the requirements. Ingoing substances and impurities are defined as below, unless otherwise stated.

- Ingoing substances: All substances in the product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g., formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.
- Impurities: Residues from production, incl. raw material production, which remain in the chemical product at concentrations below 1000 ppm (0.1000% by weight). Examples of impurities are reagent residue incl. residues of monomers, catalysts, by-products, “scavengers” (i.e., chemicals used to eliminate/minimise undesirable substances), cleaning agents for production equipment and “carry-over” from other/previous production lines.

O11 Classification of chemical products

Chemical products used in the production of the Nordic Swan Ecolabelled product must not be classified in accordance with the table below:

Table 3 Prohibited classifications of chemical products

CLP Regulation 1272/2008		
Hazard statement	**Hazard class and category**	**Hazard code**
Toxic to the environment	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Ozone	H400 H410 H411 H420
Acute toxicity	Acute Tox 1 or 2 Acute Tox 1 or 2 Acute Tox 1 or 2 Acute Tox 3 Acute Tox 3 Acute Tox 3	H300 H310 H330 H301 H311 H331
Specific target organ toxicity – single exposure/repeated exposure	STOT SE 1 STOT RE 1	H370 H372
Carcinogenic*	Carc. 1A or 1B Carc. 2	H350 H351
Germ cell mutagenic*	Mut. 1A or 1B Mut. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact.	H360 H361 H362

** Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i. Note that the responsibility for correct classification lies with the manufacturer.*

Exemptions apply for:

- Classification H411 for all impregnation and surface treatment.
- Classification H351 for adhesive products containing methylene diphenyl diisocyanate (MDI).
- Classifications H350, H341, H301, H311 and H331 for adhesive products and resins containing formaldehyde (CAS No. 50-00-0). For these products, up to 0.2% by weight (2000 ppm) of free formaldehyde is permitted. The requirement applies to the pure adhesive before mixing with any hardener.
- Classification H360 for propiconazole (CAS No. 60207-90-1) used as wood preservative.
- Classification H372, H400 and H410 for iodopropynyl butylcarbamate (IPBC, CAS No. 55406-53-6) used as wood preservative.

✉ A declaration from the chemical manufacturer or supplier, in accordance with Appendix 4.

✉ A safety data sheet for the product in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

O12 Classification of ingoing substances

Ingoing substances in the chemical product used in production must not have the classifications in the table below.

Table 4 Prohibited classifications of ingoing substances

CLP Regulation 1272/2008		
Hazard statement	**Hazard class and category**	**Hazard code**
Carcinogenic*	Carc. 1A or 1B Carc. 2	H350 H351
Germ cell mutagenic*	Mut. 1A or 1B Mut. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact.	H360 H361 H362
Endocrine disruption for human health**	ED HH 1 ED HH 2	EUH380 EUH381
Endocrine disruption for the environment**	ED ENV 1 ED ENV 2	EUH430 EUH431
Persistent, Bioaccumulative and Toxic properties** Very Persistent, Very Bioaccumulative properties**	PBT vPvB	EUH440 EUH441
Persistent, Mobile and Toxic properties Very Persistent, Very Mobile properties	PMT vPvM	EUH450 EUH451

** Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i.*

*** See also requirement O14 for additional requirements on potential or identified endocrine disruptors and PBT/vPvB substances.*

Exemptions apply for:

- Methylene diphenyl diisocyanate (MDI) classified as H351.
- Adhesive and resin containing formaldehyde (CAS No. 50-00-0) classified as H350 and H341. For these products, up to 0.2% by weight (2000 ppm) of free formaldehyde is permitted. The requirement applies to the pure adhesive before mixing with any hardener.
- Adhesive containing dioctyltin dilaurate (CAS No. 3648-18-8) classified as H360. For these chemical products, up to 0.3% by weight (3000 ppm) of free dioctyltin dilaurate is permitted.
- Titanium dioxide (CAS No. 13463-67-7) classified as H351.
- 1,1,1-Trimethylolpropane (TMP, CAS No. 77-99-6) classified as H361.
- Classification H360 for propiconazole (CAS No. 60207-90-1) in wood preservatives.
- Volatile aromatic hydrocarbons (VAH) are permitted in the chemical product as an impurity at a level of up to 1% by weight.
- The ingoing substances in the hardener in two-component paint/varnish products can be exempted from the requirement if the following is met: it must be documented that the workers are not exposed to the components, e.g., by using personal protective equipment when mixing or that the mixing takes place automatically without exposure of the workers and that the application of the finished two-component system is done in a closed system.

☒ A declaration from the chemical manufacturer or supplier, in accordance with Appendix 4.

☒ A safety data sheet for the product in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

☒ If the exemption for two-component products is applied: description of the mixing and the application system and how employees are protected from exposure.

O13 Preservatives

The content of preservatives in the chemical product must meet the limit values in the table below:

Table 5 Preservatives in chemical products

Preservative*	Limit value
Bronopol (CAS No. 52-51-7)	≤ 500 ppm (0.05% by weight)
IPBC (iodopropynyl butylcarbamate, CAS No. 55406-53-6)	≤ 6000 ppm (0.60% by weight)
Mixture (3:1) of CMIT/MIT (5-chloro-2-methyl-4-isothiazolin-3-one / 2-methyl-2H-isothiazolin-3-one, CAS No. 55965-84-9)	≤ 15 ppm (0.0015% by weight)
MIT (2-methyl-2H-isothiazol-3-one, CAS No. 2682-20-4)	≤ 15 ppm (0.0015% by weight)
Total amount of isothiazolinones	≤ 1500 ppm (0.15% by weight)

**Wood preservatives used as an impregnation agent or primer that makes the wood resistant to fungal attack/rot, are exempted from this requirement concerning preservatives. Paint and oil that may be applied after priming or impregnation are not exempt from this requirement.*

☒ A declaration from the chemical manufacturer or supplier, in accordance with Appendix 4.

☒ A safety data sheet for the product in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

O14 Prohibited substances

The chemical product used in production must not contain the following substances:

- Substances on the Candidate List.

  o The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table

  o D4 (CAS No. 556-67-2), D5 (CAS No. 541-02-6) or D6 (CAS No. 540-97-6) must only be included in the form of residues from raw material production and are allowed in concentrations up to 1000 ppm each in the silicone raw material.

- Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative).

  o PBT and vPvB in accordance with the criteria in Annex XIII of REACH.

- Endocrine disruptors: Substances on the EU member state initiative "Endocrine Disruptor Lists", List I, List II and List III, see following links:

  List I: https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu

  Propiconazole (CAS No. 60207-90-1) used as wood preservative is exempted.

  List II: https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption

  Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.

  List III: https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities

  Substances that are transferred to one of the corresponding sub-lists "Substances no longer on list" and that no longer feature on Lists I–III are not prohibited. However, this does not apply to the substances listed in Sub-List II that were evaluated on the basis of regulations or directives that do not have provisions for identifying endocrine disruptors (e.g., the Cosmetics Regulation). These substances may have endocrine disrupting properties. Nordic Ecolabelling will assess these substances on a case-by-case basis, based on the background information provided in Sub-List II.

- Halogenated organic compounds. Exemptions* for:

  o Pigments that meet the EU's requirement concerning colourants in food packaging under Resolution AP (89) point 2.5.

  o Preservatives that fulfil O13.

  **Perfluorinated and Polyfluorinated alkyl substances are covered by their own bulletin and are not included in the exemption.*

- Perfluorinated and polyfluorinated alkylated substances (PFAS).
- Aziridine and polyazidirines.

  o An exemption is made for aziridines/polyaziridines, if the substance is not classified as carcinogenic, mutagenic or reprotoxic from any manufacturer or in ECHA.

- Bisphenols and bisphenol derivatives.

  o 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 for human health, or that can be identified as toxic for reproduction.

  **Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section 2.1: Bisphenols for which further EU RRM is proposed – restriction https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02*

- Organotin compounds.
- APEO (alkylphenol ethoxylates) and APD (alkylphenol derivatives/alkylphenols).

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

o Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.

o An exemption is made for sterically hindered phenolic antioxidants with molecular weight (MW) > 600 g/mole.

- Phthalates.

  o Phthalates are esters of 1,2-benzenedicarboxylic acid (orthophthalic acid).

  o An exemption is made for diisononyl phthalate (DINP) used in polyurethane filler/sealant.

- Pigments, dyes and additives containing lead, tin, cadmium, chromium VI and mercury, and their compounds.

✉ A declaration from the chemical manufacturer or supplier, in accordance with Appendix 4.

✉ A safety data sheet for the product in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

✉ For foils: a declaration from the manufacturer or supplier, in accordance with Appendix 6 and a technical data sheet for the foil.

O15 Nanomaterials

Nanomaterials/-particles* must not be added or be present in the glass in windows and doors or in the chemical products used to manufacture windows and doors. The following substances are exempted from the requirement:

- Pigments. This exemption does not apply to pigments added for other purposes than imparting colour.
- Naturally occurring inorganic fillers. This exemption applies to fillers subject to Annex V, paragraph 7 of REACH.
- Synthetic amorphous silica (SAS). This exemption applies to non-modified synthetic amorphous silica. Chemically modified colloidal silica can be included in the products as long as the silica particles form aggregates in the final product. Any surface treatment must meet the chemical requirements in O11,O12 and O13.
- Unmodified calcium carbonate ($CaCO_3$). This exemption applies to unmodified ground calcium carbonate (GCC) and unmodified precipitated calcium carbonate (PCC).
- Polymer dispersions.
- Aluminium oxide.

** Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01), see Table 1 for full definition.*

✉ The manufacturer must declare any nanomaterial/-particle that occur in the chemical products used, see Appendix 4.

✉ The manufacturer must declare any nanomaterial/-particle that occur in the glass used in windows and doors, see Appendix 5.

1.7 Emissions to air

In this section requirements regarding VOC emissions from solvent-based wood impregnation and solvent-based surface treatment are given.

O16 Emissions to air from wood impregnation

Total emissions of volatile organic compounds (VOC) from vacuum impregnation (solvent-based impregnation) must not exceed 6 kg VOC per m^3 treated wood.

Total emissions are the sum of fugitive emissions and emissions in waste gases, according to EU Directive 2010/75/EU Article 57.

The requirement must be met regardless of whether the impregnation is performed by the manufacturer or by a supplier.

✉ Calculation and measurements according to methods described in EU Directive 2010/75/EU Appendix VII Part 7.

O17 Emissions to air from surface treatment

VOC emissions from solvent-based surface treatment must not exceed 60 mg C/Nm^3.

The requirement applies to solvent-based surface treatment. Surface treatment systems where all layers are water-based (base- and topcoat) are not covered by this requirement.

✉ Calculation of the emissions or measurement of the emissions. Methods described in EU Directive 2010/75/EU, Appendix VII Part 7 or corresponding methods must be used.

✉ Declaration from the manufacturer clarifying if the products for surface treatment are solvent-based or water-based, in accordance with Appendix 4.

1.8 Circular economy requirements

This section describes requirements with the intention of increasing the circularity of windows and doors by increasing the recycling of materials by the end-of-life of these products. This includes a requirement for recycling of float glass into new float glass.

O18 Design for disassembly

It must be possible to separate the main material types including insulating glass/float glass from each other to facilitate replacement/repair/refurbishment and for material recycling at the end of the window or door's service life.

✉ Description of how the materials including the glass can be separated from each other to facilitate replacement/repair/refurbishment and material recycling.

O19 Material recycling

If no national waste collection systems for material recycling of windows and doors are established, the manufacturer of windows and doors must:

- take initiatives and/or actively support initiatives/partnering projects for establishment of such a national waste collection system for windows and doors.

✉ Description of the initiatives taken and/or the actively support given for establishment of a national waste collection system for material recycling of windows and doors.

O20 Recycling of float glass and production waste management

Window, window door and external door manufacturers, as well as manufacturers of insulating glass units, shall separate by source the waste generated in connection with the production.

A plan for the waste separation/sorting must be made, stating waste fractions and describing how the waste is dealt with (e.g. material recovery, incineration or landfill).

Waste/spill of float glass from the production of insulation glass units shall be recycled into new float glass. The insulation glass producer must use national systems for collection, sorting and transportation of float glass back to float glass producers if such national systems exist. If such national glass recycling waste systems do not exist, the glass waste/spill must as a minimum be collected and recycled to new glass i.e. to make glass packaging, insulation or fiberglass.

Waste/spill of float glass from the production of windows and doors must as a minimum be collected and recycled to new glass i.e. to make glass packaging, insulation or fiberglass.

Hazardous waste must be treated and dealt with in accordance with the regulations applicable in the country of manufacture.

✉ A waste plan for the window/door producer detailing the waste fractions and the recipients of each waste fraction.

✉ A waste plan for the supplier of insulation glass units to the window/door producer. The waste plan must detail the waste fractions and the recipients of each waste fraction including float glass spill.

1.9 Durability and functional requirements

O21 Durability of exposed wood parts

Wood that is exposed to the elements* must meet one of the options in Table 6, according to the type of wood treatment.

In addition, regardless of wood protection method, the systems for surface treatment are to be tested according to EN 927 “Coating materials and coating systems for exterior wood”. The system must fulfil the limit values “stable end use category” in Table 1 of EN 927-2. The “Exposure condition” defined in Table 2 of EN 927-1 shall be “Medium”.

Table 6 Various methods for protecting wood and the requirements for documentation of durability

Wood protection method	Required documentation of durability
Preservative treated wood in accordance with NTR	NTR B certificate.
Preservative treated wood not classified in accordance with NTR	The following (all bullet points) must be tested by an accredited laboratory: - EN 113-1 (not C. versicolor) after separate accelerated ageing with EN 73 and EN 84 or CEN/TS 839 (not C. versicolor) after separate accelerated ageing with EN 73 and EN 84. - EN 330. The test report shall be accompanied by a separate statement, from the accredited laboratory or from a corresponding independent body, that confirms the effectiveness of the treatment system for wood in use class 3.1 according to EN 335.
Heartwood (>90%) in combination with wood preservative.	- Calculation of percentage of heartwood. - Tests in accordance with EN 152 achieve grade 1, for the overall basic and surface treatment system or a certificate showing that the treatment system fulfils the industry standard 2ØKO.
Nordic Swan Ecolabelled durable/resistant wood	Licence number and product name.

**Profiles covered with aluminium or other materials are not considered to be exposed to the elements.*

✉ Certificate / test reports and statement / calculation and test report / licence number and product name in accordance with Table 6.

✉ Test report and test certificate under EN 927 for surface treatment system.

O22 Functional requirements

Nordic Swan Ecolabelled windows, window doors and external doors must meet technical requirements regarding thermal transmittance, air permeability, climate testing and water tightness.

Thermal transmittance: See requirement O2.

Air permeability and climate testing: See requirement O4.

Water tightness: Windows, window doors and external doors must be tested according to method A or method B* according to EN 1027. If method A is used, at least Class 9A according to EN 12208 must be fulfilled. If method B is used, at least Class 7B must be fulfilled.

Products tested according to method B must have descriptions of required shielding such that declared performances are not compromised.

** Method B is used for external doors installed under roof overhangs/protection.*

Water tightness is to be measured through tests based on the methods stated in product standard EN 14351-1. Presented values shall be determined by or reviewed by an accredited party or by a corresponding independent body, see Appendix 1.

✉ Test report of the water tightness test.

O23 Warranty

The window and window door manufacturer must provide a warranty of at least:

- 10 years against wood rot.
- 10 years guarantee of function, i.e. minimum both the opening/closing function of the window/window door and for water tightness and air permeability.
- 10 years guarantee of insulating glass unit, i.e. guarantee against condensation between glasses.
- The external door manufacturer must provide a 10-year guarantee for dimensional stability and function i.e. minimum both the opening/ closing function of the door and for water tightness and air permeability.

✉ A copy of the warranty or information on the manufacturer's website, that states the terms and conditions of the product guarantee. If different warranty times are used for the same product because of commercial reasons, information for a product's longest warranty time should be used as documentation.

O24 Customer information

Manufacturers of Nordic Swan Ecolabelled products shall submit:

- Information on the window/window door's g-value and U-value and the external door's U-value in line with requirement O2.
- Information on how to select U- and g-values based on the window/window door's position in order to achieve good heating economy and a good indoor climate.
- Information on various sun screening solutions and the importance of such, either as part of the licence applicant's own product portfolio or through an agreement with partners.
- Descriptions of required shielding for external doors if relevant so that declared water tightness performance are not compromised.
- Information on how the window/window door/external door should be handled at end-of-life for instance by using national waste collection systems for material recycling for windows and doors.
- Instructions describing the recommended maintenance for the window/window door/external door. Care instructions must contain details on how often the finish should be checked and maintenance performed, and which surface treatment is recommended.

✉ Information about the above on website or in brochure.

O25 Installation information

The following shall be attached to each window or external door delivery, or alternatively a reference to information available on a website:

- Instructions on handling the window/window door/external door during transportation, reception and storage at the building site.

- Instructions on how the window/window door/external door shall be installed into a wall, adjusted and protected during the construction period. General physical parameters for fitting must be specified.
    - Instructions must specify how the window/window door/external door should best be installed from an energy point of view in order to prevent heat loss as a result of poor installation.
    - Instructions must also specify how window/window doors/external doors should be installed to avoid damages caused by moisture.

✉ Written recommendations included with the delivery of the window/window door/external door to the customer, or reference to the website where such information is available.

2 Licence Maintenance

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

O26 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 a Nordic language or in English.

✉ Send in your company's routine for handling and archiving customer complaints.

O27 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.

You can send in your company's routine or a description of the actions to ensure traceability in your company.

✉ Please send in your routine or a description.

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-swan-ecolabel.org/regulations

Follow-up Inspections

Nordic Ecolabelling may decide to check whether window and/or external door producers fulfil Nordic Ecolabelling requirements during the licence period. This may involve a site visit, random sampling or testing.

The licence may be revoked if it is evident that the window and/or external door producer does not meet the requirements.

Criteria Version History

Nordic Ecolabelling adopted version 5 of the criteria for windows and external doors on 19 December 2024. The criteria are valid until 28 February 2030.

Appendix 1 Laboratories and methods for testing and analysis

General requirements for test and analysis laboratories

Tests must be carried out in a correct and competent way. The analysis laboratory/test institute must be impartial and professional.

If accreditation is not separately required, the test and/or analysis laboratory must comply with the general requirements of the EN ISO 17025 standard for the quality control of test and calibration laboratories or have official GLP status.

The applicant's laboratory can be approved if it is accredited and complies with the requirements of the standard EN ISO 17025.

When testing quality and performance properties, the applicant's own laboratory can be approved even if it is not accredited. The following applies:

- The laboratory has a certified quality system (ISO 9001) which includes testing, and
- The laboratory can show that the test results obtained are similar to the results from an accredited test laboratory through initial tests performed as parallel tests. Parallel tests must as a minimum be performed when test standards are updates, and
- The laboratory performs the tests in accordance with an established plan for the current test standard and documents the selection of products in a product series for worst case tests, and
- An independent inspection body shall, on the basis of test reports, confirm that the manufacturer's test results are consistent with the results of an accredited laboratory. This can, for example, be evaluated as part of an inspection of the laboratory's quality system carried out by the inspection body for certification of the quality system.

Sampling methods for measuring the energy requirements

The thermal transmittance (U-value), daylight transmittance, air permeability and climate testing must be measured and/or calculated according to the standards and methods in accordance with EN 14351 -1.

Submitted/Presented values shall be determined by or reviewed by an accredited party or by a corresponding independent body.

U-values shall be determined and verified according to:

- EN ISO 10077-1 (simplified calculation) or EN ISO 10077-1 and ISO 10077-2 (detailed calculation) or
- EN ISO 12567-1 or EN ISO 12567-2 (hotbox-method)

Daylight transmittance-values shall be determined and verified according to EN 410. Validated software from established glass manufacturers (for example Pilkington and Saint-Gobain) can be used for calculations.

Air permeability shall be tested according to EN 1026 and air permeability class shall be determined and presented according to EN 12207.

Climate testing of external doors must be performed pursuant to standard EN 1121 and fulfil at least Class 2 according to EN 12219. Unless otherwise stated, a door of normal size is to be tested.

Appendix 2 Measures for efficient energy consumption in steel production

Blast furnaces	BAT is to maintain a smooth, continuous operation of the blast furnace at a steady state to minimise releases and to reduce the likelihood of burden slips. BAT is to use the extracted blast furnace gas as a fuel. BAT is to recover the energy of top blast furnace gas pressure where sufficient top gas pressure and low alkali concentrations are present.
BOF	BAT is to collect, clean and buffer BOF gas for subsequent use as a fuel. BAT is to reduce energy consumption by using ladle-lid systems. BAT is to optimise the process and reduce energy consumption by using a direct tapping process after blowing. BAT is to reduce energy consumption by using continuous near net shape strip casting, if the quality and the product mix of the produced steel grades justify it.

Appendix 3 Declaration for insulation materials

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of windows, window doors or external doors.

This is a declaration for excluded substances in insulation materials used in windows and doors and applies to the manufacturers of the insulation material.

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

Name of the product:
Manufacturer:

Are any of the following substances present in the insulation material in concentrations higher than 100 ppm?

Substances categorised as Substances of Very High Concern (SVHC) and included on the EU REACH Candidate List*	Yes ☐	No ☐
Substances evaluated by the EU to be persistent, bioaccumulative, and toxic (PBT) or very persistent and very bioaccumulative (vPvB), in accordance with the criteria in Annex XIII of REACH	Yes ☐	No ☐
Substances classified as carcinogenic, mutagenic or toxic for reproduction (CMR) Category 1A and 1B	Yes ☐	No ☐
Endocrine disruptors: Substances on the EU member state initiative "Endocrine Disruptor Lists", List I, II and III. *Propiconazole (CAS No. 60207-90-1) used as wood preservative is exempted.*	Yes ☐	No ☐
Short-chain chlorinated paraffins (C10-C13) and medium-chain chlorinated paraffins (C14-C17)	Yes ☐	No ☐
Perfluoroalkyl and polyfluoroalkyl substances (PFASs)	Yes ☐	No ☐
Alkylphenols, alkylphenol ethoxylates (APEO) and other alkylphenol derivates (APD)	Yes ☐	No ☐
Brominated flame retardants	Yes ☐	No ☐
Phthalates (Esters of phthalic acid (orthophthalic acid / phthalic acid /1,2- benzene dicarboxylic acid)). *An exemption is made for diisononyl phthalate (DINP) used in polyurethane filler/sealant.*	Yes ☐	No ☐
The heavy metals lead, cadmium, arsenic, chromium (VI), mercury and their compounds	Yes ☐	No ☐
Bisphenol A (CAS No. 80-05-7), bisphenol S (CAS No. 80-09-1) and bisphenol F (CAS No. 620-92-8)	Yes ☐	No ☐
Boric acid, sodium perborate, perboric acid, sodium borate (borax) and any other boron compounds classed as carcinogenic, mutagenic or reprotoxic in category 1A/1B/2/Lact.	Yes ☐	No ☐
Organotin compounds	Yes ☐	No ☐

** The Candidate List can be found on the ECHA website at:*
http://echa.europa.eu/sv/candidate-list-table

Signature of manufacturer/supplier of the insulation material

Date	Company
Name of contact person in CAPITAL letters	Signature by contact person
Phone	E-mail

Appendix 4 Declaration of chemical products

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of windows, window doors or external doors.

This appendix shall be completed and signed by the manufacturer of the chemical product based on the best of their knowledge at the given time, also based on information from raw material manufacturers and available knowledge on the chemical product 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.

This declaration shall be filled out for chemical products used in the production/assembly of the Nordic Swan Ecolabelled windows and doors such as impregnation, paints, lacquers, glues, putty, fillers and sealants.

Manufacturer of the chemical product:
Name of the chemical product:
Function of the chemical product:
For surface treatment chemical products: is the product solvent-based? (Yes/No)

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled product. Impurities are not regarded as ingoing substances and are exempt from the requirements. Ingoing substances and impurities are defined below, unless stated otherwise in the requirements.

Ingoing substances: *all substances in the chemical product regardless of amount, including additives (e.g. preservatives and stabilizers) from the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.*

Impurities: *Residues from production, incl. raw material production, which remain in the chemical product at concentrations below 1000 ppm (0.1000% by weight).*

Examples of impurities are residues of reagents incl. residues of monomers, catalysts, by-products, scavengers (i.e. chemicals that are used to eliminate/minimize undesirable substances), detergents for production equipment and carry-over from other or previous production lines.

Classification of chemical products according to CLP regulation 1272/2008		
Is the chemical product classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.	Yes	No
H400 – Toxic to the environment Aquatic Acute 1	☐	☐
H410 – Toxic to the environment Aquatic Chronic 1	☐	☐
H411 – Toxic to the environment Aquatic Chronic 2	☐	☐
H420 – Toxic to the environment Ozone	☐	☐
H300 – Acute toxicity; Acute Tox 1 or 2	☐	☐
H310 – Acute toxicity; Acute Tox 1 or 2	☐	☐
H330 – Acute toxicity; Acute Tox 1 or 2	☐	☐
H301 – Acute toxicity; Acute Tox 3	☐	☐
H311 – Acute toxicity; Acute Tox 3	☐	☐
H331 – Acute toxicity; Acute Tox 3	☐	☐
H370 – Specific organic toxicity, STOT SE 1	☐	☐
H372 – Specific organic toxicity, STOT RE 1	☐	☐
H350 – Carcinogenic, Carc. 1A or 1B	☐	☐
H351 – Carcinogenic, Carc. 2	☐	☐
H340 – Germ cell mutagenic, Mut. 1A and 1B	☐	☐
H341 – Germ cell mutagenic, Mut. 2	☐	☐
H360 – Reproductive toxicity, Repr. 1A or 1B	☐	☐
H361 – Reproductive toxicity, Repr. 2	☐	☐
H362 – Reproductive toxicity, Lact.	☐	☐

The following are exempted from the requirement:

- *Classification H411 for all impregnation and surface treatment.*
- *Classification H351 for adhesive products containing methylene diphenyl diisocyanate (MDI).*
- *Classifications H350, H341, H301, H311 and H331 for adhesive products and resins containing formaldehyde (CAS No. 50-00-0). For these products, up to 0.2% by weight (2000 ppm) of free formaldehyde is permitted. The requirement applies to the pure adhesive before mixing with any hardener.*
- *Classification H360 for propiconazole (CAS No. 60207-90-1) used as wood preservative.*
- *Classification H372, H400 and H410 for iodopropynyl butylcarbamate (IPBC, CAS No. 55406-53-6) used as wood preservative.*

If the answer to any of the above questions is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance. Please state also if the above-mentioned exceptions apply.

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Classification of ingoing substances according to CLP regulation 1272/2008		
Does the chemical product contain substances classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. For example, H350 also covers classification H350i.	Yes	No
H350 – Carcinogenic, Car 1A or 1B	☐	☐
H351 – Carcinogenic, Carc. 2	☐	☐
H340 – Germ cell mutagenic, Mut. 1A or 1B	☐	☐
H341 – Germ cell mutagenic, Mut. 2	☐	☐
H360 – Reproductive toxicity, Repr. 1A or 1B	☐	☐
H361 – Reproductive toxicity, Repr. 2	☐	☐
H362 – Reproductive toxicity, Lact.	☐	☐
EUH380 – Endocrine disruption for human health, ED HH 1	☐	☐
EUH381 – Endocrine disruption for human health, ED HH 2	☐	☐
EUH430 – Endocrine disruption for the environment, ED ENV 1	☐	☐
EUH431 – Endocrine disruption for the environment, ED ENV 2	☐	☐
EUH440 – Persistent, Bioaccumulative and Toxic properties, PBT	☐	☐
EUH441 – Very Persistent, Very Bioaccumulative properties, vPvB	☐	☐
EUH450 – Persistent, Mobile and Toxic properties, PMT	☐	☐
EUH451 – Very Persistent, Very Mobile properties, vPvM	☐	☐
The ingoing substances in the hardener in two-component paint/varnish products can be exempted from the requirement if the following is met: it must be documented that the workers are not exposed to the components, e.g., by using personal protective equipment when mixing or that the mixing takes place automatically without exposure of the workers and that the application of the finished two-component system is done in a closed system. Is the declaration about classification of ingoing substances done for the hardener in a two-component product? Please explain below.	☐	☐

The following are also exempted from the requirement:

- *Classification H351 for methylene diphenyl diisocyanate (MDI).*
- *Adhesive and resin containing formaldehyde (CAS No. 50-00-0) classified as H350 and H341. For these products, up to 0.2% by weight (2000 ppm) of free formaldehyde is permitted. The requirement applies to the pure adhesive before mixing with any hardener.*
- *Adhesive containing dioctyltin dilaurate (CAS No. 3648-18-8) classified as H360. For these chemical products, up to 0.3% by weight (3000 ppm) of free dioctyltin dilaurate is permitted.*
- *Titanium dioxide (CAS No. 13463-67-7) classified as H351.*
- *1,1,1-Trimethylolpropane (TMP, CAS No. 77-99-6) classified as H361.*
- *Classification H360 for propiconazole (CAS No. 60207-90-1) in wood preservatives.*
- *Volatile aromatic hydrocarbons (VAH) are permitted in the chemical product as an impurity at a level of up to 1% by weight.*

If the answer to any of the above questions is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance. Please state also if the above-mentioned exceptions apply.

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Preservatives* ** Wood preservatives used as impregnation agents are exempted from this requirement. Wood preservatives used in surface treatment like paint and oil, are not exempted from this requirement.*			
Please state if content of preservatives exceeds the limit values below.		Yes	No
Preservative:	Limit value:		
Bronopol (CAS No. 52-51-7)	≤ 500 ppm (0.05% by weight)	☐	☐
IPBC (iodopropynyl butylcarbamate, CAS No. 55406-53-6)	≤ 6000 ppm (0.60% by weight)	☐	☐
Mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one / 2-methyl-4-isothiazolin-3-one, CAS No. 55965-84-9)	≤ 15 ppm (0.0015% by weight)	☐	☐
MIT (2-methyl-2H-isothiazol-3-one, CAS No. 2682-20-4)	≤ 15 ppm (0.0015% by weight)	☐	☐
Total amount of isothiazolinones	≤ 1500 ppm (0.15% by weight)	☐	☐

If the answer to any of the above questions is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg) for each preservative.

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Prohibited substances		
Does the chemical product contain any of the following substances?	Yes	No
Substances on the Candidate List The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table D4 (CAS No. 556-67-2), D5 (CAS No. 541-02-6) or D6 (CAS No. 540-97-6) must only be included in the form of residues from raw material production and are allowed in concentrations up to 1000 ppm each in the silicone raw material.	☐	☐
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) PBT and vPvB in accordance with the criteria in Annex XIII of REACH	☐	☐
Endocrine disruptors: Substances on the EU member state initiative “Endocrine Disruptor Lists”, List I, List II and List III, see following links: List I: https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu *Propiconazole (CAS No. 60207-90-1) used as wood preservative is exempted.* List II: https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption *Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.* List III: https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities *Substances that are transferred to one of the corresponding sub-lists “Substances no longer on list” and that no longer feature on Lists I–III are not prohibited. However, this does not apply to the substances listed in Sub-List II that were evaluated on the basis of regulations or directives that do not have provisions for identifying endocrine disruptors (e.g., the Cosmetics Regulation). These substances may have endocrine disrupting properties. Nordic Ecolabelling will assess these substances on a case-by-case basis, based on the background information provided in sub-List II.*	☐	☐

Halogenated organic compounds *Exempted* are:* *• Preservatives that fulfil O13* *• Pigments that meet the EU's requirements concerning colourants in food packaging under Resolution AP (89) point 2.5* ** Perfluorinated and polyfluorinated alkyl substances are covered by their own bulletin and are not included in this exemption.*	☐	☐
Perfluorinated and polyfluorinated alkyl substances (PFAS)	☐	☐
Aziridine and polyazidirines *An exemption is made for aziridines/polyaziridines, if the substance is not classified as carcinogenic, mutagenic or reprotoxic from any manufacturer or in ECHA.*	☐	☐
Bisphenols and bisphenol derivatives 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 for human health, or that can be identified as toxic for reproduction. **Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section 2.1: Bisphenols for which further EU RRM is proposed – restriction* *https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02*	☐	☐
Organotin compounds	☐	☐
APEO (alkylphenol ethoxylates) and APD (alkylphenol derivatives/alkylphenols) Alkylphenol derivatives are defined as substances that release alkyphenols when they break down. *Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.* *An exemption is made for sterically hindered phenolic antioxidants with molecular weight (MW) >600 g/mole.*	☐	☐
Phthalates Phthalates are esters of 1,2-benzenedicarboxylic acid (orthophthalic acid). *An exemption is made for diisononyl phthalate (DINP) used in polyurethane filler/sealant.*	☐	☐
Pigments, dyes and additives containing lead, tin, cadmium, chromium VI and mercury, and their compounds	☐	☐

If the answer to any of the above questions is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance. Please state also if the above-mentioned exceptions apply.

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Nanomaterials		
	Yes	No
Does the chemical product contain nanomaterials/-particles*? **Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01):* *'Nanomaterial' means a natural, incidental or manufactured material consisting of solid particles that are present, either on their own or as identifiable constituent particles in aggregates or agglomerates, and where 50% or more of these particles in the number-based size distribution fulfil at least one of the following conditions:* *(a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;* *(b) the particle has an elongated shape, such as a rod, fibre or tube, where two external dimensions are smaller than 1 nm and the other dimension is larger than 100 nm;* *(c) the particle has a plate-like shape, where one external dimension is smaller than 1 nm and the other dimensions are larger than 100 nm.*	☐	☐

The following are exempted from the requirement:

- *Pigments. This exemption does not apply to pigments added for other purposes than imparting colour.*
- *Naturally occurring inorganic fillers. This exemption applies to fillers subject to Annex V, paragraph 7 of REACH.*
- *Synthetic amorphous silica (SAS). This exemption applies to non-modified synthetic amorphous silica. Chemically modified colloidal silica can be included in the products as long as the silica particles form aggregates in the final product. Any surface treatment must meet the chemical requirements in O11,O12 and O13.*
- *Unmodified calcium carbonate ($CaCO_3$). This exemption applies to unmodified ground calcium carbonate (GCC) and unmodified precipitated calcium carbonate (PCC).*
- *Polymer dispersions.*
- *Aluminium oxide.*

If the answer to the above question is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance. Please state also if the above-mentioned exceptions apply.

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Signature of manufacturer/supplier

Date	Company
Name of contact person in CAPITAL letters	Signature by contact person
Phone	E-mail

Appendix 5 Declaration for nanomaterials/-particles in glass used in windows and doors

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of windows, window doors or external doors.

Name of the product:
Manufacturer/supplier:

Are nanomaterials/-particles* added or present in the glass used in the windows or doors? ☐ Yes ☐ No

If yes, please specify which nanomaterials/-particles:

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**Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01), see Table 1 for full definition.*

Signature of manufacturer/supplier

Date	Company
Name of contact person in CAPITAL letters	Signature by contact person
Phone	E-mail

Appendix 6 Declaration of foils

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of windows, window doors or external doors.

This appendix shall be completed and signed by the manufacturer or supplier of the foil based on the best of their knowledge at the given time.

This declaration shall be filled out for foils used on the product surface of Nordic Swan Ecolabelled windows and doors.

Manufacturer/supplier of the foil:
Name of the product:
Function of the product:

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled product. Impurities are not regarded as ingoing substances and are exempt from the requirements. Ingoing substances and impurities are defined below, unless stated otherwise in the requirements.

Ingoing substances: *all substances in the chemical product regardless of amount, including additives (e.g. preservatives and stabilizers) from the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.*

Impurities: *Residues from production, incl. raw material production, which remain in the chemical product at concentrations below 1000 ppm (0.1000% by weight).*

Examples of impurities are residues of reagents incl. residues of monomers, catalysts, by-products, scavengers (i.e. chemicals that are used to eliminate/minimize undesirable substances), detergents for production equipment and carry-over from other or previous production lines.

Prohibited substances		
Does the foil contain any of the following substances?	Yes	No
Substances on the Candidate List The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table D4 (CAS No. 556-67-2), D5 (CAS No. 541-02-6) or D6 (CAS No. 540-97-6) must only be included in the form of residues from raw material production and are allowed in concentrations up to 1000 ppm each in the silicone raw material.	☐	☐
Substances that have been judged in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) PBT and vPvB in accordance with the criteria in Annex XIII of REACH	☐	☐

Endocrine disruptors: Substances on the EU member state initiative “Endocrine Disruptor Lists”, List I, List II and List III, see following links: List I: https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu *Propiconazole (CAS No. 60207-90-1) used as wood preservative is exempted.* List II: https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption *Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.* List III: https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities *Substances that are transferred to one of the corresponding sub-lists “Substances no longer on list” and that no longer feature on Lists I–III are not prohibited. However, this does not apply to the substances listed in Sub-List II that were evaluated on the basis of regulations or directives that do not have provisions for identifying endocrine disruptors (e.g., the Cosmetics Regulation). These substances may have endocrine disrupting properties. Nordic Ecolabelling will assess these substances on a case-by-case basis, based on the background information provided in sub-List II.*	☐	☐
Halogenated organic compounds *Exempted* are:* *• Preservatives that fulfil O13* *• Pigments that meet the EU’s requirements concerning colourants in food packaging under Resolution AP (89) point 2.5* ** Perfluorinated and polyfluorinated alkyl substances are covered by their own bulletin and are not included in this exemption.*	☐	☐
Perfluorinated and polyfluorinated alkyl substances (PFAS)	☐	☐
Aziridine and polyazidirines *An exemption is made for aziridines/polyaziridines, if the substance is not classified as carcinogenic, mutagenic or reprotoxic from any manufacturer or in ECHA.*	☐	☐
Bisphenols and bisphenol derivatives 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 for human health, or that can be identified as toxic for reproduction. **Assessment of regulatory needs: Bisphenols. ECHA – 16 December 2021: Section 2.1: Bisphenols for which further EU RRM is proposed – restriction* *https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02*	☐	☐
Organotin compounds	☐	☐
APEO (alkylphenol ethoxylates) and APD (alkylphenol derivatives/alkylphenols) Alkylphenol derivatives are defined as substances that release alkyphenols when they break down. *Butylated hydroxytoluene (BHT, CAS No. 128-37-0) is exempted up to 100 ppm in the final product.* *An exemption is made for sterically hindered phenolic antioxidants with molecular weight (MW) >600 g/mole.*	☐	☐
Phthalates Phthalates are esters of 1,2-benzenedicarboxylic acid (orthophthalic acid). *An exemption is made for diisononyl phthalate (DINP) used in polyurethane filler/sealant.*	☐	☐
Pigments, dyes and additives containing lead, tin, cadmium, chromium VI and mercury, and their compounds	☐	☐

If the answer to any of the above questions is Yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg). Also state whether the substance is contained in the form of an impurity or an added substance. Please state also if the above-mentioned exceptions apply.

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Signature of manufacturer/supplier

Date	Company
Name of contact person in CAPITAL letters	Signature by contact person
Phone	E-mail