

Appendix 11 Declaration form AI0014 - Laminates

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of furniture and fitments.

To be completed by suppliers of laminates for use in Nordic Swan Ecolabelled furniture and fitments.

The following is **not** covered in this declaration:

- Small parts of laminate such as lists are excluded and do not have to meet the requirements of this chapter except for O51 Antibacterial substances (see O51 below).
- Nordic Swan Ecolabelled laminates or laminates included in a licence for Nordic Swan Ecolabelled construction and façade panels, generation 6 or later.

General information

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| Please state name/trade name of the laminate: |
| Please state the type of laminate (and composition if applicable): |
| Name of the manufacturer/supplier: |

| O51: Have chemical products and nanomaterials with antibacterial or disinfectant properties been added to the laminate? | YES | NO |
|---|--------------------------|--------------------------|
| <p>Chemical products and nanomaterials* with antibacterial or disinfectant properties must not be added to the laminate.</p> <p>The term antibacterial means chemical products that prevent or inhibit growth of microorganisms, such as bacteria or fungi. Silver ions, silver nanoparticles, gold nanoparticles and copper nanoparticles are classed as antibacterial agents.</p> <p><i>* In accordance with the definition of a nanomaterial adopted by the European Commission on 18 October 2011 (2011/696/EU), see definitions.</i></p> | <input type="checkbox"/> | <input type="checkbox"/> |

| O52 - O55: Classification of chemical products | | | | |
|--|------------|----------|---|--------------------------|
| Chemical products used for the manufacture of laminate must be declared in Appendix 12. | | | | |
| Please state the name of the chemical product(s), CAS number, function and whether appendix 12 has been filled out | | | YES | NO |
| Name of chemical product | CAS number | Function | Appendix 12 filled out for the chemical product Y/N | |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |

Please attach a safety data sheet of the chemical products in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

O56 Requirement for emissions

Laminate must comply with the requirements for emissions in the table below:

The test must be performed in compliance with EN -16516.

| Substances or groups of substances | Threshold limit values after 28 days* (µg/m³) |
|------------------------------------|---|
| TVOC (C6-C16) | 160 |
| SVOC (C16-C23) | 30 |
| Formaldehyde | 30 |

** If the limit values in the table can be reached in a shorter time than 28 days, this is also accepted.*

Alternatively, compliance with only the requirement for emissions of formaldehyde can be chosen for direct pressure laminate (melamine).

It is the finished coated panel material that must be tested and one of the following limit values must be met:

- The emission of formaldehyde must on average not exceed 0.062 mg/m³ air according to test method EN 717-1.
- The emission of formaldehyde must on average not exceed 0.124 mg/m³ air according to test method EN 16516.

Other analysis methods than those stated in the requirement may be used, provided that the correlation between test methods can be verified by an independent third party.

YES

NO

Has another test method than EN 16516 been used?

☐
☐

Please upload analysis report, including measurement methods, results, and measurement frequency.

It must be clearly stated which method/standard was used, the laboratory that conducted the analysis, and that the analysis laboratory is an independent third party. Other analysis methods than those stated in the requirement may be used, provided that the correlation between test methods can be verified by an independent third party.

Requirement O57 only applicable when the laminate makes up more than 10% by weight of the furniture/fitment

O57 Energy consumption in the manufacturing of laminate

No more than 14 MJ/kg per panel may be used for the manufacture of the laminate.

The energy consumption must be stated as an annual average and can either be stated for the manufacture of the laminate that must be included in the Nordic Swan Ecolabelled furniture/fitment, or for the entire production.

Energy for the production of raw materials (paper) must not be included in the calculation. Paper has a separate energy requirement.

Internally produced energy and excess energy that are sold off must be stated but must not be included as consumed energy in the calculation. For detailed information on how the energy calculation is to be done, see Appendix 2.

Please attach report/calculation of the energy consumption used in the manufacture of laminate:

O58 Tree species with restricted use

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

- CITES (Appendices I, II and III)
- IUCN red list, categorized as CR, EN and VU
- Rainforest Foundation Norway's tree list
- Siberian larch (originated in forests outside the EU)

** The list of restricted tree species is located on the website:*

<http://www.nordic-ecolabel.org/certification/paper-pulp-printing/pulp--paper-producers/forestry-requirements-2020/>

| | | |
|---|--------------------------|--------------------------|
| Tree species listed on a) CITES (Appendices I, II and III) are not permitted to be used. | | |
| | YES | NO |
| Are any of the restricted tree species used in the laminate? | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, and tree species listed on either b), c) or d) are used please answer: | | |
| Do the tree species originate from an area/region where it is IUCN red listed, categorized as CR, EN or VU? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do the tree species originate from Intact Forest Landscape (IFL), defined in 2002 http://www.intactforests.org/world.map.html ? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do the tree species originate from plantation established on areas converted from forest after 1994? | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>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.</p> <p>Please attach a valid FSC/PEFC Chain of Custody certificate (or state licence number) 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:</p> | | |

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| <p>O59 Wood fibre in paper</p> <p>Where paper is used in the manufacture of laminate, the following requirements must be met: The names of the species of trees used to produce the paper must be stated. Species of trees on the Nordic Swan Ecolabel's list of prohibited tree species* (https://www.nordic-swan-ecolabel.org/pulp-paper-declaration-portal/what-can-be-declared/forestry-requirements/) must not be used. The requirement applies to new fibres only and not to recycled fibres*. The paper producers must be Chain of Custody certified by the FSC scheme or the PEFC scheme. Compliance with one of the following three alternatives is required, on an annual basis, for certified wood fibre and/or recycled fibres:</p> <ol style="list-style-type: none"> 70% of the fibre raw material in the paper must be certified by the FSC or the PEFC scheme. The paper must be labelled FSC or PEFC Recycled. Alternatively, 70% of the fibre raw material must consist of recycled fibres. If less than 70% of the fibre raw material content in the paper is recycled fibre, the percentage of fibre raw material that must be sourced from certified forests is calculated using the following formula: $Y (\%) \geq 70 - x$ <p>Y = Percentage of fibre raw material from certified forests x = Percentage of recycled fibre</p> <p><i>*Recycled material defined as pre-consumer and post-consumer in accordance with ISO 14021. See detailed information in Definitions.</i></p> <p>Please attach a valid FSC/PEFC Chain of Custody certificate (or state licence number) that covers the specific tree species and documentation that the requirement is met.</p> <ol style="list-style-type: none"> An invoice between the paper manufacturer and laminate manufacturer showing the purchase of FSC/PEFC certified paper. An invoice between the paper manufacturer and laminate manufacturer showing the purchase of FSC or PEFC Recycled labelled paper. Or a declaration of compliance with the requirement for recycled fibre content from the paper manufacturer. Paper manufacturer's calculation of the percentage of fibre raw material that is FSC/PEFC certified and recycled, and documentation showing that paper with the certified amount is purchased. This should be specified in e.g. invoices or delivery note. |
|--|

O60 Emission of COD from pulp and paper production

The total discharge of COD (chemical oxygen demand) to water must be less than the COD value in the table below:
COD is calculated by adding COD emissions from the pulp and paper:

COD pulp (kg/ADt) + COD emissions from the paper machines (kg/ADt)

| Types of pulp | Total emission of COD for both pulp and paper (kg/ADt) |
|--------------------------|--|
| Unbleached chemical pulp | 14.0 |
| CTMP pulp | 19.0 |
| TMP/Groundwood pulp | 7.0 |
| Recycled fibre pulp | 4.0 |

Please state the total emission of COD from both pulp and paper:

Please attach a calculation from the pulp and paper manufacturers showing that the total emission of COD is below the relevant threshold limit value in the table.

O61 Energy consumption in production of pulp and paper

The following requirements must be met:

$$P_{\text{electricity}(\text{total})} < 2.5$$

$$P_{\text{fuel}(\text{total})} < 2.5$$

For paper comprising solely of TPM/GW produced on-site, the limit value for $P_{\text{fuel}(\text{total})}$ is 1.25

P is the energy score for the paper and pulp production. The energy score from both the production of paper and the pulps are included in $P_{\text{electricity}(\text{total})}$ and $P_{\text{fuel}(\text{total})}$.

A more detailed explanation of the calculation is given in Annex 3.

Please state the name of manufacturer, production facility and name of the pulp.

Please attach a calculation from the paper and pulp manufacturers showing compliance with the limit values for the score.

Please note that there has been developed a calculation sheet for the energy calculations that can be obtained by Nordic Ecolabelling.

Surface treatment of laminate

| O62-O68 Surface treatment of laminate | | | YES | NO |
|---|--|----------|---|--------------------------|
| Is the laminate surface treated? | | | <input type="checkbox"/> | <input type="checkbox"/> |
| If surface treatment is applied, please fill out Appendix 13 for each chemical product used for surface treatment. Please state the name of the chemical product(s), CAS umber, function and whether appendix 13 has been filled out | | | | |
| Name of chemical product | | Function | Appendix 13 filled out for the chemical product Y/N | |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> |

Please attach a safety data sheet of the chemical products in compliance with current European legislation (Annex II of REACH, Regulation (EC) No. 1907/2006).

| O64: UV curing surface treatment | YES | NO |
|---|--------------------------|--------------------------|
| Are the chemical products used for surface treatment UV curing? | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>If yes, then the following applies: UV curing surface treatment products must be applied to the material during a controlled closed process where no discharge to recipient takes place. Spills and residual waste (e.g. residues from cleaning) must be collected in containers that are approved for hazardous waste and handled by a waste contractor.</p> <p>Please describe the process and how waste and residual waste are handled, including information about who receives the residual waste from the performer of the surface treatment:</p> | | |

Manufacture's signature:

| | |
|---------------------|----------------------------------|
| Place and date: | Company name: |
| Responsible person: | Signature of responsible person: |
| Phone: | Mail: |