

## Appendix 4 Chemicals used in production of panels and cladding

To be used in conjunction with an application for a licence for the Nordic Swan Ecolabel of Panels and Cladding for exterior use.

Declaration is made by the chemical manufacturer or supplier based on the best of their knowledge at the given time and available knowledge on the chemical product with reservations for new advances/knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

This declaration must be completed for chemical products used in the production of the Nordic Swan Ecolabelled panels and cladding for exterior use, such as adhesives, resins, waxes, surface treatments, and surface treatment system.

Chemical products used in the manufacture of paper, and for printing patterns on decor paper, do need not be declared. Auxiliary substances, such as lubricants and detergents, also do not need to be declared.

**Name of chemical product:**

**Function of the chemical 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 stabilisers) 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/minimise undesirable substances), detergents for production equipment and carry-over from other or previous production lines.*

O20 Classification of chemical products used in the production	YES	NO
Is the chemical product classified with any of the hazard phrases below? Including all combinations of stated exposure routes and stated specific effect. Fx H350 also covers classification H350i.		
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 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). Formaldehyde emissions are regulated in a separate requirement.
- Classifications H341, H301 and H331 for resins containing a maximum of 10% by weight of phenol (CAS No. 108–95–2).
- Classifications H301, H311, H331 and H370 for resins containing a maximum of 10% by weight of methanol (CAS No. 67–56–1).
- Classifications H351 and H361 for resins containing melamine (CAS No. 108–78–1).
- UV curing products are exempted from classification H411 under the following conditions: There must be a controlled closed process where no discharge to recipient takes place. Spillage and general waste (e.g. cleaning residue) must be collected in containers approved for hazardous waste and handled by a waste contractor.

**If yes**, please state the CAS No., chemical name, and level (in ppm, % by weight or mg/kg). Also, specify whether the substance is present as an impurity, an added substance or if the aforementioned exceptions apply.

O21 Classification of ingoing substances	YES	NO
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. Fx H350 also covers classification H350i.		
H350 – Carcinogenic, Carc. 1A and 1B		
H351 – Carcinogenic, Carc. 2		
H340 – Germ cell mutagenic, Mut. 1A or 1B		
H341 – Germ cell mutagenic, Mut. 2		
H360 – Reproductive toxicity, Repr. 1A and 1B		
H361 – Reproductive toxicity, Repr. 2		
H362 – Reproductive toxicity, Lact.		
EUH380 – Endocrine disruption for human health, ED HH1		
EUH381 – Endocrine disruption for human health, ED HH2		
EUH431 – Endocrine disruption for the environment, ED ENV 1		
EUH431 – Endocrine disruption for the environment, ED ENV 2		
EUH440 – Persistent, Bioaccumulative and Toxic properties, PTB		
EUH411 – Very Persistent, Very Bioaccumulative properties, vPvB		

EUH450 – Persistent, Mobile and Toxic properties, PMT		
EUH451 – Very Persistent, Very Mobile properties, vPvM		
<b>The following are exempted from the requirement:</b> <ul style="list-style-type: none"> <li>– Adhesive containing methylene diphenyl diisocyanate (MDI) classified as H351.</li> <li>– Adhesive and resin containing formaldehyde (CAS No. 50–00–0) classified as H350 and H341. Formaldehyde emissions are regulated in a separate requirement.</li> <li>– Resin containing maximum 10% by weight of phenol (CAS No. 108–95–2) classified as H341.</li> <li>– Resin containing melamine (CAS No. 108–78–1) classified as H351 and H361.</li> <li>– 1,1,1-Trimethylolpropane (TMP, CAS No. 77–99–6) classified as H361.</li> </ul>		

**If yes**, please state the CAS No., chemical name, and level (in ppm, % by weight or mg/kg). Also, specify whether the substance is present as an impurity, an added substance or if the aforementioned exceptions apply.

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O22 Prohibited substances	YES	NO
Does the chemical product contain any of the following substance groups?		
Substances on the Candidate List The Candidate List can be found on the ECHA website: <a href="http://echa.europa.eu/candidate-list-table">http://echa.europa.eu/candidate-list-table</a> <ul style="list-style-type: none"> <li>– Exemption applies to melamine (CAS No. 108–78–1)</li> <li>– Exemption applies to boric acid (CAS No. 10043–35–3)</li> </ul>		
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		
Halogenated organic compounds <ul style="list-style-type: none"> <li>– Exemptions apply for bronopol, IPBC, MIT and CMIT/MIT (3:1). These are addressed in a separate requirement, see requirement O24).</li> </ul>		
Per- and polyfluoroalkyl substances (PFASs), e.g. PFOA and PFOS		
Butylhydroxytoluene (BHT, CAS No. 128–37–0)		
Aziridine and polyaziridines		
Bisphenols and bisphenol derivatives <ul style="list-style-type: none"> <li>– 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.</li> </ul> <p>*Assessment of regulatory needs: Bisphenols. ECHA- 16 December 2021: Section 2.1: Bisphenols for which further EU RRM is proposed – restriction <a href="https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02">https://echa.europa.eu/documents/10162/c2a8b29d-0e2d-7df8-dac1-2433e2477b02</a></p> <p>Exemption applies to bisphenol A used in the production of epoxy acrylate.</p>		
APEO (alkylphenol ethoxylates) and APD (alkylphenol derivatives/alkylphenols) Alkylphenol derivatives are defined as substances that release alkylphenols when they break down.		
Phthalates <ul style="list-style-type: none"> <li>– Phthalates are esters of 1,2-benzenedicarboxylic acid (orthophthalic acid).</li> </ul>		
Pigments and additives based on lead, tin, cadmium, chromium VI and mercury, and their compounds.		

<p>Endocrine disruptors: Substances on the EU member state initiative "Endocrine Disruptor Lists", List I, List II and List III, see following links:</p> <p>List I: <a href="https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu">https://edlists.org/the-ed-lists/list-i-substances-identified-as-endocrine-disruptors-by-the-eu</a></p> <p>List II: <a href="https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption">https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption</a></p> <p>List III: <a href="https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities">https://edlists.org/the-ed-lists/list-iii-substances-identified-as-endocrine-disruptors-by-participating-national-authorities</a></p> <p>- IPBC (3-iodo-2-propynyl butylcarbamate, CAS No. 55406-53-6) is exempted up to 3000 ppm.</p> <p>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 based on 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.</p>		
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If **yes**, please state the CAS No., chemical name, and level (in ppm, % by weight or mg/kg). Also, specify whether the substance is present as an impurity, an added substance or if the aforementioned exceptions apply.

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O23 Nanomaterials	YES	NO
<p>Does the chemical product contain nanomaterials/-particles?</p> <p>Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01):</p> <p>'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:</p> <p>(a) one or more external dimensions of the particle are in the size range 1 nm to 100 nm;</p> <p>(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;</p> <p>(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.</p> <p>The following are exempted from the requirement:</p> <ul style="list-style-type: none"> <li>– Pigments. This exemption does not include pigments added for purposes other than colouring.</li> <li>– Naturally occurring inorganic fillers in accordance with annex V point 7 in REACH.</li> <li>– Synthetic amorphous silica (SAS). This applies to non-modified synthetic amorphous silica and surface-treated pyrogenic silica, as long as the silica particles form aggregates or agglomerates in the product. For surface treated nanoparticles, the surface treatment must meet the chemical requirements in O31 (Classification of ingoing substances) and O32 (Prohibited substances).</li> <li>– Polymer dispersions.</li> </ul>		

If **yes**, please state the CAS No., chemical name, and level (in ppm, % by weight or mg/kg). Also, specify whether the substance is present as an impurity, an added substance or if the aforementioned exceptions apply.

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O24 Preservatives	YES	NO
Please state if content of preservatives exceeds the limit values below		
<b>Preservative:</b>	<b>Limit value:</b>	
Bronopol	< 500 ppm (0.05% by weight)	
IPBC (iodopropynyl butylcarbamate)	< 3000 ppm (0.30% by weight)	

Mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one / 2-methyl-4-isothiazolin-3-one)	≤ 15 ppm (0.0015% by weight)		
MIT (2-methyl-2H-isothiazol-3-one)	≤ 100 ppm (0.01% by weight)		
Total amount of isothiazolinones	≤ 500 ppm (0.05% by weight).		

If yes, state the CAS No. (where possible), chemical name and level (in ppm, % by weight or mg / kg) for each

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O25 Volatile organic compounds in additives	YES	NO
<p>Does the additive contain any VOC (volatile organic compound) and/or VAH (volatile aromatic compound)?</p> <p>Volatile organic compounds (VOC), including volatile aromatic compounds (VAH), may be present in the adhesive to a maximum of 3% by weight.</p> <p>VAHs may be present in the adhesive to a maximum of 0.1% by weight.</p> <p>Does the additive comply with the requirement?</p> <p>VOC are defined as organic compounds with a steam pressure exceeding 0.01kPa, at 20°C. For products under EU Directive (2004/42/EC) in which steam pressure is not indicated: Organic substances with an initial boiling point that is lower than or equal to 250°C measured at a normal pressure of 101.3 kPa</p>		
<p>The following is exempted from the requirement:</p> <p>Resin used in the production of laminate is exempted from the requirement.</p>		

If yes, please state the CAS No., chemical name, and level (in ppm, % by weight or mg/kg). Also, specify whether the substance is present as an impurity, an added substance or if the aforementioned exceptions apply.

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O26 Free formaldehyde	YES	NO
<p>Does the content of free formaldehyde (from formaldehyde not deliberately added or from formaldehyde-releasing substances) exceed 0.02% by weight (200 ppm) in the chemical product?</p> <p>For adhesive 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.</p>		

If yes, please specify source of formaldehyde, i.e., actively added or because of release or decomposition from another substance and theoretical amount of formaldehyde in the product. Please also verify if the exceptions apply.

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**Signature of chemical product manufacturer**

Date	Company
Signature by contact person	
Name of contact person	Phone