Appendix 6 Chemical products

To be used in conjunction with an application for a license for the Nordic Swan Ecolabelling of floor coverings and flooring underlays.

This appendix shall be completed and signed by the manufacturer of the chemical product based to the best of their knowledge at the given time, also based on information from raw material manufacturers, recipe, 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 for chemical products used in the production/assembly of the Nordic Swan Ecolabelled floor coverings or flooring underlays, such as adhesives, resins, sealants, or waxes, as well as lacquers, oils, paints, stains or fillers. The requirements also apply to chemicals used at the production site of subcontractors manufacturing finished layers/elements such as manufactured board and backing foam.

Lamination (thin layer of laminate < 2 mm, including melamine) on another panel is not considered to be surface treatment. For a wood-based panel with laminate, both elements must fulfil the requirements for the relevant panel type individually, i.e. the wood-based panel and laminate must both meet the requirements for chemicals.

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

Manufacturer of the chemical product:
Name of the 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 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.

O24 Antibacterial substances		
Please state:	Yes	No
Does the chemical product contain nanomaterials* with antibacterial or disinfecting properties? *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.* ** Nanomaterials/-particles are defined according to the EU Commission Recommendation on the Definition of Nanomaterial (2022/C 229/01).*	☐	☐
The following is exempted from the requirement: - *Preservatives used to preserve the chemical product, so-called in-can preservatives.*		

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 exception applies.

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O25 Classification of chemical products		
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 or1B	☐	☐
H351 – Carcinogenic, Carc. 2	☐	☐

H340 –Germ cell mutagenic, Mut. 1A and 1B	☐	☐
H341 – Germ cell mutagenic, Mut. 2	☐	☐
H360 –Reproductive toxicity, Repr. 1A or1B	☐	☐
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). Isocyanates in the production of polyurethane and polyurethane foam are regulated in separate requirement O36.*
- *Classifications H350, H341, H301, H311 and H331 for adhesive products and resins containing formaldehyde (CAS no. 50-00-0). Formaldehyde emissions are regulated in O31 and O41.*
- *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 surface treatment products classified as environmentally hazardous, if UV curing surface treatment products are 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.*

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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O26 Classification of ingoing substances		
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	☐	☐
EUH340 - Endocrine disruption for the environment, ED ENV 1	☐	☐
EUH341 - 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	☐	☐

	Yes	No
For two-component products it is the added ingredients in the separate components that shall comply with the requirement. Alternatively, if it can be documented that protective equipment was worn when the hardener was mixed with the paint/varnish and the finished two-component product was applied in a closed system, the requirement may apply to the hardened product.	☐	☐
Is the declaration about CMR substances done for a hardened two component product?	☐	☐
If yes, the chemical product is part of a two-component product, is safety equipment used when the hardener is mixed with the paint/lacquer and is the application of the finished two-component product done in a closed system?	☐	☐

The following are exempted from the requirement:

- *Photo initiators classified H351, H341 or H361*
- *Chemical products containing methylene diphenyl diisocyanate (MDI) classified as H351.*
- *Adhesive and resin containing formaldehyde (CAS no. 50-00-0) classified as H350 and H341. Formaldehyde emissions are regulated in O31 and O41.*
- *Resin containing maximum 10% by weight of phenol (CAS no. 108-95-2) classified as H341.*
- *Resin containing melamine (CAS no. 108-78-1) classified as H351 and H361.*
- *Titanium dioxide (CAS no. 13463-67-7) classified as H351.*
- *1,1,1-Trimethylolpropane (TMP, CAS no. 77-99-6) classified as H361.*
- *VAH (volatile aromatic compounds) in chemical products. VAH content is regulated in requirements O30 and O34.*

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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O27 Preservatives			
Please state if content of preservatives exceeds the limit values below		Yes	No
Preservative:	**Limit value**		
Bronopol (CAS 52-51-7)	≤ 500 ppm (0.05% by weight)	☐	☐
IPBC (iodopropynyl butylcarbamate, CAS 55406-53-6)	≤ 2000 ppm (0.20% by weight)	☐	☐
Mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one / 2-methyl-4-isothiazolin-3-one, CAS 55965-84-9)	≤ 15 ppm (0.0015 % by weight)	☐	☐
MIT (2-methyl-2H-isothiazol-3-one, CAS 2682-20-4)	≤ 200 ppm (0.0015 % by weight)	☐	☐
Total amount of isothiazolinones	≤ 500 ppm (0.05% 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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O28 Prohibited substances		
Does the chemical product contain any of the following substance groups?	**Yes**	**No**
Substances on the Candidate List	☐	☐

- The Candidate List can be found on the ECHA website: http://echa.europa.eu/candidate-list-table - Exemption applies to melamine (CAS No. 108-78-1) - 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* *List II: https://edlists.org/the-ed-lists/list-ii-substances-under-eu-investigation-endocrine-disruption* *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, such as short-chain chlorinated paraffins (C10-C13), medium-chain chlorinated paraffins (C14-C17). - Halogenated organic pigments that comply with the Council of Europe recommendation "Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food", point 2.5. - Exemptions apply for bronopol, IPBC, MIT and CMIT/MIT (3:1). These are addressed in a separate requirement, see requirement O26). - Exemption applies also for epoxy acrylate used in UV curing products.	☐	☐
Per- and polyfluoroalkyl substances (PFASs), e.g., PFOA and PFOS	☐	☐
Butylhydroxytoluene (BHT, CAS No. 128-37-0) - An exemption is made for BHT that is included in UV curing chemical products. If BHT receives a harmonized classification that means the substance does not meet the requirements anymore and the exemption will be removed.	☐	☐
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	☐	☐
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 - Bisphenol A used in the production of epoxy acrylate is not covered by the requirement. -	☐	☐
Organotin compounds	☐	☐
APEO (alkylphenol ethoxylates) and APD (alkylphenol derivatives/alkylphenols) - Alkylphenol derivatives are defined as substances that release alkyphenols when they break down. - 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).	☐	☐
Pigments, dyes and additives based on 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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O29 Nanomaterials		
Please state:	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 include pigments added for purposes other than colouring.* - *Naturally occurring inorganic fillers in accordance with annex V point 7 in REACH.* - *Synthetic amorphous silica. This 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 O26 (Classification of ingoing substances) and O28 (Prohibited substances).* - *Polymer dispersions*		

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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O30 Volatile organic compounds Please state:
Amount of volatile organic compounds (VOC) in the chemical product (weight -%):
Amount of volatile aromatic compounds (VAH) in the chemical product (weight -%):
Volatile organic compounds (VOC), including volatile aromatic compounds (VAH), may be present in the chemical product to a maximum of 1% by weight. In adhesives, volatile organic compounds (VOC) may be present to a maximum of 3% by weight. However, volatile aromatic compounds (VAH) may be to a maximum of 0,1% by weight. ***The following are exempted from the requirement:*** - *Chemicals used for surface treatments are exempted from the requirement and must instead fulfil requirement O34.* - *Resin used in the production of laminate is exempted from the requirement provided that the laminate flooring meets the emission requirements O35 and O41.* *Volatile organic compounds (VOC) are defined as any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101.3 kPa. This definition is the same as in the Paints Directive (2004/42/EC).*

Please 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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O31 Free formaldehyde		
Please state:	Yes	No
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? 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. Resin used in the production of laminate is exempted from the requirement if the laminate fulfils requirement concerning emissions of formaldehyde (see requirement O35 and O41).	☐	☐

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 state also if the above-mentioned exceptions apply.

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O33 Environmentally harmful products and substances in surface treatments		
Please state:	Yes	No
Does the chemical product contain substances classified with hazard phrases H410, H411 or H412?	☐	☐

If the answer to the above questions is Yes, state the CAS no. (where possible), each constituent classified substance, the concentration in the chemical product must be stated as a percentage by weight. Also state whether the substance is contained in the form of an impurity or an added substance.

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O34 Quantity of applied volatile organic compounds (VOC) in surface treatments		
Please state:	Yes	No
Does the chemical product contain VOC in its uncured form?	☐	☐
If the chemical product contains VOC in its uncured form; please state the VOC content in %.		

Signature of the manufacturer of the chemical product:

Date	Company
Signature by contact person	
Name of contact person	Phone