Appendix 13 AI0014b - Chemicals used for surface treatment of wood, wood-based panels and laminate

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

This appendix applies to chemical products used for surface treatment of wood, wood-based panels and laminate.

Name of the chemical product:	Bluefin Unistar +4% Aqua-Crosslinker 8481
Function of the chemical product (e.g. resin):	Water-based 2C transparent multi-layer coating

Ingoing substances and impurities are defined as follows:

- Ingoing substances: All substances in the chemical 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 considered as ingoing substances.
- Impurities: Residuals, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material or in chemical product in concentrations less than 1000 ppm (0,1000 w-%, 1000 mg/kg) in the chemical product. Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and detergents for production equipment and carry-over from other or previous production lines.

O61: Is the chemical product classified according to any of the classifications below? Incl. all classification variants. For example, H350 also covers classification H350i.	**YES**	**NO**
H400 – Aquatic Acute 1	☐	☑
H410 – Aquatic Chronic 1	☐	☑
H411 – Aquatic Chronic 2	☐	☑
H420 – Ozone	☐	☑
H300 – Acute Tox 1 or 2	☐	☑
H310 – Acute Tox 1 or 2	☐	☑
H330 – Acute Tox 1 or 2	☐	☑
H301 – Acute Tox 3	☐	☑
H311 – Acute Tox 3	☐	☑
H331 – Acute Tox 3	☐	☑
H370 – STOT SE 1	☐	☑
H372 – STOT RE 1	☐	☑

H350 – Carc. 1A or 1B	☐	☑
H351 – Carc. 2	☐	☑
H340 – Muta. 1A or 1B	☐	☑
H341 – Muta. 2	☐	☑
H360 – Repr. 1A or 1B	☐	☑
H361 – Repr. 2	☐	☑
H362 – Lact.	☐	☑
Exemption applies to: - UV-curing surface treatment products classified as environmentally hazardous if requirement O64 (UV curing surface treatment system) is met.		

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 the ingoing substance/substances which is causing the classification of the chemical product.

O62: UV curing surface treatment system
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.

Please describe the UV curing surface treatment system and how waste and residual waste are handled, including information about who receives the residual waste from the performer of the surface treatment:

O63: Does the chemical product contain ingoing substances which are classified according to any of the classifications below? Incl. all classification variants. For example, H350 also covers classification H350i.	**YES**	**NO**
H350 – Carc. 1A or 1B	☐	☑
H351 – Carc. 2	☐	☑
H340 – Muta. 1A or 1B	☐	☑
H341 – Muta. 2	☐	☑
H360 – Repr. 1A or 1B	☐	☑
H361 – Repr. 2	☐	☑
H362 – Lact.	☐	☑

Exemptions applies to: *- Photo initiators classified H351, H341 or H361.* *- 1,1,1-Trimethylolpropane (TMP, CAS No. 77-99-6) classified H361.* *- Trimethylolpropane triacrylate (TMPTA, CAS No. 15625-89-5) classified as Carc 2, H351.* *- Mequinol (CAS No. 150-76-5) classified H361.* *- The hardener in 2-component UV 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 safety 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.*

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 substances is an impurity or purposely added.

O64: Does the chemical product contain any of the following prohibited substances?	**YES**	**NO**
Substances on the REACH Candidate list of SVHC https://www.echa.europa.eu/candidate-list-table	☐	☑
Substances that have been evaluated in the EU to be PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) in accordance with the criteria in Annex XIII of REACH	☐	☑
Potential or identified endocrine disruptors, listed in any of the following "Endocrine Disruptor Lists" List I; II and III. Exemptions apply to: - IPBC (3-iodo-2-propynyl butylcarbamate, CAS No. 55406-53-6) may be present in the chemical product at a level of not more than 0,2% by weight *Note: Substances moved to "Substances no longer on list" and not present on Lists I-III, are no longer excluded, except for those on sublist II where concern remains. Nordic Ecolabelling will assess these on a case-by-case basis.*	☐	☑
Polyfluorinated and polyfluorinated alkylated substances (PFAS)	☐	☑
Halogenated organic compounds *Exceptions* apply to:* *- Bronopol (CAS No. 52-51-7) may be present in the chemical product at a level of not more than 0.05% by weight* *- Mixture (3:1) of CMIT/MIT (5 chloro-2-methyl-4-isothiazolin-3-one CAS No. 247-500-7; 2-methyl-4-isothiazolin-3-one CAS No. 220-239-6) may be present in the chemical product at a level of not more than 0.0015% by weight* *- IPBC (Iodopropynyl butylcarbamate) may be present in the chemical product at a level of not more than 0.20% by weight* *- 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* *- Epoxy acrylate used in UV curing coatings* ** Polyfluorinated and polyfluorinated alkylated substances (PFAS) are covered by their own bullet and are not included in the exemption.*	☐	☑
Isothiazolinones may be present in the chemical product at a level of not more than 0.05% by weight	☐	☑

Butylhydroxytoluene (BHT, CAS No. 128-37-0) *An exemption is given for BHT in UV curing lacquers and paints. If BHT is given a harmonized official classification so that the substance does not meet the requirements of the criteria document, the exemption will no longer be valid.*	☐	✔
Aziridine and polyaziridines *Exemption is given for aziridine/polyaziridine if the substance is not classified as carcinogenic, mutagenic or toxic for reproduction from any manufacturer or in ECHA.*	☐	✔
Bisphenol A, S and F *Bisphenol A used in the production of epoxy acrylate is not covered by the requirement.*	☐	✔
Alkylphenols, alkylphenol ethoxylates and other alkylphenol derivates *Alkylphenol derivatives are defined as substances that release alkylphenols when they break down*	☐	✔
Phthalates	☐	✔
Pigments and additives based on lead, tin, cadmium, chromium VI and mercury, and their compounds	☐	✔
Volatile aromatic hydrocarbons (VAH) at a level of more than 1% by weight in the chemical product	☐	✔

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 substances is an impurity or purposely added.

O65: Does the chemical product contain any nanomaterials according to definition adopted by the European Commission Recommendation (2022/C 229/01)?	**YES**	**NO**
Definition: '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.. Exemptions are made for: - Pigments* - Naturally occurring inorganic fillers** - Unmodified synthetic amorphous silica ** This exception does not include pigments added for purposes other than colour.* *** This applies to fillers covered by Annex V item 7 of REACH*	☐	✔

If the answer is yes, state which type of nanomaterial and if it is an impurity or purposely added:

O66: Does the chemical product contain free formaldehyde?	YES	NO
The content of free formaldehyde in each individual chemical product used for surface treatment must not exceed 0.2% by weight (2000 ppm).	☐	☑

If yes, state the % by weight of formaldehyde:

Does the chemical product contain VOC?	YES	NO
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 (the same definition that appears in the VOC Directive 2004/42/EC). This information will be used to calculate the total amount of VOC or total applied amount of VOC in the surface treatment system.	☑	☐

If yes, state the % by weight of VOC:

0,23%

O60: Does the chemical product contain nanomaterials with antibacterial or disinfectant properties?	YES	NO
Chemical products and nanomaterials* with antibacterial or disinfectant properties must not be used in surface treatment. 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. ** In accordance with the definition of a nanomaterial adopted by the European Commission (2022/C 229/1), see definitions.*	☐	☑

Please attach:

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

Place and date: 17.03.2026	Company name: ADLER-Werk Lackfabrik Johann Berghofer GmbH & Co KG
Responsible person: Peter Passler, MSc	Signature of responsible person: Peter Passler
Phone: +43 52426922-731	E-mail: peter.passler@adler-lacke.com