



**Österreichisches
Umweltzeichen**

**Furniture
and similar Products made
from Wood or Wood-based
Panels**

Version 9.1

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Changes with effect from 1 January 2020:

Expansion of the product group to include solid wood coffins.

This was accompanied by corresponding changes in the chapters

1 Product group definition

2.4 Emission limits

2.8 Durability and waste reduction

3 Suitability for use.

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Introduction

Most people spend about 90% of their time indoors. It is therefore of great importance for the quality of life to have low-pollutant furniture in living, sleeping and children's rooms, but also in offices and schools. Customary furniture can affect the room air with volatile organic compounds (VOC) for many months after furnishing. For this reason the present Guideline specifies requirements concerning the chemical substances in the primary components like varnishes, oils or glues. The limit values for pollutant emissions of the finished furniture are very low. In this way health deteriorations (e.g. Sick Building Syndrome), but also annoying odours, are to be avoided.

The Guideline covers furniture which consists predominantly of the material wood. There is no clear answer to the question whether furniture made of wood-based materials or furniture made of solid wood is more environmentally friendly. Particleboards contribute to the use of small timber and residual wood and therefore are useful in respect of waste management. Solid wood from sustainable forest management and wood-based panels with low emissions from the gluing of the wood particles can supplement each other usefully in ecological terms. Durability, stability and usability for many years are equally important ecological factors.

In any case, the types of wood used and the raw materials for the wood-based materials have to originate from legal sources. Furthermore, the entire wood is to come from forests that are managed according to the principles of sustainable forest management. Corresponding proof has to be furnished for at least 50 percent of the wood.

Requirements on the quality and durability of the furniture, on ease of repair or the availability of spare parts are principles of eco-design. They aim at enhancing the durability of the furniture and in this way serve both environmental protection and cost saving.

Ergonomic office and school furniture are indispensable for the health of users. Criteria in line with the relevant standards and the provision of information on ergonomically beneficial planning and use are therefore part of this Guideline as well.

1 Definition of the product groups

The following types of indoor furniture are covered by the definition of the present Guideline (based on the definitions in ÖNORM A 1600-1):

- Furniture for the living area: for sleeping and living rooms, teenagers' and children's rooms, antechambers and wardrobes, kitchens and bathrooms.
- Office furniture
- Furniture for public buildings: for schools, nurseries and kindergartens, hospitals and sanatoriums, laboratories, workshops, commercial premises (shop fittings), restaurants, hotels and boarding houses, boarding schools and homes, barracks, function halls, theatres, cultural and sacred buildings, libraries, bathing and sports facilities, and meeting rooms.

Also doors, staircases and slatted frames are covered by the Guideline.

Solid wood coffins were included in this product group as well.

Outdoor furniture is not covered by this Guideline, but by the Austrian Ecolabel Guideline UZ 28 "Weatherproof timber products".

Upholstered furniture items are covered by Austrian Ecolabel Guideline UZ 54 "Low-emission upholstered furniture", office work chairs by Austrian Ecolabel Guideline UZ 34 "Office work chairs and office chairs"; they are therefore not subject to the present Guideline.

Sauna furniture is excluded from the scope. In this context we would like to mention the [position paper of the working group "Indoor air"](#) at the BMK.

1.1 Materials

Furniture, doors, stairs and slatted frames awarded the Austrian Eco-label must be made predominantly (= more than 50% by volume or weight) of wood. The following wood materials according to ÖNORM EN 13986 may be used for these products:

- Solid wood panels
- Plywood
- boards made of long, slender aligned strands (OSB)
- resin-bonded particle boards
- fibreboards (e.g.: MDF, soft fibreboards)

For surface treatment, stains, oils and waxes, varnishes and glazes and powder coating are permissible.

In addition, coatings with halogen-free plastic, halogen-free plastic laminates or edge protectors are permitted.

The following non-wood materials may be part of the furniture:

- Metals - including those with galvanised or anodised surfaces. If galvanised metal is used, it must be proven that neither chromium VI nor cadmium compounds are used in the galvanisation process.
- Glass
- Natural stone slabs
- Synthetic resin-bonded mineral panels
- Leather if it can be shown that the criteria in chapter 2.5 are fulfilled.
- Textiles if evidence of fulfilment of the criteria in Chap.2.6 is provided.
- HDL panels (=HPL panels, high-pressure laminates, compact panels)
- The use of components made of plastics must be justified and limited to a functionally necessary minimum (e.g. plain bearing rollers). Halogenated plastics must not be used.

For coffins, only the use of single-layer solid wood panels is permissible. Metal joints and fittings as well as plastics are not permitted.

The coffin surface must be left raw or may be treated with water-soluble stains or oils and waxes.

Glue and adhesive materials as well as any surface treatment agents must be such that they do not release any hazardous pollutants (e.g. heavy metals, halogen-organic compounds) into the environment during rotting or incineration.

2 Health and environmental criteria

2.1 Origin of the wood

At least 50% of the wood or 50% of the primary raw materials for wood-based panels shall originate from sustainable forestry.

The applicant shall provide information on the type, annual input volume and origin of the wood.

The following options are permissible for the proof of the use of wood from sustainable forestry:

- certificates from FSC or PEFC for the traceability of the value chain or
- other equivalent proof.

Sawmill by-products and recycled wood are also permissible as raw materials. The recycled wood used must comply with the Recycled Wood Ordinance [1]. Assessment certificates of the recycled wood used in accordance with Annex 2 (recycled wood) or Annex 3 (recycled wood products) of the Recycled Wood Ordinance shall be enclosed with the expert opinion.

For wood and wood-based materials licensed for the award of the Austrian Ecolabel according to Guideline UZ 07 "Wood and Wood-Based Materials", the above requirements are deemed to be fulfilled.

2.2 General regulations for raw materials, auxiliary materials and input materials

All substances and mixtures used in the manufacture of the products shall be disclosed.

Current safety data sheets in accordance with the REACH Regulation [2] shall be enclosed with the expert opinion in German or English.

Substances and mixtures that lose the following hazard characteristics during manufacture (e.g. by reacting out) are exempt from the quantity restrictions listed.

The following applies:

Substances classified under the following H-phrases according to CLP-Regulation [3] may not be used in pure form; in mixtures they may be present up to the maximum limits given in Table 1.

If a specific concentration limit has been set in the CLP-Regulation, the lower value shall be the limit. Excluded are those for "dangerous for the environment", here the limit values given in the table apply in general.

Note: The maximum application quantities are based on the concentrations above which the substances must be mentioned in the safety data sheet. If a substance with one of the mentioned hazard categories appears under point 3.1 of the safety data sheet, the substance or mixture is not permitted, with the exception of the hazard statements for "dangerous for the environment".

CLP Regulation – Hazard Statements		Limit mass % *
Acute Toxicity Cat. 1,2, or 3		
H300, H310, H330		0.1
H301, H311, H331		0.1
Specific Target Organ Toxicity		
H370, H372		1.0
Carcinogenicity		
Cat. 1A, 1B: H350, H350i		0.1
Cat.2 H351		0.1
Germ cell mutagenicity		
Cat. 1A, 1B: H340		0.1
Cat.2: H341		1.0

Reproductive toxicity	
Cat. 1A, 1B: H360F, H360D, H360FD, H360Fd, H360Df	0.1
Cat.2: H361f, H361d, H361fd	0.1
Toxic for reproduction on or via lactation: H362	0.1
Environmental hazards	
Acute aquatic hazard Cat. 1: H400	1.0
Chronic aquatic hazard Cat. 1: H410	1.0
Chronic aquatic hazard Cat. 2: H411	1.0
Hazardous to the ozone layer: H420	0.1
Substances which, according to Article 59 of the REACH Regulation, have been placed on what is known as the candidate list. The version of the list of candidates up to date at the time of application shall apply. See: https://echa.europa.eu/candidate-list-table	0.1
Substances meeting the criteria for PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative) (REACH, Annex XIII)	0.1
Substances which, according to the (Austrian) Ordinance on Occupational Exposure Limits ('Grenzwertverordnung') [4], are clearly identified as carcinogenic agents (Annex III – A1 and A2) and classified as carcinogenic substance groups or compounds (Annex III – C).	0.1
Substances which, according to the (Austrian) Ordinance on Occupational Exposure Limits ('Grenzwertverordnung') are classified as reasonably suspected of having carcinogenic potential (Annex III –B).	1.0

* These limits are „general limits. If there are specific concentration limits established these limits are valid except for environmental hazard categories.

Halogenated organic compounds must neither be used in the production nor contained in the product. Permissible chlorine impurities: max. 0.002 mass%.

Exceptions:

Zinc phosphate (CAS 7779-90-0) and zinc oxide (CAS 1314-13-2) as insulating pigments may be added to a total of max. 2 %.

Diphenyl-2-ethylhexyl phosphate (CAS 115-86-6) is permitted up to 1.5%.

Triphenyl phosphate (CAS 115-86-6) is permitted up to 0.2%. Should this substance be placed on the REACH candidate list, this exemption is no longer valid, but the general concentration limit for all candidate substances under REACH of 0.1% applies.

Formaldehyde is exempt from these general requirements. Separate requirements apply to this substance.

2.3 Specific regulations for raw, auxiliary and input substances

In addition to chapter 2.2, the following criteria apply.

2.3.1 Flame retardants

The use of halogenated flame retardants is not permitted. If the addition of flame retardants is necessary, inorganic ammonium phosphates (diammonium phosphate, ammonium polyphosphate, etc.), other water-splitting minerals (aluminium hydrate or similar) or expanded graphite must be used. Antimony oxides must not be used.

2.3.2 Requirements for liquid surface treatment agents and coatings

The liquid surface treatment agents or coatings used must comply with the following requirements:

- The VOC content of the oils and waxes used for coating must not exceed 10 w/w%.

The VOC definition according to the DecoPaint guideline [5] applies:

Volatile organic compounds with an initial boiling point not exceeding 250°C at a standard pressure of 101.3 kPa.

For paints and varnishes:

- The VOC content of the varnishes and glazes used for coating must not exceed 8 w/w%.

The VOC definition according to the DecoPaint guideline applies:

Volatile organic compounds with an initial boiling point not exceeding 250°C at a standard pressure of 101.3 kPa.

OR

- The VOC emission of 20 g/m² per coated furniture surface must not be exceeded.

The VOC definition according to the VOC Plant Ordinance 6 applies:

Organic compounds and the creosote fraction that have a vapour pressure of 0.01 kPa or more at 293.15 K or have a corresponding volatility under the respective conditions of use.

The requirements according to chapter 2.2 apply. In addition, the following ingredients must not be added:

- Aromatic hydrocarbons (impurities up to a maximum of 0.1 % are tolerated).
- Biocidal finishes that go beyond pot preservation (film or object preservation), especially active substances against wood pests.
- Compounds containing arsenic, lead, cadmium, chromium (VI), mercury and other toxic heavy metals. Any impurities which may occur, but which may not

exceed 50 ppm each, 10 ppm for arsenic and 2 ppm for cadmium and mercury, must be justified.

- Cobalt compounds are limited to 0.1 % (as Co) and manganese compounds to 0.5 % (as Mn).
- Plasticising substances from the group of phthalates or from the group of organophosphates must not be added to the coating (impurities may be contained to a maximum of 0.1 % by mass).

Exceptions (as already stated in chapter 2.2)

Diphenyl-2-ethylhexyl phosphate (CAS 115-86-6) is permissible up to 1.5%.

Triphenyl phosphate (CAS 115-86-6) is permitted up to 0.2%. Should this substance be placed on the candidate substance list according to REACH [4], this exemption is no longer valid, but the general concentration limit for all candidate substances according to REACH of 0.1% applies.

- APEO's (alkylphenol ethoxylates).

2.4 Emission limit values

The criteria for emission limit values in this chapter (2.4) do not apply to coffins.

For all other products:

The verifications for formaldehyde (chap. 2.4.1), phenols (chap.2.4.2) or MDI (chap. 2.4.3) may be omitted if they are covered by the test chamber measurement according to chap.2.4.4.

2.4.1 *Wood-based materials with formaldehyde-containing binders*

The wood-based materials used and purchased by the applicant shall not exceed the following emission values, depending on the carrier material or binder used:

- 0.05 ppm (0.062 mg/m³) formaldehyde per m³ resp. 2.0 mg formaldehyde per m² and h

Test conditions:

The following methods are permissible for the detection of the formaldehyde concentration:

Test chamber method according to ÖNORM EN 717-1. The maximum permissible equalisation concentration of formaldehyde in the test chamber may be 0.05 ppm.

or

mean value of 2.0 mg formaldehyde/m²h measured according to the gas analysis method according to ÖNORM EN ISO 12460-3.

or

emission measurement according to chapter 2.4.4.

2.4.2 Wood-based materials with phenolic binders

The test is carried out for panel-shaped products by a test chamber method according to ÖNORM EN ISO 16516, and the subsequent determination according to VDI 3485 sheet 1. The concentration of phenols in the test chamber must not exceed 10 µg/m³ (test after 24 h, 72 h and 28 days).

or

Emission measurement according to chapter 2.4.4.

2.4.3 Wood-based materials with binders based on polymeric MDI (methyl diisocyanate)

The test is carried out for panel-shaped products by a test chamber procedure according to ÖNORM EN ISO 16516 and the subsequent identification and quantification of the MDI according to ISO 16702. No emissions of monomeric MDI may be detectable in the test chamber (detection limit 0.1 µg/m³).

or

Emission measurement according to chapter 2.4.4.

The above-mentioned requirements are considered to be fulfilled for wood-based materials that are certified according to the guideline UZ 07 "Wood and wood-based materials" for the award of the Austrian Ecolabel, or the German Blue Angel for "Low-emission wood-based panels" RAL-UZ 76.

2.4.4 Emission limit values for VOC

The products must not exceed the following emission values:

Substance(s)	Day 3	final (day 28)
Sum of organic compounds in the retention range C6 - C16 with the exception of acetic acid (TVOC)	≤ 3.0 mg/m ³	≤ 0.4 mg/m ³
Acetic acid		≤ 0,60 mg/m ³ Above 0.30 mg/m ³ must be retested after 1.5 years.
Total organic compounds in the retention area > C16 - C22 (Σ SVOC)	-	≤ 0,1 mg/m ³

Carcinogenic substances ¹	total ≤ 0,01 mg/m ³	≤ 0,001 mg/m ³ per individual value
Summe VOC ohne NIK ^{2,3}	-	≤ 0,1 mg/m ³
R-value ⁴	-	≤ 1
Formaldehyde	-	Formaldehyde - Raw wood materials: 0.05 ppm (0,062 mg/m ³) Coated wood-based materials Test specimen acc. to ÖNORM EN 717-1 ⁵ : 0.03 ppm (0.037 mg/m ³)
Phenols (for wood-based materials with phenol-containing binders)		10 µg/m ³⁶
MDI (for wood-based materials with binders based on polymeric MDI)		Not detectable (LOD = 0.1 µg/m ³) ⁷
Ammonia ⁸		≤ 0.1 mg/m ³

The verifications for formaldehyde, phenols or MDI may be omitted if they are verified according to Chapters 2.4.1, 2.4.2 and 2.4.3, respectively.

Test conditions

Test conditions according to ÖNORM EN 16516 with the implementation provisions according to the AgBB scheme (as amended).

Room loading: 0.5 m²/m³

¹ Carcinogenic substances: carcinogenic, mutagenic and reprotoxic substances of classes 1A and 1B according to the CLP Regulation (Regulation (EC) 1272/2008, Annex VI, Table 3.1). Formaldehyde is an exception.

² For a large number of indoor-relevant VOCs, so-called NIK values are listed in the appendix of the AgBB assessment scheme as health-related auxiliary values. NIK = Lowest concentration of interest.

³ Includes unidentifiable substances

⁴ Substances listed in the Annex to the AgBB scheme whose concentration in the test chamber is ≥ 5 µg/m³ are included in this assessment. Their quantification is carried out substance-specifically. For the assessment, the ratio Ri defined in the following equation is formed for each compound i.

$$R_i = C_i / NIK_i$$

Here Ci is the substance concentration in the chamber air. It is assumed that no effect occurs if Ri falls below the value 1. If several compounds with concentrations ≥ 5 µg/m³ are detected, additivity of the effects is assumed and it is determined that R, i.e. the sum of all Ri, must not exceed the value 1.

$$R = \text{sum of all } R_i = \text{sum of all quotients } (C_i / NIK_i) \leq 1$$

⁵ This standard specifies, among other things, the percentage of open edges on the test specimen.

⁶ Determination according to VDI 3485 Sheet 1

⁷ Quantification of MDI according to ISO 16702

⁸ A measurement for ammonia is only required for wood that has been treated with ammonia.

2.5 Requirements for leather⁹

Chrome tanning

A chromate determination is required for leather, whereby hexavalent chromium (CrVI) must not be detectable (detection limit 3 mg/kg).

Preservation

Chemical preservation of hides and tanned semi-finished products for transport and storage should be avoided as far as possible.

Where preservatives are used to preserve hides, they must not contain substances with the following properties as constitutional components:

1. substances identified as substances of very high concern under the REACH regulation (EC/1907/2006) and included in the list established under REACH Article 59(1) (the so-called "candidate list")¹⁰.

2. substances classified or meeting the criteria for classification in the following hazard classes and categories according to the criteria of EC Regulation 1272/2008:

- carcinogenic (carcinogenic) category Carc. 1A or Carc. 1B
- germ cell mutagenic (mutagenic) of category Muta. 1A or Muta. 1B
- toxic to reproduction of category Repr. 1A or Repr. 1B

3. are classified in TRGS 905¹¹ as:

- carcinogenic (K1, K2)
- mutagenic (M1, M2)
- harmful to fertility (RF1, RF2)
- harmful to fertility (RE1, RE2);

4. are classified in the MAK list¹² as:

- carcinogenic agents category 1 or category 2 or 3
- germ cell mutagenic agents category 1 or category 2, 3A or 3B

Or

- are classified in the Grenzwerteverordnung [6] as "clearly identified

⁹ The requirements for leather according to the guideline UZ 54 for the award of the Austrian Eco-label for upholstered furniture (harmonised with the Blue Angel guideline RAL-UZ 117 "Low-emission upholstered furniture").

¹⁰ The version of the candidate list at the time of application shall apply. The current version of the list of candidates can be found at: <https://echa.europa.eu/de/candidate-list-table>

¹¹ GERMANY - TRGS 905, List of carcinogenic, mutagenic or reprotoxic substances, as amended.

¹² GERMANY - MAK- und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, z. Zt. Mitteilung 43 (2007)

carcinogens" (Annex III - A1 and A2) or as "carcinogenic groups of substances or mixtures of substances" (Annex III - C).

Furthermore, only those preservatives may be used for which a determination method for leather exists and which are not classified as a strong contact allergen (Cat. A) in the BgVV list [7].

For preservatives, the maximum levels in the leather specified in ANNEX 1 also apply. Chemical preservation of the finished leather is not permitted.

Dyes and pigments

The dyes or pigments mentioned in ANNEX 2 shall not be used.

2.6 Requirements for textiles¹³

Dyes and pigments

The dyes or pigments listed in ANNEX 2 shall not be used.

Biocides

For cover fabrics made of natural plant fibres, wool and other animal fibres, the requirements on pesticides of the Oeko-Tex Standard 100 shall be complied with.

The requirements for dyes and pigments and biocides are also deemed to be met if the textiles are labelled with one of the following environmental or quality labels: Öko-Tex 100, EU Ecolabel for textiles, Qualitätszeichen Naturtextilien, Austrian Ecolabel for Textiles.

Moth protection

For upholstery fabrics made of wool and other animal fibres, pyrethroids / permethrin are used as moth repellents. An effective finish against moths ranges between 35 and 75 mg/kg, against beetles between 75 and 100 mg/kg. Concentrations between 3 mg/kg and 35 mg/kg are therefore to be regarded as contamination without function and are not permissible. At permethrin concentrations between 35 mg/kg and 100 mg/kg, the manufacturer is obliged to include the following sentence in the consumer information:

"Product contains permethrin for protection against wool pests".

¹³ Requirements for textiles according to guideline UZ 54 for the award of the Austrian Ecolabel for upholstered furniture

Concentrations above 100 mg/kg are not permitted.

Values to be observed for wool material not treated against wool pests: permethrin < 3.0 mg/kg. The concentration of the other pyrethroids detected shall not exceed 1 mg/kg. In case of compliance with this limit value, the manufacturer is obliged to include the following sentence in the consumer information:

"Not protected against wool pests."

2.7 Production

The production site is the place where the products are predominantly produced.

- All official requirements and legal regulations, especially those concerning air, water, waste, environmental information and worker protection, must be complied with.
- The respective national regulations must be complied with for both domestic and foreign production sites.
If EU regulations go beyond national regulations, the EU regulations must be complied with in any case.
The applicant shall confirm compliance with this requirement.
- A waste management concept (AWK) according to the Waste Management Act 2002 shall be submitted.

For production sites registered under the EMAS Regulation [8] the above requirements shall be deemed to be fulfilled.

If an environmental management system certified according to ÖNORM EN ISO 14001 exists for the production site, the audit results may be used as evidence of compliance with the above requirements.
The applicant shall confirm compliance with this requirement.

In addition, the following requirements shall be complied with:

2.7.1 Air and noise emissions (plant)

- Compliance with air and noise emission limits in accordance with legal regulations and official requirements must be demonstrated.

If an environmental management system certified according to ÖNORM EN ISO 14001 or validated according to EMAS Regulation exists for the production site, the audit results may be used as evidence of compliance with these production requirements.

2.7.2 Pollution at the workplace

- With regard to the emission of solid suspended matter or harmful working substances, the limit values or technical guideline concentrations of the Limit

Values Ordinance or the provisions of the Workers' Indoor Protection Ordinance must be demonstrably complied with.

- Minimise noise emissions in accordance with labour law requirements.

2.8 Durability and waste reduction

These criteria do not apply to coffins.

One of the three "shall criteria" must be fulfilled:

- Repair and maintenance service or
- Spare parts guarantee for wear parts of at least 10 years and service telephone for customers or
- Establishment of a take-back

2.8.1 Packaging

Plastics used must be free of halogenated organic compounds and must not be based on styrene compounds.

Wherever possible, products shall be packaged in such a way as to allow the outgassing of volatile components after manufacture.

Distributors of packaging must either take it back and recycle it themselves or demonstrably participate in a collection and recycling system. The provisions of the Packaging Ordinance [] shall apply.

3 Usability

On the basis of a random sample, the quality of the furniture as well as the technical properties shall be checked in accordance with the applicable special standard. In the course of the re-testing, another type of furniture (e.g. container furniture, table, ...) shall be tested if offered as an eco-labelled product.

3.1 Assessment of the quality of materials and workmanship

The quality of materials and workmanship of furniture shall at least correspond to quality level "S" (standard) according to ÖNORM A 1610-1.

3.2 Special requirements for coffins made of solid wood (solid wood coffins)

The moisture content of the wood shall not exceed 15 % of the kiln-dried weight (according to ÖNORM EN 13183-1).

3.3 Drying and hardening of the surface treatment

Optimum drying and curing of the treated or coated surface shall be ensured (e.g. quantity consistency of the applied substances, control of the effectiveness of the

reflectors in case of radiation curing systems). Proof of regular maintenance of the relevant plant components.

The following criteria (3.4 - 3.7) are not applicable to coffins as they are not relevant.

3.4 Assessment of construction, durability and safety

Construction, durability and safety are to be assessed according to an applicable special standard (ÖNORM or EN standard) for the respective type of furniture (e.g. container furniture, table, ...) of the tested sample. Likewise, comparable evidence such as the GS mark (for safety) or according to DIN technical report 147 is permissible.

3.5 Assessment of ergonomic properties

Office desks shall be height-adjustable and the dimensions shall comply with the requirements of ÖNORM EN 527 1.

Dimensions of chairs and tables for general education in schools shall comply with the requirements of ÖNORM EN 1729-1, ÖNORM EN 1729-2 and ÖNORM A 1650.

3.6 Assessment of the quality of the surface

When tested according to ÖNORM A 1605 12 in conjunction with ÖNORM EN 12720, the following assessment classes must be achieved against chemical effects:

- General: Assessment class 1 C
- Table tops, kitchen fronts: Assessment class 1 B
- Work surfaces: Assessment class 1 A

If care sets with maintenance and use instructions for the different areas of use are supplied with oil- and wax-based surfaces, the rating classes must only be achieved after the care described therein.

3.7 Additional requirements for infants or children's furniture

The surface treatment products must additionally fulfil the requirements according to ÖNORM EN 71, part 3.

4 Declaration

It applies to coffins:

The award of the Austrian Ecolabel applies to the raw coffin.

The furnishing with further materials, such as foams and textiles, which takes place in the funeral home, is not covered by the criteria.

Therefore, for coffins equipped with further materials it is only permissible to affix a note (but not the label itself) that the unfinished coffin has been awarded the Austrian Eco-label Guideline "UZ 06 Furniture and comparable products made of wood and wood-based materials".

The following applies to all other products

The following information must be declared on the product or in an information leaflet

- Name and place of business of the user of the label (e.g. manufacturer, dealer).
- Model designation (for series furniture)
- Quality of the furniture according to ÖNORM A 1610 1 ("S" or "H")
- Types of wood, wood-based materials and any other materials used
- Materials used for the surface treatment or coating of the wood (e.g. lacquered, oiled / waxed)
- Dimensions (including ergonomically important dimensions, e.g. seat heights)
- Stress resistance of the furniture (rating classes)
- Care instructions
- Declaration of those service(s) that are listed and fulfilled according to the "target criteria" under point 2.8 of this guideline.

For office and school furniture, the following information must also be provided:

Information on the ergonomic design of office workplaces or classrooms which must contain at least the following:

- Adjustment of the basic elements: desk, chair, monitor and light.
- Correct sitting
- Correct working at a computer screen
- Space requirements

All product information (e.g. declaration, care instructions) must be enclosed with the expert report.

5 Applicable standards, laws and other regulations

The documents listed below contain provisions that are part of this Ecolabel Guideline. Legal regulations are to be applied as amended.

For Austrian law see: www.ris.bka.gv.at; there you will also find the link to EU law: www.eur-lex.europa.eu.

- [1] Recyclingholzverordnung, BGBl. II Nr. 160/2012, as amended
Regulation (EU) No 995/2010 laying down the obligations of operators who place timber and timber products on the market Text with EEA relevance Verordnung, OJ Nr. L 295, 12.11.2010 S.23, as amended
- [2] Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), OJ. L 396, 30.12.2006 S.1, as amended
- [3] Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, amending (CLP), OJ L 353, 16.12.2008 p.1, as amended
- [4] Grenzwertverordnung 2021 - GKV 2021, BGBl. II Nr. 253/2001, as amended
- [5] Lösemittel-Verordnung 2005, BGBl. II/398/2005, as amended
- [6] VOC-Anlagen-Verordnung, BGBl. II 301/2002, as amended
- [7] Chemikalien und Kontaktallergien – Eine bewertende Zusammenstellung.
Hrsg.: D. Kayser und, E.Schlede, Verlag: Urban und Vogel, München 2001
- [8] Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), OJ L 342, 22.12.2009, p. 1, as amended

ANNEX 1

For the preservatives used as transport and storage protection of leather, the following maximum values apply in the leather (maximum value I):

- 4-chloro-3-methylphenol < 300 mg/kg
- N-octylisothiazolinone < 100 mg/kg
- o-phenylphenol < 500 mg/kg
- 2-thiocyanomethylthiobenzothiazole < 500 mg/kg

If maximum value I is exceeded, an emission test is also required. If the emission test shows that the specified test chamber concentrations¹⁴ are not achieved are not reached, the following maximum values apply (maximum value II):

	<u>Maximum value II</u>	<u>Test chamber concentration</u>
➤ 4-chloro-3-methylphenol	< 600 mg/kg	< 12 µg/m ³
➤ N-octylisothiazolinone	< 250 mg/kg	< 1 µg/m ³
➤ o-phenylphenol	< 1000 mg/kg	< 23 µg/m ³

The following substances shall not be present. Based on the analytical method and the detection limit of these substances, this is considered to be fulfilled if the following maximum values are not exceeded in the leather:

- chlorophenols (including salts and esters) < 1 mg/kg
- Bromophenols (including salts and esters) < 1 mg/kg
- Methylene-bis-thiocyanate (MBT) < 5 mg/kg

Further maximum values may be included in Annex 1 by the Federal Environment Agency (Germany) in agreement with the LGA Bavaria and the leather specialist institutes LGR Reutlingen and FILK Freiberg. The maximum values can be adapted to the state of the art in the same way.

Methods of analysis:

For chlorophenols, bromophenols, 4-chloro-3-methylphenol and o-phenylphenol, the following methods may be used the following methods can be used:

- A defined amount of the comminuted leather sample is heated with 1 m KOH in a drying oven. An aliquot of the extract is derivatised with acetic anhydride.

¹⁴ The same test parameters apply as described under point 3.2.1 of the award criteria RAL-UZ 117 "Low-emission upholstered furniture". Deviating from this, the test may not be interrupted (the emission measurement takes place on the 28th day).

The derivative is extracted with n-hexane and analysed on capillary GC by MSD. The halogenated phenols can alternatively be analysed by ECD.

- LFGB method (§ 64) or similar methods.
- An accelerated extraction procedure followed by silylation (e.g. with BSTFA) and subsequent analysis by capillary GC/MS.

N-octylisothiazolinone, 2-thiocyanomethylthiobenzothiazole (TCMTB) are determined by HPLC and UV detector. For sample preparation, a defined quantity of the comminuted leather sample is extracted in the Soxhlet (or by means of an accelerated extraction procedure) with methanol in the Soxhlet (or by means of an accelerated extraction process) and after filtration through a membrane, e.g. with methanol/water/acetic acid 75/25/0.

Alternatively, other suitable eluents are also permissible.

ANNEX 2

Excluded Dyes and Pigments

Azo dyes, which potentially separate one of the aromatic amines listed below (according to Directive 2002/61/EC):

4-aminobiphenyl	(92-67-1),
benzidine	(92-87-5),
4-chloro-o-toluidine	(95-69-2),
2-naphthylamine	(91-59-8),
o-aminoazotoluene	(97-56-3),
2-amino-4-nitrotoluene	(99-55-8),
p-chloroaniline	(106-47-8),
2,4-diaminoanisole	(615-05-4),
4,4'-diaminodiphenylmethane	(101-77-9),
3,3'-dichlorobenzidine	(91-94-1),
3,3'-dimethoxybenzidine	(119-90-4),
3,3'-dimethylbenzidine	(119-93-7),
3,3'-dimethyl-4,4'-diaminodiphenylmethane	(838-88-0),
p-cresidine	(120-71-8),
4,4'-methylene-bis-(2-chloroaniline)	(101-14-4),
4,4'-oxydianiline	(101-80-4),
4,4'-thiodianiline	(139-65-1),
o-toluidine	(95-53-4),
2,4-diaminotoluene	(95-80-7),
2,4,5-trimethylaniline	(137-17-7),
4-aminoazobenzene	(60-09-3),
o-anisidine	(90-04-0).

Carcinogenic, teratogenic or reprotoxic dyes (according to Commission Decision 2002/371/EC (EU eco-label for textile products) and Öko-Tex Standard 100):

C.I. Basic Red 9	C.I. 42 500,
C.I. Disperse Blue 1	C.I. 64 500,
C.I. Acid Red 26	C.I. 16 150,
C.I. Basic Violet 14	C.I. 42 510,
C.I. Disperse Orange 11	C.I. 60 700,
C.I. Direct Black 38	C.I. 30 235,
C.I. Direct Blue 6	C.I. 22 610,
C.I. Direct Red 28	C.I. 22 120,
C.I. Disperse Yellow 3	C.I. 11 855.

Potentially sensitizing dyes (according to Commission Decision 2002/371/EC and Öko-Tex Standard 100):

C.I. Disperse Blue 3	C.I. 61 505,
C.I. Disperse Blue 7	C.I. 62 500,
C.I. Disperse Blue 26	C.I. 63 305,
C.I. Disperse Blue 35,	
C.I. Disperse Blue 102,	
C.I. Disperse Blue 106,	
C.I. Disperse Blue 124,	
C.I. Disperse Brown 1,	
C.I. Disperse Orange 1	C.I. 11 080,
C.I. Disperse Orange 3	C.I. 11 005,
C.I. Disperse Orange 37,	
C.I. Disperse Orange 76 (formerly „Orange 37“).	
C.I. Disperse Red 1	C.I. 11 110,
C.I. Disperse Red 11	C.I. 62 015,
C.I. Disperse Red 17	C.I. 11 210,
C.I. Disperse Yellow 1	C.I. 10 345,
C.I. Disperse Yellow 3	C.I. 11 855,
C.I. Disperse Yellow 9	C.I. 10 375,
C.I. Disperse Yellow 39,	
C.I. Disperse Yellow 49.	

Heavy Metal-Containing Dyes

Dyes and pigments that contain cadmium, mercury, lead or nickel.