

EN

COMMISSION DECISION

of

**establishing the ecological criteria for the award of the Community eco-label to
furniture**

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme¹, and in particular the second sub-paragraph of Article 6(1) thereof,

Whereas:

- (1) Under Regulation (EC) No 1980/2000 the Community eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.
- (2) Regulation (EC) No 1980/2000 provides that specific eco-label criteria are to be established according to product groups.
- (3) The measures provided for in this Decision are based on the draft criteria developed by the European Union Eco-labelling Board established under Article 13 of Regulation (EC) No 1980/2000.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Committee instituted by Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

In order to be awarded the Community eco-label under Regulation (EC) No 1980/2000, a piece of furniture must fall within the product group “furniture” as defined in Article 2, and must comply with the ecological criteria set out in Annex 1 to this Decision.

¹ OJ L 237, 21.9.2000, p. 1.

Article 2

1. The product group furniture shall comprise free-standing or built-in units, which are used for storing, hanging, lying, sitting, working and eating, provided they fall within the subgroups as specified in paragraph 2.

The product group does not include technical equipment and fittings.

2. The scope of the product group is limited to:

- (a) Domestic furniture used indoors, including children's furniture, kitchen and bathroom furniture (excluding technical equipment and fittings), excluding mattresses;
- (b) Contract furniture, limited to all furniture used indoors (i.e. used in buildings) for business purposes, e.g. office and school furniture, furniture for restaurants and hotels.

Outdoor furniture is excluded from the scope.

Article 3

For administrative purposes the code number assigned to the product group furniture shall be '24'.

Article 4

This Decision shall apply from [.....until.....].

Article 5

This Decision is addressed to the Member States.

Done at Brussels, [...]

For the Commission
Margot WALLSTRÖM
Member of the Commission

ANNEX

FRAMEWORK

The aims of the criteria

These criteria aim in particular at promoting:

- a reduction of the impact of furniture on the environment.

More specifically:

- the use of materials produced in a more sustainable way,
- a reduction of the use of hazardous substances and of emissions of polluting substances,
- a durable product.

In order to address, in future revisions, the reduction of energy consumption per type of furniture, a collection of data has been introduced to establish a specific database of energy and material's consumption.

The criteria are set at levels which promote only the labelling of furniture that is produced with a low environmental impact.

Assessment and verification requirements

The specific assessment and verification requirements are indicated within each criterion. Where appropriate, test methods other than those indicated for each criterion may be used if their equivalence is accepted by the Competent Body assessing the application.

Where the applicant is required to provide documentation, analyses test reports, or other evidence to show compliance with the criteria, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), etc, as appropriate.

Where possible, conformity assessment should be performed by appropriate accredited laboratories that meet the general requirements of EN ISO 17025.

Where appropriate, Competent Bodies may require supporting documentation and may carry out independent verifications.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO14001, when assessing applications and monitoring compliance with the criteria (*note: it is not required to implement such management schemes*).

Glossary of terms

A glossary of the main terms used in this scheme is listed in Appendix 4.

CATEGORIES OF CRITERIA

The criteria are divided into the following five categories:

- **Criteria on composition:** criterion is set on the composition of the eco-labelled furniture. A requirement for the collection of data on energy input of materials used in the eco-labelled furniture is also included.

- **Criteria on materials:** criteria are set for the following class of materials:

- a) Solid wood, wood based materials, aluminium, steel, plastic, textile, leather, glass, PUR and latex foam, feather, and down;
- b) Materials falling neither in any of the classes reported in item a) nor in the class of materials for surface coating and finishing treatments.

Adhesives, glues and binding agents, as well as the materials used in surface treatments, other than metals and plastics, are not comprised in this section.

- **Criteria for surface treatment:** criteria are set for the surface treatment of components/parts used in furniture as well as of the furniture as a whole. The surface treatments include: clear finishes, paints, varnishes, lacquers, coating with plastic, laminated plastic, decorative foils, papers, PVC films, and fabrics. Materials for the preparation of surfaces like primers, dyes, stains, and fillers are also comprised in this section..

- **Criteria for the assembly of furniture:** criteria related to the use of adhesives, glues, and binding agents are set.

- **Criteria for the final eco-labelled furniture:** the following criteria are set under this section:

- Durability and safety
- Maintenance
- Recycling and waste
- Consumer information
- Packaging of the final product
- Information on the packaging
- Information appearing on the eco-label

CRITERIA

CRITERIA ON COMPOSITION

1 Product description

A description of the product shall be provided (functional description, product name or reference code, if various types of the same product are available a description of the subtypes to which the application applies).

Moreover, information shall be provided on the total weight of the product, the materials used in the product, including small parts (e.g. screws and hinges), and their respective weight.

Assessment and verification: The applicant shall provide a product description in which the above-described information is included.

1.1 Data collection on energy input

Energy input data of materials applied in furniture shall be calculated and provided by the Applicant on the basis of Csi, average energy consumption related to the production and

manufacturing of materials. In this regard, a table with Csi data shall be made available through the internet on the EU Eco-label web site.

The calculation of the energy input of materials applied in the eco-labelled furniture shall be provided by the Applicant on the basis of the Csi, average energy consumption according to the formula in Appendix 3. Different data to Csi can be used by the Applicant if they are proved to be more precise than Csi values.

The data on the composition of the furniture shall be those included in the dossier of the criterion 1.

Appropriate guidelines shall be provided in the user manual.

CRITERIA ON MATERIALS

GENERAL REQUIREMENTS

1.2 Application of materials

a) The use of the materials falling in one or more of the following classes of materials:

- solid wood,
- wood based materials,
- aluminium,
- steel,
- plastic,
- textile,
- leather,
- glass,
- PUR
- latex foam
- feather and down.

shall be possible if the materials comply with ‘material specific requirements’ and the criteria for surface treatment where relevant.

Materials belonging to one or more of the above mentioned classes can be exempt on request of the applicant from complying with ‘material specific criteria’ and shall only comply with the criteria 1.2.c and 1.3 if they are applied in the eco-labelled furniture in a total amount below 3% by weight. This exemption applies per type of material as indicated below:

- Solid wood: per type of species
- Wood based panel: per type of wood panel (i.e. Fibreboard, Plywood, and so on)
- Plastic: per polymer
- Textile: per type of fibre as set in the EU eco-label scheme for textiles
- Aluminium: per total. It is already a sub-type of metal class; no distinction is therefore made between different types of aluminium.
- Steel and stainless steel: per total. It is already a sub-type of metal class; no distinction is therefore made between different type of steel and stainless steel.
- PUR and latex: per total. They are already a sub-type of the plastic class; no distinction is therefore made between different types of PUR or latex products as they represent already a type of plastic class.
- Leather, feather, and down: per total.

b) Materials other than those covered by 'material specific requirements', and criteria for surface treatment and for the assembly of furniture shall only be allowed if the following conditions are fulfilled:

- they comply with criteria 1.2.c and 1.3, and

- they are contained in the eco-labelled product in an amount of <3% (w/w).

c) The total percentage of all materials exempt according to the above a) and b) requirements shall not exceed 10% (w/w) of the final eco-labelled product.

***Assessment and verification:** In the dossier of criterion 1.1, appropriate information shall be provided on those materials which are exempted from compliance with the 'material specific requirements'. The calculation of the percentage of materials to exempt, according to criteria 1.2.a/b/c shall also include the possible amount of such materials in composite materials, whatever is the percentage of the composite material in the final eco-labelled furniture.*

1.3 Hazardous substances

No substances and preparations shall be allowed in the production process of materials applied in the eco-labelled furniture that:

a) contain:

-lead, cadmium, chromium (VI), mercury, and their compounds

- tri-organic tin compounds. Mono and di-organic compounds may be used if free from any impurities of tri-organic tin compounds.

b) are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its subsequent amendments. This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

***Assessment and verification:** The applicant and/or his supplier shall provide declarations or other information to show that this criterion is fulfilled.*

2. Specific material requirements

2.1 Solid wood

2.1.1) Sustainable forest management

a) All virgin solid wood from forests shall originate from forests that are managed so as to implement the principles and measures aimed at ensuring sustainable forest management.

In Europe, the principles and measures referred to above shall at least correspond to the definition of SFM that was adopted in Resolution 1 of the 2nd Ministerial Conference on the Protection of Forests in Europe (Helsinki, 16-17 June 1993), the Pan-European Operational Level Guidelines for Sustainable Forest Management, as endorsed by the 3rd Ministerial Conference on the Protection of Forests in Europe (Lisbon, 2-4 June 1998) and the Improved Pan-European Indicators for SFM, adopted at the MCPFE Expert Level Meeting of 7-8 October 2002 that were endorsed at 4th Ministerial Conference on the Protection of Forests in

Europe (Vienna, 28-30 April 2003). Outside Europe they shall at least correspond to the UNCED Forest Principles (Rio de Janeiro, June 1992) and, where applicable, to the criteria or guidelines for sustainable forest management as adopted under the respective international and regional initiatives (ITTO, Montreal Process, Tarapoto Process, UNEP/FAO Dry-Zone Africa Initiative).

b) At least 50% of the virgin solid wood from forests, as specified under the criterion 2.1.1.a, shall originate from sustainably managed forests which are certified by independent third party forest certification schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof.

c) Wood from forests that are not certified as being sustainably managed forests shall not originate from:

– Illegal harvesting

Illegally harvested wood: wood that is harvested, traded or transported in a way that is in breach with applicable national regulations (such regulations can for example address CITES species, money laundering, corruption and bribery², and other relevant national regulations).

– Genetically modified trees

Wood from genetically modified trees: which have been induced by various means to consist of genetic structural changes (for a definition of genetically modified, please refer to Directive 2001/18/EC on the deliberate release of genetically modified organisms in the environment). Please note that this does not exclude traditional tree breeding programmes, since these are not considered to be part of the techniques of genetic modification.

– Uncertified high conservation value forests

High Conservation Value Forests are forests that possess one or more of the following attributes:

a) forest areas containing globally, regionally or nationally significant:

– concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or

– large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance

b) forest areas that are in or contain rare, threatened or endangered ecosystems

c) forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control)

d) forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural

² These are the topics addressed in the Commission communication on an EU Action plan on FLEGT.

identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities)

Assessment and verification: *The applicant shall indicate types, quantities and origins of the wood used in the eco-labelled product. The origin of virgin solid wood shall be indicated with sufficient precision to allow checks, where appropriate.*

- i) For virgin solid wood from certified sustainably managed forests the applicant shall provide the appropriate certificate(s) together with supporting documentation showing that the certification scheme correctly fulfils the principles and measures of sustainable forest management, as mentioned under the criterion 2.1.1.a.
- ii) For virgin solid wood from uncertified sustainably managed forests, the applicant and/or his supplier shall provide the appropriate declarations, charter, code of conduct or statement, verifying that the requirements of criterion 2.1.1.a and 2.1.1.c are met.

2.1.2) Impregnating substances and preservatives

Solid wood, after logging, shall not be treated with substances or preparations containing substances that are included in any of the following lists:

- WHO recommended classification of pesticides by hazard classified as class 1a (extremely hazardous)
- WHO recommended classification of pesticides by hazard classified as class 1b (highly hazardous)

Moreover, the treatment of wood shall be in accordance with the provisions of EU Directive 79/117/EEC on the market and use of plant protection products containing certain active substances and Directive 76/769/EEC on the marketing and use of dangerous substances and preparations.

Assessment and verification: *The applicant shall provide a declaration showing compliance to this criterion.*

2.2) Wood-based materials

Finished or semi-finished wood-based materials, and wood based materials coated by plastics, or laminated plastic, or metals, or other coating materials shall also comply with the criteria for surface treatment in addition to the criteria set under this paragraph and sub-paragraphs,.

2.2.1) Sustainable forest management

a) All virgin wood from forests shall originate from forests that are managed so as to implement the principles and measures aimed at ensuring sustainable forest management.

In Europe, the principles and measures referred to above shall at least correspond to the definition of SFM that was adopted in Resolution 1 of the 2nd Ministerial Conference on the Protection of Forests in Europe (Helsinki, 16-17 June 1993), the Pan-European Operational Level Guidelines for Sustainable Forest Management, as endorsed by the 3rd Ministerial Conference on the Protection of Forests in Europe (Lisbon, 2-4 June 1998), and the Improved Pan-European Indicators for SFM, adopted at the MCPFE Expert Level Meeting of 7-8

October 2002 that were endorsed at the 4th Ministerial Conference on the Protection of Forests in Europe (Vienna, 28-30 April 2003). Outside Europe they shall at least correspond to the UNCED Forest Principles (Rio de Janeiro, June 1992) and, where applicable, to the criteria or guidelines for sustainable forest management as adopted under the respective international and regional initiatives (ITTO, Montreal Process, Tarapoto Process, UNEP/FAO Dry-Zone Africa Initiative).

b) At least 20% of the virgin wood from forests, as specified under the criterion 2.2.1.a, shall originate from forests which are certified by independent third party forest certification schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof.

c) Wood from forests that are not certified as being sustainably managed forests shall not originate from:

– Illegal harvesting

Illegally harvested wood: wood that is harvested, traded or transported in a way that is in breach with applicable national regulations (such regulations can for example address CITES species, money laundering, corruption and bribery³, and other relevant national regulations).

– Genetically modified trees

Wood from genetically modified trees: which have been induced by various means to consist of genetic structural changes (for a definition of genetically modified, please refer to Directive 2001/18/EC on the deliberate release of genetically modified organisms in the environment). Please note that this does not exclude traditional tree breeding programmes, since these are not considered to be part of the techniques of genetic modification.

– Uncertified high conservation value forests

High Conservation Value Forests are forests that possess one or more of the following attributes:

a) forest areas containing globally, regionally or nationally significant:

– concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or

– large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance

b) forest areas that are in or contain rare, threatened or endangered ecosystems

c) forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control)

d) forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance)

³ These are the topics addressed in the Commission communication on an EU Action plan on FLEGT.

identified in cooperation with such local communities).

Assessment and verification: *The applicant shall indicate types, quantities and origins of the wood used in the production of wood-based materials. The origins of virgin wood (e.g. chips or fibres) shall be indicated with sufficient precision to allow checks, where appropriate.*

- i) For virgin wood from certified sustainably managed forests the applicant shall provide appropriate certificate(s) together with supporting documentation showing that the certification scheme correctly fulfils the principles and measures of sustainable forest management as mentioned under the criterion 2.2.1.a.
- ii) For virgin wood from uncertified sustainably managed forests the applicant and or his supplier shall provide the appropriate declarations, charter, code of conduct or statement, verifying that the requirements of criterion 2.2.1.a and 2.2.1.c are met.

2.2.2) Recycled wood fibres

Post consumer wood, chips or fibres applied in the production of wood based materials (input), shall at least comply with the provisions in the EPF Industry standard, as reported in paragraph 6 of document 'EPF Standard for delivery conditions of recycled wood' of 24 October 2002.'. The reference standard table is also appended in appendix 2.

Assessment and verification: *A declaration shall be provided that post-consumer wood is applied in the production of wood based materials. In addition, test results shall be provided to verify compliance with limit values as laid down in appendix 2.*

2.2.3) Use of hazardous substances and preparations in the production of wood based materials

a) Virgin wood shall not be treated with substances or preparations containing substances that are included in any of the following lists:

- WHO recommended classification of pesticides by hazard classified as class 1a (extremely hazardous)
- WHO recommended classification of pesticides by hazard classified as class 1b (highly hazardous)

Moreover, the treatment of wood shall be in accordance with the provisions of EU Directive 79/117/EEC on the placing on the market and use of plant protection products containing certain active substances and Directive 76/769/EEC on the marketing and use of dangerous substances and preparations.

b) Wood used in wood based materials shall not be treated with substances or preparations that are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its amendments. This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

c) Wood used in wood based materials shall not be treated with substances classified carcinogenic, harmful to the reproductive system, mutagenic, toxic or allergenic (when inhaled) in accordance with classification as laid down into the Directive 67/548/EEC and its amendments.

The content of free formaldehyde in products or preparations used in the panels shall not exceed 0.3% (w/w). The content of free formaldehyde in binding agents, adhesives, and glues for plywood panels or laminated wood panels shall not exceed 0.5% (w/w).

Assessment and verification: The applicant shall provide appropriate declarations verifying that the above requirements are met. For the chemical products used in the production of wood-based materials a MSDS or equivalent documentation shall be presented containing information on health hazard classification.

2.2.4) Formaldehyde emission from untreated raw wood-based materials

The emission of formaldehyde from wood based materials in their raw state, i.e. prior to machining or coating, shall not exceed the E1 emission limit according to standard EN 13986.

Assessment and verification: The applicant and/or his supplier shall provide evidence that the wood based materials comply with the requirements for the formaldehyde class E1 according to the European standard EN 13986.

2.3) Aluminium

Recycled aluminium

All aluminium parts used in the eco-labelled furniture shall be easily dismantled.

If the total amount of aluminium contained in the eco-labelled furniture is above 80% of the final weight of the eco-labelled furniture all aluminium shall be sourced from production using 100% of secondary material input.

Surface treated aluminium shall also comply with criteria for surface treatment in addition to the above requirements.

Assessment and verification: The applicant and/or his supplier shall provide appropriate documentation showing the compliance with this criterion. In addition, the consumer product information supplied with the furniture shall include a text on the recyclability of aluminium parts in the eco-labelled furniture.

2.4) Steel and stainless steel

Recycled steel

If the amount of steel in the product constitutes more than 50% (w/w) of the total weight of the final furniture product, the input of secondary material in the steel used shall be at least 20%.

Surface treated steel shall also comply with criteria for surface treatment in addition to the above requirement.

Assessment and verification: The applicant or his supplier shall provide appropriate documentation showing compliance with this criterion.

2.5) Plastics

Polyurethane and latex foams used in furniture as filling material shall only comply for material specific requirements with criterion 2.5.3.

2.5.1) Plastics for surface coating applications

Plastics for surface coating applications shall be allowed in a percentage up to 6.5% (w/w) of the total weight of the material on which coating plastics are directly applied.

Assessment and verification: The applicant shall provide appropriate documentation showing compliance with this requirement.

2.5.2) Hazardous additives

No substances and preparations shall be used in the production of polymers/co-polymers and plastics applied in the eco-labelled furniture that:

a) contain:

- lead, cadmium, chromium (VI), mercury, and their compounds.
- tri-organic tin compounds. Mono and di-organic compounds may be used if free from any impurities of tri-organic tin compounds.

b) are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its subsequent amendments. This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

Assessment and verification: The applicant shall provide a declaration indicating which additives have been used. Appropriate documentation (such as safety data sheets) shall be provided showing compliance with this criterion.

2.5.3) Polyurethane and latex foams

Polyurethane and latex foam used as filling material in furniture shall comply with all of the relevant criteria laid down in Decision 2002/740/EC establishing revised ecological criteria for the award of the Community Eco-label to bed mattresses. Where the criterion 2f of the criteria for Bed Mattresses reads “tin in organic form”, for compliance to the Eco-label requirements for Furniture, it shall be read “tri-organic tin compounds.

Assessment and verification: The applicant shall either provide detailed documentation showing that the polyurethane and latex foams have been awarded the eco-label or shall provide the detailed documentation (test reports, declarations, etc.) showing that the polyurethane and latex foams comply with all of the relevant criteria laid down in Decision 2002/740/EC.

2.5.4) Input recycled material

Plastics applied for uses other than surface coating shall be sourced by productions using at least 15% (w/w) of secondary material input.

Assessment and verification: *The applicant shall provide documentation of compliance with this criterion.*

2.6) Textiles (fibres and fabric)

All textile fibres and fabrics (except yarn used for sewing) shall comply with all of the relevant criteria laid down in Commission Decision 2002/371/EC establishing the ecological criteria for the award of the Community eco-label to textile products.

Where criterion 3a. of the criteria for Textile Products, reads “organotin compounds”, where criterion 11 reads “organic tin compounds, and where criterion 32a, reads “organic tin compounds”, for compliance to the Eco-label requirements for Furniture, it shall read “tri-organic tin compounds.”.

Assessment and verification: *The applicant shall either provide detailed documentation showing that the fibres and fabric have been awarded the eco-label or shall provide the detailed documentation (test reports, declarations, etc.) laid down in Decision 2002/371/EC.*

2.7) Leather

If leather is present in the furniture product for < 5% (w/w) of the final eco-labelled product, leather should comply to 2.7.1, 2.7.2, 2.7.3, 2.7.4 and 2.7.5.

If leather is present in > 5% (w/w) of the final eco-labelled product, leather should comply with all criteria of section “2.7 leather”.

2.7.1) Presence of substances in furniture leather

Chrome (Cr(VI)), Arsenic (As), Cadmium (Cd), and Lead (Pb) should not be detectable in leather used for furniture.

Assessment and verification: *The applicant and/or his supplier shall provide a test report using the following test methods:*

- Chrome Cr(VI): ISO 20345:2000 or a comparable method (detection limit 10 ppm).
- Arsenic, cadmium and lead: Sampling and testing according to CEN TC 309 – WI 065 – 4.3. Or the applicant and/or his supplier shall provide a declaration that no substances have been used which can result in residues of these metals in furniture leather.

2.7.2) Formaldehyde

The amount of free and partially hydrolysable formaldehyde of the leather components shall not exceed 150 ppm.

Assessment and verification: *The applicant and/or his supplier shall provide a test report using the following test method: CEN/ISO TS 17226.*

2.7.3) COD emissions from tanning

The waste water from leather tanning sites has to be treated, either by an in-house or municipal waste water treatment plant/facility, so as to achieve a reduction of the COD content of at least 85% before water is discharged to surface water.

Assessment and verification: *The applicant shall provide a test report and complementary data, using the following test method: COD: ISO 6060 Water quality, determination of Chemical Oxygen Demand.*

2.7.4) Chrome in waste water

Tannery waste water after treatment shall contain ≤ 2 mg Chrome/l.

Assessment and verification: *The applicant shall provide a test report and complementary data, using the following test methods: ISO 9174 or EN 1233 or EN ISO 11885 for Chrome.*

2.7.5) PCP and TCP

Pentachlorophenol (PCP) and Tetrachlorophenol (TCP) and its salts and esters shall not be used.

Assessment and verification: *The applicant and/or his supplier(s) shall provide a declaration that the materials do not contain these chlorophenols. Should a verification of this declaration be carried out, the following test methods shall be used: CEN TC 289 TS 14494.*

2.7.6) Azo dyes

“Blue colourant” shall not be used for the colouring of leather. In addition, no azo dyes shall be used that may cleave to any of the following aromatic amines:

1. 4-aminodiphenyl (92-67-1)
2. benzidine (92-87-5)
3. 4-chloro-o-toluidine (95-69-2)
4. 2-naphthylamine (91-59-8)
5. o-amino-azotoluene (97-56-3)
6. 2-amino-4-nitrotoluene (99-55-8)
7. p-chloroaniline (106-47-8)
8. 2,4-diaminoanisole (615-05-4)
9. 4,4'-diaminodiphenylmethane (101-77-9)
10. 3,3'-dichlorobenzidine (91-94-1)
11. 3,3'-dimethoxybenzidine (119-90-4)
12. 3,3'-dimethylbenzidine (119-93-7)
13. 3,3'-dimethyl-4,4'-diaminodiphenylmethane (838-88-0)
14. p-cresidine (120-71-8)
15. 4,4'-methylene-bis-(2-chloroaniline) (101-14-4)
16. 4,4'-oxydianiline (101-80-4)
17. 4,4'-thiodianiline (139-65-1)
18. o-toluidine (95-53-4)
19. 2,4-diaminotoluene (95-80-7)
20. 2,4,5-trimethylaniline (137-17-7)
21. 4-aminoazobenzene (60-09-3)
22. o-anisidine (90-04-0)

Assessment and verification: *the applicant and/or his supplier(s) shall provide a declaration that such azo- dyes have not been used. Should a verification of this declaration be carried out, the following test method shall be used: CEN TC 289/ISO TS 17234: limit 30 ppm. (note: false positives are possible for 4-aminoazobenzene, 4-aminodiphenyl and 2-naphthylamine and confirmation is therefore recommended).*

2.7.7) Chloroalkanes

C10-C13 Chloroalkanes or substances and preparations containing these substances in concentrations higher than 1% shall not be used for the fat liquoring of leather.

Assessment and verification: *The applicant and/or his supplier(s) shall provide a declaration that such chloroalkanes have not been used.*

2.7.8) VOC emissions from leather coating

The total VOC emission⁴ shall be 7% below the emission limit of Directive 1999/13/EC, i.e. 140 g/m².

Assessment and verification: *The applicant shall provide a calculation of the total use of VOCs during final production, together with supporting data, test results and documentation as appropriate. Registration of purchased leather adhesives, finishes and production of leather over 6 months is required.*

2.8) Glass

Glass shall be easily replaceable in case of damage or breakage.

Assessment and verification: *Documents from the furniture manufacturer including accompanying instructions for use, where instructions for replacement of damaged glass is included.*

2.9) Feathers and downs

2.9.1) Waste water treatment

The waste water from feather processing shall be treated in an in-house and/or communal waste water treatment plant. The Chemical Oxygen Demand (COD) reduction before discharge on the surface water shall be at least 85%.

Assessment and verification: *The applicant shall provide a test report and complementary data using the following test method: COD: ISO 6060 Water quality, determination of chemical oxygen demand.*

2.9.2) Detergents used in feather processing

During feather processing, no detergents based on nonyl phenol ethoxylates shall be used. The detergents shall be readily biodegradable and no phosphates shall be used in detergent formulations.

⁴ VOC (Volatile organic compounds are defined as any organic compound with, at normal conditions for pressure, a boiling point (or initial boiling point) lower than or equal to 250 °C.

Assessment and verification: *The applicant and/or his supplier shall provide a declaration that no nonyl phenol ethoxylates and no phosphates are used during feather processing combined with information (e.g. MSDS) to support this declaration. Moreover, information on the biodegradability of the detergents shall be provided.*

CRITERIA FOR SURFACE TREATMENT

3) Surface treatment

Surface treatment refers to the surface treatment process either of single parts/components of furniture or of the furniture as a whole.

3.1) Surface treatment with plastic

The surface of materials (e.g. wood, wood-based or metals) can only be coated with plastics if plastics comply with criteria: 2.5.1 and 2.5.2.

Assessment and verification: *The applicant shall provide appropriate documentation to show compliance with these criteria.*

3.2) Surface treatment with metals

The surface of materials (e.g. wood, wood-based materials) can only be coated with metal sheets if the material complies with criteria: 2.3 for aluminium and 2.4 for steel.

Assessment and verification: *The applicant shall provide appropriate documentation to show compliance with these criteria.*

3.3) Surface treatments for plastics, wood and wood based materials other than plastics and metals

The criteria for the surface treatment of plastics, wood, and wood based materials, mentioned below, are applicable if the treated plastic, wood or wood based materials are present in the final eco-labelled product in quantities above 1% by weight.

3.3.1) Hazardous substances and preparations (including VOC content)

No substances and preparations shall be allowed in the surface treatment of components/parts of furniture as well as of the entire furniture that:

a) are classified as carcinogenic, harmful to the reproductive system, mutagenic, toxic or allergenic (when inhaled) in accordance with Directive 1999/45/EC.

b) contain halogenated organic binding agents, azidrin and polyaziridins as well as pigments and additives based on:

- lead, cadmium, chrome(VI), mercury and their compounds.

- tri-organic tin compounds. Mono and di-organic compounds may be used if free from any impurities of tri-organic tin compounds.

c) are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its subsequent amendments.

This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

Assessment and verification: *The applicant shall provide a declaration of compliance with this criterion, together with a list of ingredients and related documentation, such as Material and Safety Data Sheets.*

d) **I.** Chemical substances classified as harmful to the environment by the chemical manufacturer/supplier in accordance with EU classification system (18th Amendment to Directive 67/548/EEC) must not be added to substances and preparations for surface treatment in quantities in excess of 2% in weight. Nevertheless the products may contain up to 5% volatile organic compounds (VOC are defined as any organic compound with, at normal conditions for pressure, a boiling point (or initial boiling point) lower than or equal to 250 °C). If the product requires dilution, the contents of the diluted product must not exceed the aforementioned threshold values.

Or:

II. Applied quantity (wet paint/varnish) of environmentally harmful substances <14g/m² surface area and applied quantity (wet paint/varnish) of VOC: < 35g/m² (Volatile organic compounds are defined as any organic compound with, at normal conditions for pressure, a boiling point (or initial boiling point) lower than or equal to 250 °C).

The applicant can choose: either the requirement I. (constituent substances) or the requirement II. (maximum quantity of hazardous substances per surface area).

Assessment and verification:

I. The applicant shall provide a declaration of compliance with this criterion, together with documents to support this declaration, including:

- *a complete recipe with designation of quantities and CAS numbers for constituent substances*
- *the test method and test results for all substances present in the product, for example 16 point data sheets with sufficient eco-toxicological data and references to test methods*
- *a declaration stating that all constituent substances have been disclosed*

II. Environmentally harmful substances are substances that are classified as harmful to the environment in accordance with current regulations in accordance with the EU classification system (18th Amendment to Directive 67/548/EEC). The chemical supplier is responsible for classifying the substances.

The Competent Body can require the data basis for the assessment/classification of the substances. The following documentation is required:

- *A complete recipe with designation of quantities and CAS numbers for constituent substances*

- *The test method and test results for all substances present in the product, for example 16 point data sheets with sufficient eco-toxicological data and references to test methods*
- *Declaration stating that all constituent substances have been disclosed*
- *Number of coats and quantity applied per coat per square meter of surface*
- *Method of application*

The following degrees of effectiveness (which are fixed values and must not be deviated from) are used for the purpose of calculating discharges: Spraying device without recycling 50%, spraying device with recycling 70%, electrostatic spraying 65%, spraying, bell/disk 80%, roller varnishing 95%, blanket varnishing 95%, vacuum varnishing 95%, dipping 95%, rinsing 95%.

3.3.2) Formaldehyde

Formaldehyde emissions from substances and preparations for surface treatment liberating formaldehyde shall be less than 0.1 ppm.

Assessment and verification: *The applicant and/or his supplier shall provide a declaration that the above requirement is met, together with information on the formulation of the surface treatment (e.g. Material safety data sheets).*

3.4) Coatings for metals other than plastics and metals

Criteria for surface coating for metals are applicable to coated metals present in more than 1% (w/w) of the final eco-labelled product.

3.4.1) VOC content

VOC content of coatings used is max. 15% w/w of which the content of aromatic solvents must be ≤1% in weight. VOC (Volatile organic compounds) are defined as any organic compound with, at normal conditions for pressure, a boiling point (or initial boiling point) lower than or equal to 250 °C.

Assessment and verification: *The applicant and/or his supplier shall provide a declaration completed with documents to support this declaration that this criterion is met.*

3.4.2) Hazardous substances

No substances and preparations shall be allowed in the surface treatment of components/parts of furniture as well as of the entire furniture that:

a) are classified as carcinogenic, harmful to the reproductive system, mutagenic, toxic or allergenic (when inhaled) in accordance with the EU classification system (18th Amendment to Directive 67/548/EEC).

b) contain halogenated organic binding agents, azidirin and polyaziridins as well as pigments and additives based on:

- lead, cadmium, chrome VI and mercury and their compounds.

- tri-organic tin compounds. Mono and di-organic compounds may be used if free from any impurities of tri-organic tin compounds..

c) are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its subsequent amendments.

This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

Assessment and verification: *The chemical supplier shall provide:*

- *A complete recipe with designation of quantities and CAS numbers for constituent substances*
- *A product data sheet with health hazard classification*
- *A declaration stating that prohibited constituents are not present in the chemical product, and that all constituent substances have been disclosed.*

II. Metals, with the exception of gas lifts, must not be coated with chrome, nickel, tin and their compounds. In exceptional cases, metal surfaces may be treated with chromium or nickel where this is necessary on the grounds of heavy physical wear or in the case of parts that require particularly tight connections. This exemption does not include parts that are intended to come into frequent contact with skin.

Emissions from nickel or chrome surface treatment shall fulfil the recommendations in the Ospara Agreement (Parcom/Oscom), depending on the country in question and the recipient environment into which the emissions are released, and the parts used must be recyclable.

Assessment and verification: *A declaration shall be provided by the supplier of surface treated metal including:*

- *The need for this type of surface treatment. This shall be documented in the form of tests or an account showing that the metal surface is exposed to heavy physical wear or is a surface requiring a very tight connection.*
- *Declaration demonstrating that the recommendations of the Ospara Agreement have been fulfilled and that parts coated with chromium or nickel can be recycled.*

3.4.3) Degreasing

Halogenated organic compounds shall not be used for degreasing in the surface treatment of metals.

Assessment and verification: *The applicant and/or his supplier shall provide a declaration completed with documents to support this declaration that this criterion is met.*

3.4.4) Loss of coating

Loss of the product (coating) shall not exceed 10% (w/w) for powder coatings and 30% (w/w) for wet paint, for surfaces larger than 25 cm².

Assessment and verification: *The applicant and/or his supplier shall provide a declaration completed with documents showing that this criterion is met.*

CRITERIA FOR THE ASSEMBLY OF FURNITURE

4) Adhesives

4.1) VOC

The VOC content of adhesives used in the assembly of furniture shall not exceed 10% (w/w). VOC (Volatile organic compounds) are defined as any organic compound with, at normal conditions for pressure, a boiling point (or initial boiling point) lower than or equal to 250 °C.

Assessment and verification: A declaration shall be provided by the applicant indicating all adhesives used in the assembly of furniture, as well as the compliance with this criterion.

4.2) Additives and binding agents

No additives or substances shall be added to adhesives and glues that:

- are classified as carcinogenic, harmful to the reproductive system, mutagenic, toxic or allergenic (when inhaled) in accordance with classification as laid down in the Directive 67/548/EEC. The content of free formaldehyde shall not exceed 0.5% in weight.

c) are assigned at the time of application any of the following risk phrases (or combinations thereof): R40, R45, R46, R49, R50, R51, R52, R53, R60, R61, R62, R63, R68, as laid down in Directive 67/548/EEC and its subsequent amendments.

This requirement does not apply to substances that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above and where less than 0.1% remains in the form compared to before application.

Assessment and verification: The applicant shall provide appropriate declarations verifying that the above requirements are met. For each chemical product used in the assembly of furniture, a Safety Data Sheet or equivalent documentation shall be presented containing information on health hazard classification. Test reports or a declaration from the supplier shall be provided for the free formaldehyde content.

CRITERIA FOR THE FINAL PRODUCT

5) Durability and safety

The product shall fulfil the requirements on durability, strength, safety and stability in EN standards applicable to the usage of the product. If no EN standard exists, the requirements in ISO standards shall be used. If no EN or ISO standard exists, an evaluation of the product's durability, strength, safety and stability on the basis of the design and choice of materials shall be performed by an independent test institution.

Assessment and verification: The producer shall provide a declaration completed with documentation on the test methods performed, the test institution and the test results.

6) Maintenance

Maintenance of products shall be possible without organic based solvents.

Assessment and verification: The applicant and/or his supplier shall provide a declaration completed with documents showing that this criterion is met.

7) Recycling and waste

a) The eco-labelled product shall be easily disassembled making possible the recovery and recycling of materials used.

In order to facilitate recycling of the materials used in products, the following materials have to be easy separable:

- All aluminium
- Steel, if it composes $\geq 10\%$ by weight of the eco-labelled product.
- Glass, if it composes $\geq 10\%$ by weight of the eco-labelled product;
- Plastic, if it composes $\geq 50\%$ by weight of the eco-labelled product.

Assessment and verification: The applicant shall provide appropriate documentation showing full compliance with this criterion, including an instruction for disassembly and where it is explained how aluminium, steel, glass and plastic parts can be disassembled. Furthermore, the applicant shall provide appropriate information on the construction and composition of the product on the basis of which the certifying institute can assess whether the product is separable.

b) In order to promote the reduction of pollutant hazards in the disposal, landfill and/or incineration of end of life furniture, the eco-labelled furniture shall comply with the requirements set for elements and substances as laid down in Appendix 1. The natural ambient content, the chromium in stainless steel materials, the recycled material used in the production of the applied material, and materials exempt according to the criterion 1.2.a/b/c are excluded from calculations requested for the compliance with this criterion.

Assessment and verification: The applicant shall provide appropriate documentation showing full compliance with this criterion.

8) Consumer information

The following information shall be supplied with the eco-labelled product:

- (a) Information on the fitness for purpose, on the basis of domestic or contract use (light or heavy);
- (b) Information on cleaning and care;
- (c) Instruction for disassembly of aluminium, steel, glass and plastic parts and the fact that the local authorities should be contacted on the best way to dispose of old furniture and materials;
- (d) Instruction for assembly;
- (e) Best use from an ergonomic point of view, where relevant;

Assessment and verification: The applicant shall provide a sample of the information material supplied with the eco-labelled product.

9) Packaging of the final product

Packaging needs to fulfil the following requirements:

- (a) Made of recyclable material or be a multi-use system.

(b) All materials shall be easily separable by hand in recyclable parts consisting of one material (e.g. cardboard, paper, plastic, textile).

Assessment and verification: A sample of the product packaging shall be provided on application, together with a corresponding declaration of compliance with this criterion.

10) Information on the packaging

The following text (or equivalent text) shall appear on the packaging and in the user manual:

“For more information visit the European Eco-label web site. Additional information can be obtained at: name / address of the consumer department of the applicant”.

Assessment and verification: The applicant shall provide a sample of the product’s packaging and user manual and of the information supplied with the product, together with a declaration of compliance with each part of this criterion.

11) Information appearing on the eco-label

Box 2 of the Eco-label shall contain the following text:

- sustainably managed forests (if wood based parts are used);
- low air pollution and low indoor pollution;
- reduced pollutant hazards in the waste
- hazardous substances restricted.

Assessment and verification: The applicant shall provide a sample of the product packaging showing the label, together with a declaration of compliance with this criterion.

Appendix 1

Limit values of elements and substances allowed in the final eco-labelled furniture according to the criteria 7.b.

Elements and compounds	Limit values* (mg/kg of total dry eco-labelled product)
Arsenic	2
Cadmium	25
Chromium	25
Copper	20
Lead	30
Mercury	0.4
Fluorine	100
Chlorine	600
Pentachlorophenol (PCP)	5
Tar oils (benzo(a)pyrene)	0.5

* **The natural ambient content**, the chromium in stainless steel materials, the recycled material used in each constituting material, and materials exempt according to the criteria 1.2.a/b/c are excluded from calculations.

Appendix 2

Limit values of elements and substances allowed in recycled wood fibres for the production of wood based materials, according to the criteria 2.2.2

Elements and compounds	Limit values (mg/kg of total dry panel)	Test method (shall be specified in the user's manual)
Arsenic	25	
Cadmium	50	
Chromium	25	
Copper	40	
Lead	90	
Mercury	25	
Fluorine	100	
Chlorine	1000	
Pentachlorophenol (PCP)	5	
Tar oils (benzo(a)pyrene)	0.5	

Appendix 3

Description of the criterion on energy input

1. **Calculation of energy** consumption related to the final eco-labelled furniture:

$$\sum_{1}^{n} m_i \times CS_i^*$$

with :

m_i: weight of material contained in the product (in kg) (the materials whose total weight per product is less than 3% of the weight of the product are not taken into account);

CS_i: average energy consumption related to the production and manufacturing of materials.

The CS_j data refer to listed average values of natural energetic resources consumptions and are expressed in MJ. They shall be provided in the user manual and made available through the internet on the EU Eco-label web site.

Appendix 4

GLOSSARY OF MAIN TERMS

The following terms and definitions apply to the criteria set under this scheme:

- **Adhesive**, *general term for any of several substances capable of bonding materials to each other by chemical or mechanical action. They may be natural or synthetic. The synthetic adhesives include the thermoplastic resins, the thermosetting resins, and the elastomeric adhesives.*
- **Aluminium**, *caste alloy of aluminium-silica, and/or aluminium-magnesium, and/or aluminium-copper. Depending upon the application the final product can include superficial treatment (i.e. chrome-plating, nickel-plating, anodic oxidation, chemical nickel-plating and derivatives).*
- **Artificial or imitation leather**, *material, usually a plastic or rubber fabric on a support of cloth or paper, made to resemble leather.*
- **Binding agent**, *adhesive substance, usually of liquid or molten form, used to create adhesion between aggregates, globules, etc. It is distinguished from an adhesive in that it performs an internal adhesive function rather than a surface adhesive function*
- **Chlorine**, *under this scheme and specifically for the table in Appendix 1 this term refers to chlorine bounded to organic compounds*
- **Coated aluminium**, *aluminium covered with another material (i.e. chrome-plating, nickel-plating, anodic oxidation, chemical nickel-plating and derivatives)*
- **Coated steel**, *steel covered with another material (tin, chrome, and zinc at WSC), primarily for corrosion resistance*
- **Composite material**, *material made from various different parts*
- **Down**, *small soft feathers, especially those from a young bird*
- **Feather**, *one of the many soft light things which cover a bird's body, consisting of a long thin central part with hair-like material along each side*
- **Flame retardants**, *family of different chemicals applied to materials to control ignition, flame spread, and to lower the rate of heat release.*

There are four main families of flame-retardant chemicals:

- Inorganic flame retardants including aluminium trioxide, magnesium hydroxide, ammonium polyphosphate and red phosphorus;
- Halogenated flame retardants, primarily based on chlorine and bromine. The brominated flame retardants are included in this group;
- Organophosphorus flame retardants, primarily phosphate esters. They may contain also bromine or chloride;

- Nitrogen-based organic flame retardants, used for a limited number of polymers.
- **Glue**, adhesive consisting of organic colloids of a complex protein structure obtained from animal materials.
- **Laminated plastic**, paper sheets impregnated with polymers. Under this scheme they are considered plastic.
- **Leather**, animal skin treated with natural or chemical substances.
- **Material**, physical substance with basic characteristics used in production or manufacturing
- **Plastic**, polymer and/or co-polymer compounded with other substances. These substances can include: additives (i.e. plasticizers, stabilizers, flame retardants, lubricants, antioxidants, antistatic agents, preservative materials, such as antifouling agent, fillers, and colour pigments), papers, clothes, glass.

The following materials are considered plastic:

- aminated plastics
- synthetic polymeric fibres like nylon, polyester, spandex, acrylic, modacrylic, olefin, saran, spandex, and vinyonare
- PVC and PU synthetic leather (artificial leather)
- **Polyurethane foams**, family of chemicals known as the urethane polymers, which are composed of two principal raw materials, isocyanates and polyols, brought together with catalysts and a large variety of additives
- **Recycled material**, material having been used before and then processed so that it can form a new product. The definition applies to waste process materials as well as to waste disposal materials.
- **Recycling**, process or set of processes to collect and/or process waste from a product system to result in a useful application in the same (internal recycling) or in another product system (external recycling).
- **Secondary raw material**, raw material or material obtained from waste which may be used on an economic or other way, but remaining waste until processed.
- **Solid wood**, solid part of trees composed of plant tissues and vegetable fibres. The term comprises: timber, stripped or sheared wood sheets (i.e. veneers), wood from roots, and wood residues from forests and plantations. It also comprises wood-like materials bamboo and rattan and solid post-consumer wood
- **Stainless steel**, term for grades of steel that contain more than 10% chromium, with or without other alloying elements.
- **Steel**, metal which is a mixture of iron and carbon. It may contain also manganese, sulphur, phosphorous and a host of other elements.

- **Surface treatment**, *finishing and coating treatments applied to the surface of components/parts of furniture as well as to the entire furniture for decorative and/or protective function. Typical materials used in surface treatments are: primers, fillers, dyes and stains, clear finishes, paints, varnishes, lacquers, plastics, laminated plastic, decorative foils, papers, and fabrics.*
- **Type of material (as referred to a class of materials)**, *material belonging to a specific class or sub-class of materials (i.e.: for solid wood the type of material refers to the species of wood; for plastic the type refers to the polymer; for metal the type refers to the main element; and so on)*

Under this scheme no distinction is made about different sub-types of material (i.e. PVC rigid and PVC flexible are considered both PVC).

- **Waste furniture**, *any output from the product system which is disposed of.*
- **Wood based material**, *material made binding with adhesives and/or glues one or more of the following materials: wood fibres, and/or stripped or sheared wood sheets, and/or wood residues from forest, plantations, sawn-wood, residues from pulp/paper industry, and/or recycled wood.*

Wood-based materials may comprise: hardboard, fibreboard, medium density fibreboard, particleboard, OSB (Oriented Strand Board), plywood, and panels in solid wood. The term ‘wood based material’ also refers to composite materials made from wood based panels coated by plastics, or laminated plastics, or metals, or other coating materials and finished/semi-finished wood based panels.