

# Basic Criteria for Award of the Environmental Label

# Low-Emission Upholstered Furniture RAL-UZ 117



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RAL DEUTSCHES INSTITUT FÜR GÜTESICHERUNG UND KENNZEICHNUNG E.V. (RAL GERMAN INSTITUTE FOR QUALITY ASSURANCE AND CERTIFICATION)

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#### 1 Introduction

1.1 In co-operation with the Federal Minister for the Environment, Nature Conservation and Nuclear Safety, the Federal Environmental Agency and considering the results of expert hearings conducted by RAL the Environmental Label Jury has set up these Basic Criteria for Award of the Environmental Label. RAL, reg. assoc., has been entrusted with the award of the Environmental Label.

Upon application to RAL and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL the permission to use the Environmental Label may be granted for all products, provided that they comply with the requirements as specified hereinafter.

1.2 Upholstered furniture may cause environmental problems during their manufacture, use and disposal. That is why the requirements for award of the eco-label refer to the overall life of upholstered furniture. They refer to the manufacture of the products and the materials used during the manufacturing process, the period of actual use as well as to the disposal of used upholstered furniture and the packaging material used for the transportation of new furniture.

The Environmental Label for Upholstered Furniture may be awarded to furniture which - beyond the legal provisions -

- distinguishes itself by an environmentally compatible manufacture this particularly applies to leather, textiles and upholstery materials,
- from the health point of view does not have an adverse impact on the living environment.
- does not contain any hazardous substances that might well impede recycling.

The use of timber from sustainable forestry and low-emission wood-based material will be supported.

#### 2 Scope

These Basic Criteria apply to ready-to-use indoor upholstered furniture according to DIN 68880, which are <u>not</u> mainly - i.e. for more than 50 percent by volume - made from wood and/or wood-based materials (chipboards, coreboards, fibreboards, veneer-faced panels, each non-coated or coated) and consequently are to be allocated to the RAL-UZ 38 Environmental Label for "Low-emission wood products and wood-base products".

#### 3 Requirements

The Environmental Label shown on page 1 may be used for the marking of products under para. 2, provided that they comply with the following requirements:



#### 3.1 Manufacture

#### 3.1.1 Origin of the Wood

Solid wood, laminated wood, veneer and the wood used for the production of plywood shall not be taken from primeval forests (boreal and tropical primary forests). When buying timber the applicant undertakes to take wood from sustainable forestry into consideration.

#### Compliance Verification

The applicant indicates type and geographic origin of the timber used or presents certificates according to the FSC Criteria or equivalent certification systems (FSC = Forest Stewardship Council).

#### 3.1.2 Formaldehyde in Wood-Based Materials

Wood-based materials marked with the RAL-UZ 76 Environmental Label may be used for the production of products under para. 2. Wood-based materials not marked with the Environmental Label according to RAL-UZ 76 must not exceed in their raw state, i.e. prior to machining or coating, a formaldehyde steady state concentration of 0.1 ppm in the test chamber.

#### Compliance Verification

The applicant shall name the manufacturer and the product name of wood-based materials carrying the Environmental Label according to RAL-UZ 76. For wood-based materials which do not yet carry the RAL-UZ 76 Environmental Label the applicant shall present a test certificate according to the test method for wood-based materials<sup>1)</sup>.

#### 3.1.3 General Substance Requirements

The materials used (leather, textiles, upholstery materials, coating materials, adhesives) must not contain any substances<sup>2)</sup> as constituent parts which are:

listed as very toxic (T+) of toxic (T) in Annex I to Directive 67/548/EEC<sup>3</sup> or are classified and must be marked according to Section 4a, para. 3, GefStoffV<sup>4</sup>, (Ordinance on Hazardous Substances) as very toxic (T+) or toxic (T); are classified as carcinogenic in accordance with EC Category Carc. Cat.1, or Carc.Cat.2 or mutagenic according to EC Category Mut.Cat.1, Mut.Cat.2 or toxic to reproduction according to EC Category Repr. Cat.1, Repr. Cat. 2;

<sup>&</sup>lt;sup>1)</sup> Test Methods for Wood-Based Materials, Federal Health Bulletin 10/91 p. 488-489

<sup>&</sup>lt;sup>2)</sup> Term as defined in Section 3, Para. 1, Revised Version of the German Chemicals Act of 20 June 2002

Ocuncil Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances; Annex I: Official Journal of the European Communities and published in: Series of documents of the Federal Institute for Occupational Safety and Health - Regulations RW 23, "List of Hazardous Substances and Preparations under Annex 1 to Directive 67/548/EEC" (continuous publication)

Publication of the revised version of the Ordinance on Hazardous Substances, dated October 18, 1999 (Official Law Gazette. I, p. 2059)



- 2. classified in TRGS 905<sup>5)</sup> as carcinogenic, mutagenic or reprotoxic substances;
- 3. classified in the MAK Value List<sup>6)</sup> as:
  - cancerogenic working materials Category 1 or 2;
  - germ-cell-mutagenic working materials Category 1 or 2.

#### Compliance Verification

The applicant proves compliance with the requirements of para. 3.1.3 by presentation of a statement of the suppliers in accordance with Annex 2 to the Contract according to RAL-UZ 117 and submits suppliers' product information in German and English.

#### 3.1.4 Leather

#### 3.1.4.1 Chrome Tanning

A chromium determination is to be carried out on leather where hexavalent chromium (Cr<sup>VI</sup>) may not be detected (detection limit: 3 mg/kg).

#### Compliance Verification

The applicant submits a test report according to DIN 53314 (April 1996) stating that hexavalent chromium ( $Cr^{VI}$ ) has not been detected.

#### 3.1.4.2 Preservation

A chemical preservation of hides and tanned semi-finished leather products for transportation and storage purposes should be avoided wherever possible. If preservatives are used for the preservation of hides they must meet the requirements of para. 3.1.3, except for the requirement to be marked as toxic (T). Apart from that, only those preservatives may be used which come along with a determination method for leather and which in the BgVV List<sup>7)</sup> are not classified as a strong contact allergen (Cat. A). In addition to this, preservatives must observe the maximum contents in leather listed in Annex 1.

Preservatives must also meet the requirements of para. 3.2.1.

A chemical preservation of the finished leather will be inadmissible.

<sup>&</sup>lt;sup>5)</sup> Revised version of TRGS 905, List of carcinogenic, mutagenic or reprotoxic substances (Edition of March 2001 - last amended: BArbBI. Edition of 3/2003)

MAK and BAT Value List, Senate Commission for the Testing of Health-Endangering Working Materials, Current Communication No. 39 (2003).

Chemicals and contact allergies – An evaluating survey. Editor: D. Kayser and E. Schlede, Publishers: Urban und Vogel, Munich 2001



#### Compliance Verification

The applicant either presents a declaration from the leather supplier that proves in a complete survey (from slaughter to the finished leather) that the leather has not been chemically preserved or submits a declaration from the leather supplier naming the preservatives used, including evidence of the preservative content according to Annex 1. The test methods are described in Annex 1.

#### 3.1.4.3 Dyes and Pigments

The dyes or pigments listed in Annex 2 may not be used.

#### Compliance Verification

The applicant presents declarations of his leather suppliers in accordance with Annex 3, which prove that these substances have not been used and presents evidence according to DIN 53316 and/or according to a test method mentioned in the "Öko-Tex Standard 2008".

#### 3.1.5 Textiles

#### 3.1.5.1 Dyes and Pigments

The dyes or pigments listed in Annex 2 may not be used.

#### Compliance Verification

The applicant presents declarations of his textile suppliers in accordance with Annex 3, which prove that these substances have not been used and presents evidence according to a test method mentioned in the "Öko-Tex Standard 200".

#### **3.1.5.2 Biocides**

The requirements for pesticides of the "Öko-Tex Standard 100<sup>9)</sup>" must be observed for cover fabrics made of vegetable natural fibres, wool and other animal fibres.

#### Compliance Verification

The applicant presents the measurement results according to a test method mentioned in the "Öko-Tex Standard 200" for a representative sample of cover fabrics selected in consultation with the testing institute.

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<sup>8)</sup> Öko-Tex Standard 200, Test Methods, Edition of January 2004



#### 3.1.5.3 Alternative Compliance Verification

The requirements of paras. 3.1.5.1 and 3.1.5.2 will also be considered met if the textiles are marked with one of the following eco-labels or quality marks: Öko-Tex 100<sup>9)</sup>, EU eco-label for textiles<sup>10)</sup>, Quality Mark for natural Textiles<sup>11)</sup>.

#### Compliance Verification

The applicant presents a corresponding certificate or contract which proves that the textiles are allowed to carry the named eco-label or quality mark.

#### 3.1.6 Moth Proofing

Pyrethroids (Permethrin) are used as moth repellent in cover fabrics made of wool and other animal fibres. An effective **defence against moths** ranges between about 35 and 75 mg/kg, **against bugs** between about 75 and 100 mg/kg. Therefore, concentrations between 3 mg/kg and 35 mg/kg are to be considered as a contamination with no effect on the moth and consequently inadmissible. If permethrin concentrations between 35 mg/kg and 100 mg/kg are applied the manufacturer shall be liable to include the following sentence in the **Consumer Information**:

#### "Contains Permethrin to protect the product from Wool Pests".

Concentrations above 100 mg/kg shall be inadmissible.

The following values must be observed in wool materials without a defence against wool pests: Permethrin < 3.0 mg/kg. The concentration of other detected pyrethroids must not exceed 1 mg/kg. If this threshold value is observed the manufacturer shall be liable to include the following sentence in the **Consumer Information**:

#### "Without Protection from Wool Pests."

#### Compliance Verification

The manufacturer submits the determination of the total content in the material as well as the Consumer Information.

A material sample of about 1-5 g are weighed in an extraction thimble and sealed with a suitable glass wool or filter paper. The extraction thimble is extracted in a Soxhlet extractor for six hours using a 1:1 n-Hexan-Aceton mixture. The resulting extract is then concentrated in the rotary evaporator and filled up to a defined volume (about 5ml) with an extraction medium. The measurement is carried out on the GC-MS instrument operating in the SIM Mode. This method is used to detect permethrin, furmecyclox, piperonyl butoxide, tetramethrin, cyfluthrin, cypermethrin, fenvalerate and deltamethrin.

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Öko-Tex Standard 100, General and Special Conditions, Edition of January/2004

Commission Decision 2002/371/EC of 15 May 2002, Official Journal of the European Communities L 133 of 18 May 2002, p. 29.

<sup>11)</sup> International Natural Textile Association, reg.Assoc., Directive as of 20 January 2000



Determination limits:0,1-1 mg/kg (depending on the compound and the weighed sample).

#### 3.1.7 Upholstery

Notice: The following criteria will have to be met only if the respective share of upholstery materials adds up to more than 5 percent by volume of the total volume of the upholstered furniture.

#### 3.1.7.1 Latex Foam

Chlorophenols, butadienes, nitrosamines and carbon disulphide must not be detectable in the latex foam or as an emission. Here, the following substance-specific limits apply:

Chlorophenols (including salts and esters)

< 1 mg/kg

#### Compliance Verification

The applicant presents a test report on a test carried out in accordance with the following procedure: Comminution of a 5 gram sample, extraction of the chlorophenol or the sodium/potassium salt and subsequent derivatization using acetic anhydride. Analysis by means of gas chromatography (GC), detection by use of a mass spectrometer or ECD.

• Butadienes < 1 mg/kg

#### Compliance Verification

The applicant presents a test report on a test carried out in accordance with the following procedure: Comminution and weighing of the sample. Sampling by use of a headspace sampler. Analysis by means of gas chromatography, detection by use of a flame ionization detector.

• N-nitrosamines (test chamber measurement)

 $< 1 ug/m^{3}$ 

#### Compliance Verification

The applicant presents a test report on a test chamber measurement according to para. 3.2.1. The analysis of the N-nitrosamines shall be carried out according to the BGI 505-23 method (formerly: ZH 1/120.23) acknowledged by the German Federation of Institutions for Statutory Accident Insurance and Prevention (Hauptverband der Gerweblichen Berufsgenossenschaften - HVBG).

Carbon Disulphide (test chamber measurement)

 $< 20 \, \mu g/m^3$ 

#### Compliance Verification

The applicant presents a test report on a test chamber measurement according to para. 3.2.1. .

#### 3.1.7.2 Polyurethane Foam (PUR)

The following requirements apply to organic tin and physical blowing agents in the polyurethane foam:



• Tin in the organic form (tin bonded to a carbon atom) shall not be used.

#### Compliance Verification

The applicant presents a corresponding declaration from his pre-suppliers.

A test will not be required. If however a test is done (e.g. for the purpose of control or supervision) the following test method shall be used: every method used to specifically determine an organic tin compound without checking the presence of inorganic tin compounds, such as tin octoate.

 partially fluorinated hydrocarbons (HFCs), perfluorinated hydrocarbons (PFCs), partially halogenated chlorofluorocarbons (H-CFC), chlorofluorocarbons (CFCs) or methylene chloride shall not be used as physical blowing agents or auxiliary blowing agents.

#### Compliance Verification

The applicant presents corresponding declarations from his pre-suppliers.

#### 3.1.7.3 Coconut Fibres

The criteria applying to latex foam must be observed for rubber coated fibres.

#### Compliance Verification:

The applicant either declares that no rubber-coated coconut fibres have been used or submits the test reports listed above under the criteria for latex foam.

#### 3.1.8 Coating Systems

(to be observed only if coated wood surfaces exist)

Coating systems are normally used to protect and design wood surfaces of upholstered furniture. Such coating systems include stains, primers, clear varnishes, topcoats, adhesives etc..

#### 3.1.8.1 Liquid Coating Systems

The coating materials used in liquid coating systems must not exceed a maximum VOC content of 420 g/l. Exempted are small parts with a share of less than 5 percent by volume of the total. This requirement shall be considered fulfilled irrespective of the VOC content of the individual coating material if it is proved that - considering the quantity of the coating material used - the VOC content for the entire coating system does not exceed 420 g/l.



Exempted are painting plants equipped with a waste gas purification system satisfying the requirements of Directive 1999/13/EC (VOC Directive)<sup>12)</sup>, TA Luft<sup>13)</sup> or the 31<sup>st</sup> Bundesimmissionsschutzverordnung (Federal Immission Control Ordinance) BImSchV<sup>14)</sup>.

#### 3.1.8.2 Special Substance Requirements for Liquid Coating Systems

The liquid coating systems meet the requirements of para. 3 of the VdL-Richtlinie Holzlacksysteme (VdL Directive on Wood Paint Systems). 15)

#### Compliance Verification:

The applicant proves compliance with the requirements of paras. 3.1.8.1 to 3.1.8.2 by presentation of a declaration from the coating materials manufacturer according to Annex 4 and presents the Technical Data Sheets as well as the Product Safety Data Sheets according to EC Directive 91/155/ EEC<sup>16)</sup> in German or English.

#### 3.2 Use

#### 3.2.1 Indoor Air Quality

The products under para. 2 must not exceed the following emission values in the test chamber by analogy with the "health risk assessment process for emissions of volatile organic compounds (VOC) from building products" developed by the Committee for Health-Related Evaluation of Building Products:<sup>17)</sup>:

Technische Anleitung zur Reinhaltung der Luft -TA Luft-, (Technical Instructions on Air Quality Control) of 27 February 1998.

Directive on the Declaration of Wood Paint Systems, VdL-RL 02 (2<sup>nd</sup> Revision), Association of the Paint Industry, reg. assoc., May 2001

Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds (VOC Directive)

<sup>31.</sup> BimSchV, 31st Federal Immission Control Ordinance establishing limits for the emissions of volatile organic compounds that may result from the use of organic solvents in certain plants (Official Law Gazette I No. 44, page 2180 ff.)

Commission Directive (91/155/EEC) of 5 March 1991 defining and laying down the detailed arrangements for a specific information system relating to dangerous preparations in implementation of Article 10 of Council Directive 88/379/EEC

The requirements for VOC emissions are aimed at limiting the contribution of upholstered furniture to the VOC content of the indoor air to 300 μg/m³ after 28 days in an average-sized living room with an air change of 0.5/h.



a) the following applies to a textile-covered armchair:

		Final Va	عايام
Substance	3rd Day	(28th D	
	Test Chamber Concentration	`	Test Chamber Concentration
Formaldehyde		≤ 240 μg/h	≤ 60 μg/m³ (0.05 ppm)
Other aldehydes <sup>19)</sup> (total)		< 240 μg/h	< 60 μg/m <sup>3</sup>
Total organic compounds within the retention range $C_6 - C_{16}$ (TVOC)	-	<u>&lt;</u> 1800 μg/h	≤ 450 μg/m³
Total organic compounds within the retention range > C <sub>16</sub> - C <sub>22</sub> (TSVOC)	-	<u>&lt;</u> 320 μg/h	≤ 80 μg/m³
C-substances <sup>20)</sup>	≤ 10 μg/m³ total		≤ 1 µg/m³ per single value
Total VOC without LCI <sup>21)22)</sup>			< 40 μg/m <sup>3 23)</sup>
R-Value <sup>22)</sup>	-		<u>&lt; 1 <sup>23)</sup></u>

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The surface of an armchair is not a good basis for calculating the load (time consuming and very inaccurate calculations). That is why the emissions of an armchair are measured in the test chamber at an air flow rate of 4.0 m³/h. Consequently, to calculate the product-specific emission rate the test chamber concentration is multiplied by the air flow rate of 4.0 m³/h.

plied by the air flow rate of 4.0 m³/h.

Other aldehydes which may be measured by using a BAM test method, (Method for the measurement of emissions of formaldehyde and other volatile compounds). Aldehydes can also be measured by use of the DNPH method (dinitrophenylhydrazine = DNPH) (DIN ISO 16000-3).

<sup>&</sup>lt;sup>20)</sup> C-Substances = cancerogenic substances, pursuant to EU Classification Cat. K1 and K2 as well as TRGS 905

<sup>&</sup>lt;sup>21)</sup> including non-identifiable substances

LCI - Lowest Concentration of Interest cf. "Health risk assessment process for emissions of volatile organic compounds (VOC) from building products", Homepage of the Umweltbundesamt (Federal Environmental Agency, http://www.umweltdaten.de/down-d/voc.pdf
 During the first term of the Basic Criteria the total VOC without LCI and the R-value are determined by the

During the first term of the Basic Criteria the total VOC without LCI and the R-value are determined by the testing laboratories and indicated in the test report but even if the limits are exceeded this will not result in a refusal. The hearing on the revision of these Basic Criteria will decide on the adoption of these data taking the results into consideration.



#### b) the following applies to leather:

Substance	3rd Day	Final Value (28th Day)
Formaldehyde		60 μg/m³ (0.05 ppm)
Other aldehydes <sup>19)</sup> (Total)		60 μg/m <sup>3</sup>
Total organic compounds within the retention range $C_6-C_{16}$ (TVOC)	-	≤ 450 μg/m³
Total organic compounds within the retention range $> C_{16} - C_{22}$ (TSVOC)	-	≤ 80 μg/m³
C-substances <sup>20)</sup>	≤ 10 μg/m³ total	≤ 1 µg/m³ per single value
Total VOC without LCI 21)22)		60 μg/m³ <sup>23)</sup>
R-Value <sup>22)</sup>	-	<u>≤</u> 1 <sup>23)</sup>

The test may be stopped prematurely (but not before the 7th day after charging) if on each of four consecutive measurement days the admissible emission values are not exceeded and if during this period none of the substances to be detected shows a rise in concentration.

#### Compliance Verification

The applicant submits a test report pursuant to the BAM Test Method<sup>24)</sup> (Method for the detection of emissions of formaldehyde and other volatile compounds) based on the Standards ENV 13419-1 and ENV 13419-2<sup>25)</sup> issued by a testing institute recognized for this test by BAM (Bundesanstalt für Materialforschung und Prüfung (Federal Institution for Material Research and Testing) (Annex 3 to the Basic Criteria RAL-UZ 117) which confirms compliance with this requirement.

Notwithstanding the above-cited BAM Test Method, for the testing of upholstered furniture one textile-covered armchair of a certain series of armchairs<sup>26)</sup> which does not differ from the other models of the series with regard to the materials used (frame, expanded plastics, adhesives, cover fabrics etc.) is tested as a whole body under the following conditions in a test chamber:

- Air flow rate for an armchair (regardless of the size of chamber and armchair): 4
  m³/h
- Chamber size: about 2 10 m³ and about four times the size of the armchair(s). The other parameters (temperature, air humidity, air velocity) correspond to the BAM Method.

Official Journal of BAM - Bundesanstalt für Materialforschung und -prüfung (Federal Institution for Material Research and Testing), vol. 29, 1999, p.234-250

If a series of upholstered furniture consists of leather-covered models only, the whole-body-testing shall be done with a so-called white upholstered furniture (complete upholstered furniture without leather cover).

ENV 13419- Determination of the emission of volatile organic compounds (VOC); Part 1: Emission Test Chamber Method and Part 2: Emission Test Cell Method



Due to their high emission relevance leathers are subjected to a separate emission test. For this purpose, the testing laboratory selects representative samples in coordination with the upholstered furniture manufacturer and the tannery which guarantees compliance with the requirements for the respective series. Small test chambers (e.g. 20 litres) or emission test cells are suited for the testing of leather components. Leather is tested rear to rear in test chambers. In doing so, it must be guaranteed that the surface-specific flow rate of 1.5 m³/m²h is maintained over the whole testing period (28 days).

#### 3.2.2 Packaging

If possible, upholstered furniture is to be packed in a way allowing post-manufacture outgassing of volatile materials.

#### Compliance Verification

The applicant presents a description of the packaging system and states that the packaging system is so designed as to allow the out gassing of volatile components or gives the reason why such packaging cannot be used.

#### 3.2.3 Serviceability

Upholstered furniture must be up to the usual quality standards regarding serviceability (e.g. safety, abrasion resistance, tensile strength, light fastness, rub fastness, deformation by compression according to current ISO/EN/DIN Standards).

#### Compliance Verification

The applicant declares compliance with the requirement.

#### 3.2.4 Wearing Parts

Functionally compatible replacements shall be guaranteed for a period of at least five years for those parts contained in upholstered furniture which are subject to wear, e.g. hinges and table leaves.

#### Compliance Verification

The applicant declares compliance with the requirement.

#### 3.3 Recycling and Disposal

With regard to recycling and disposal neither material protection agents (fungicides, insecticides, flame-retardants) nor halogenated organic compounds (e.g. chloro-organic carriers in textiles, chlorinated paraffins in leather oil) may be added to upholstered furniture, including the materials used for the manufacture (leather, textiles, foams, wood-based materials, adhesives etc). Exempted are fungicides exclusively used for pot preservation of aqueous coatings and adhesives, preservatives for transport preservation of hides and tanned semi-finished products (see para. 3.1.4.2), moth proofing of textiles made of animal fibres (see para. 3.1.6), adhesives based on aqueous dispersions and flame retardants using inorganic ammonium phosphates



(diammonium phosphate, ammonium polyphosphate etc.), boron compounds (boric acid, borates) or other dehydrating minerals (aluminium trihydrate or the like) for flame retarding purposes.

#### Compliance Verification

The applicant declares compliance with the requirement and presents the corresponding declarations of his pre-suppliers.

#### 3.4 Consumer Information

Upholstered furniture must be accompanied by the following consumer information providing at least the following basic information, possibly in conjunction with other information:

- Information about wearing parts and their repair or exchange, and, if applicable, about a repair service, stating that functionally compatible replacement parts will be available for a period of at least 5 years;
- Information about type and origin of the predominant wood in accordance with para. 3.1.1;
- Information about other materials (> 3 weight percent);
- Information about the tanning process / tanning material, including retanning (e.g. chrome tanning, vegetable tanning)
- Information about assembly or laying of the products, if applicable;
- Information about disassembly for moving, if applicable;
- Information about the product's wearing resistance (fields of use and, if applicable, material test results, product-specific properties, change caused by product use);
- Cleaning and Care Instructions.

#### Compliance Verification

The applicant presents the consumer information.

#### 3.5 Advertisement Messages

Advertisements should not include any information, such as "tested for its biological living quality" or those which play down risks in terms of Article 23, para. 4 of Directive 67/548/EEC, as for example "non-toxic", "non-harmful".

#### Compliance Verification

The applicant declares compliance with the requirement.



#### 4 Applicants and Parties Involved

- **4.1** Manufacturers of products according to para. 2 shall be eligible for application.
- The following parties are involved in the award procedure:
  - RAL, Umweltbundesamt [Federal Environmental Agency] and the Federal State where the production plant is located that manufactures the products to be marked with the Environmental Label.
- 4.3 The compliance verifications submitted by the applicant will be treated confidentially.

#### 5 Use of the Environmental Label

- 5.1 The terms governing the use of the Environmental Label by the applicant are stipulated by a Contract on the Use of the Environmental Label to be concluded with RAL.
- Within the scope of such contract the applicant undertakes to comply with the requirements under paragraph 3 as long as he makes use of the Environmental Label. RAL shall be informed of considerable changes in the materials used (e.g. leather, textiles, foams). In such cases, the applicant may be required to submit new compliance verifications.
- 5.3 Contracts on the Use of the Environmental Label are concluded to fix the terms for the labelling of products under paragraph 2. Such contracts shall run until December 31, 2008.
  - They shall be extended by periods of one year each, unless terminated in writing by March 31, 2008 or March 31 of the respective year of extension.
  - After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.
- The applicant (manufacturer) shall be entitled to apply to RAL for an extension of the right to use the label to the product entitled to the label if it is to be marketed under another brand/trade name and/or under other marketing organizations.
- The Contract on the Use of the Environmental Label shall give the following particulars:
- **5.5.1** Applicant (Manufacturer)
- **5.5.2** Brand/trade name, product designation
- **5.5.3** Distributor (label user, i.e. the marketing organization according to para. 5.4.
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#### Appendix 1 to the Basic Criteria RAL-UZ 117

The following limiting values apply to preservatives used in leather for transportation and storage protection:

•	4-chloro-3-methylphenol	< 300 mg/kg
•	n-octyl isothiazolinone	< 100 mg/kg
•	o-phenylphenol	< 500 mg/kg

The following substances must not be used in leather. Starting out from the analysis procedure and the detection limit of these substances the requirement shall be considered met if the following limit values are not exceeded in leather:

•	chlorophenols (including salts and esters)	< 1 mg/kg
•	bromophenols (including salts and esters)	< 1 mg/kg
•	2-(thiocyanomethylthio)benzothiazole (TCMTB)	< 5 mg/kg
•	methylene-bis-thiocyanate (MBT)	< 5 mg/kg

Additional limit values may be adopted into Annex 1 by the Umweltbundesamt (Federal Environmental Agency) in consultation with LGA Bayern (Regional Trade Institute - Bavaria) and the specialized leather institutes "Lederinstitut Gerberschule Reutlingen e.V." (LGR Reutlingen) (Leather Institute German Tanners School, Reutlingen) and Forschungsinstitut für Leder- und Kunstledertechnologie (FILK Freiberg) (Institute of the Leather Industry, Material Testing and Research Institute). In the same way, the limit values may be adapted to the state-of-the-art.

#### **Detection Tests:**

The following tests may be used for detection of <u>chlorophenol</u>, <u>bromophenol</u>, <u>4-Chloro-3-methylphenol</u>:

- A defined quantity of a comminuted leather sample is heated with 1 m KOH in a
  drying chamber. An aliquot of the extract is derivatized with acetic acid anhydride.
  The derivative is then extracted with n-hexane and finally analyzed on a capillary
  gas chromatograph by means of ECD.
- LMBG test (Section 35, 82.02) or similar tests. (LMBG: Lebensmittel-und Bedarfsgegenständegesetz Food and Other Commodities Act).



n-octyl isothiazolinone and 2-(thiocyanomethylthio)benzothiazole (TCMTB) are determined using high-performance liquid chromatography (HPLC) and a UV detector. For the purpose of sample preparation, a defined quantity of the comminuted leather sample is extracted with methanol in a Soxhlet apparatus. After filtration through a membrane it is chromatographed in methanol/water/acetic acid 75/25/0.4.

The determination of <u>o-phenylphenol</u> is done simultaneously with the test for chlorophenols, yet here the analysis is to be done on a GC-MS (gas chromatography/mass spectrometer) (not on a GC-ECD as in the case of chlorophenols). The comminuted leather sample is mixed with an internal standard and a caustic potash solution and then heated. A part of the solution is mixed with acetic acid anhydride and hexane and then stirred. Derivatization occurs during this process. The hexane phase is analyzed on the GC-MS.



#### Appendix 2 to the Basic Criteria RAL-UZ 117

Dyes and Pigments the use of which is not permitted under paras. 3.1.4.3 and 3.1.5.1:

Azo dyes, which potentially cleave 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),
                                                         (119-93-7),
3,3'-dimethylbenzidine
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),
                                                         (95-53-4),
o-toluidine
2,4-diaminotoluene
                                                         (95-80-7),
2,4,5-trimethylaniline
                                                         (137-17-7).
4-aminoazobenzene
                                                         (60-09-3),
                                                         (90-04-0).
o-anisidine
```

**Dyes that are carcinogenic, mutagenic or toxic to reproduction** (according to Commission Decision 2002/371/EC (Community ecolabel for textile products) and Öko-Tex Standard 100):

•	. ,	,
C.I. Basic Red 9	C.I. 42 500	0,
C.I. Disperse Blue 1	C.I. 64 500	0,
C.I. Acid Red 26	C.I. 16 150	0,
C.I. Basic Violet 14	C.I. 42 510	0,
C.I. Disperse Orange 11	C.I. 60 700	0,
C.I. Direct Black 38	C.I. 30 23	5,
C.I. Direct Blue 6	C.I. 22 610	0,
C.I. Direct Red 28	C.I. 22 120	0,
C.I. Disperse Yellow 3	C.I. 11 85	5.

#### Potentially sensitising 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. Disperse Red 17
C.I. Disperse Red 17
C.I. Disperse Yellow 1
C.I. Disperse Yellow 3
C.I. Disperse Yellow 9
C.I. 10 375,
C.I. Disperse Yellow 9

C.I. Disperse Yellow 39, C.I. Disperse Yellow 49.

#### **Heavy Metal-Containing Dyes**

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



#### Appendix 3 to the Basic Criteria RAL-UZ 117

#### List of Recognised Testing Institutes for the Detection of Formaldehyde and other Volatile Organic Compounds for Award of the Environmental Label RAL-UZ 117

Recognised by the Bundesanstalt für Materialforschung und -prüfung (BAM) (Federal Institution for Material Research and Testing), Expert group IV.2, Emissions from Materials: (as of March 2004) in accordance with para. 3.2.1 of the Basic Criteria or Chapter 7 of the Test Method.

ALAB GmbH Wilsnacker Straße 15

10559 Berlin Contact: Ms. Cremer

Phone: (030) 3949983

Eco-Umweltinstitut Sachsenring 69 50667 Köln (Cologne)

Contact: Dr. F. Kuebart

Phone: (0221) 931245-0

Fraunhofer-Institut für Bauphysik

(Fraunhofer Institute for Building Physics)

POBox 1152

83601 Holzkirchen

Contact: Dr. K. Breuer

Phone: (08024) 643-33

**Eurofins Danmark** Großmoorbogen 25 21079 Hamburg

Contact: Mr. R. Oppl

Phone: (040) 79752555

Gesellschaft für Umweltschutz

TÜV Nord mbH

(Environmental Protection Institute - Technical Control Board - North)

Große Bahnstraße 31 22525 Hamburg

Contact: Mr. W. Schwampe

Phone: (040) 8557-2770

of these tests:

Bundesanstalt für Materialforschung und – prüfung (BAM)

Fachgruppe IV.2, Emission aus Materialien

(Federal Institution for Material Research and Testing),

Expert group IV.2, Emissions from Materials)

Unter den Eichen 87

12205 Berlin

Dr. O. Jann Contact:

Phone: (030) 8104-1422

IHD Institut für Holztechnologie (Institute for Wood Technology)

Zellescher Weg 24 01217 Dresden

Contact: Mr. K. Aehlig

Phone: (0351) 4662-231

LGA QualiTest GmbH

(Regional Trade Institute - Bavaria)

Quality Tests Tillystraße 2

90431 Nürnberg (Nuremberg)

Contact: Dr. F. Jungnickel

Phone: (0911) 6555-601

TÜV Süddeutschland Bau und Betrieb GmbH

Westendstraße 199 80686 München (Munich)

Mr. W. Lindenmüller Contact:

Phone: (89) 5791-1070

WKI Fraunhofer-Institut für Holzforschung (Fraunhofer Institute for Wood Research)

Bienroder Weg 54 E 38108 Braunschweig

Contact: Dr. T. Salthammer

Phone: (0531) 2155-350

Umweltbundesamt

Fachgebiet II 1.3, Gesundheitsbezogene Exposition,

Innenraumhygiene

(Federal Environmental Agency - Expert Group // 1.3

Health-related exposition - Indoor Hygiene)

Corrensplatz 1 14195 Berlin

Contact: Dr. D. Ullrich

Phone: (030) 8903-1644

In addition to the above-listed institutes the following institutes meet all requirements for the execution



Since BAM is a reference test institute and UBA only takes action in matters of air hygiene, these institutes do not do the RAL-UZ 117 tests as routine tests.



No

on the Award of the Environmental Label

RAL, reg. assoc., as label awarding agency, and the firm of (Distributor/Manufacturer)

as applicant, conclude the following Contract on the Use of the Environmental Label:

 Under the following conditions the applicant shall be entitled to use the Environmental Label for the labelling of the product/product group/project: Low-Emission Upholstered Furniture

#### "(Brand/Trade Name - Product Designation)"

This shall not include the right to use the Environmental Label as part of a brand. Unless otherwise agreed, the Environmental Label shall only be used in the above given shape and colour and shall be marked at the bottom "Jury Umweltzeichen" (Environmental Label Jury). The entire inner surrounding text shall always be identical as regards size, form, thickness and colour of the letters and it shall be easy to read.

- The Environmental Label according to para. 1 shall only be used for the above-mentioned product/product group/ project.
- 3. If the Environmental Label is used for advertising purposes the applicant shall make sure that it is exclusively used in connection with the above-named product/product group/ project for which the use of the Environmental Label has been granted and settled under this contract. The applicant shall be solely responsible for the way the label is used, above all, in advertising.
- 4. During the entire period of label use the product/product group/project to be labelled shall comply with all requirements and conditions for the use of the label as specified in the "Vergabegrundlage für Umweltzeichen RAL-UZ 117" (Basic Criteria for Award of the Environmental Label RAL-UZ 117), as amended. This shall also apply to the reproduction of the Environmental Label (including the surrounding text). Claims for damages against RAL, especially on the grounds

Sankt Augustin, this day of

RAL e.V. General Managing Director SPECIMEN

of third party objections to the applicant's use of the label and the accompanying advertising shall be ruled out.

- 5. If the "Basic Criteria for Award of the Environmental Label" provide for checks by third parties the applicant shall bear the costs accruing in connection therewith.
- 6. Should the applicant himself or third parties find out that the applicant does not comply with the conditions as stipulated in paras. 2-5 he shall be liable to inform RAL and stop the use of the Environmental Label until the conditions are complied with again. Should the applicant be incapable of restoring the state required for the use of the label immediately or should the applicant seriously offend against this contract RAL may, if necessary, withdraw the Environmental Label and prohibit the applicant from using the label any longer. Claims for damages against RAL because of the withdrawal of the label shall be ruled out.
- 7. The applicant undertakes to pay RAL an amount according to the "Beitragsordnung für das Umweltzeichen" (Schedule of Contributions for the Environmental Label), as amended, for the period of use.
- 8. According to the Basic Criteria for Award of the Environmental Label RAL-UZ 117 this contract will run until December 31, 2008. It shall be extended by periods of one year each, unless terminated in writing by March 31, 2008 or by March 31 of the respective year of extension. After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect the products being still in the market.
- **9**. Products/projects marked with the Environmental Label and the advertising for these products/projects may reach the consumer only when naming the firm of the

(Applicant/Distributor)

Date, Place

(Signature of authorized representative and corporate seal)



#### Annex 1 to the Contract pursuant to RAL-UZ 117

#### **Environmental Label for**

"Low-Emission Upholstered Furniture"

Please use this form!

Manufacturer (Applicant):	
Distributor (Label User):	
Brand/Trade Name:	
<ul><li><u>Upholstered Furniture</u></li><li>Furniture designation according to DIN 68880:</li></ul>	
Textile and Leather Covers	
Covers available (Different types of material)	
(Trade Name)	
<ul><li><u>Product materials:</u></li><li>Fraction of wood:</li><li>Fraction of wood-based material:</li></ul>	percent by volume



Origin of the Wood, Paragraph 3.1.1	
Type of Wood <sup>2)</sup> :	
Origin of the wood used <sup>2)</sup> :	
or	
Attached is a certificate according to the FSC Criteria or equivalent certification systems:	
Formaldehyde in Wood-Based Materials, Paragraph 3.1.2  If compliance with the requirements of para. 3.1.2, 1st sentence, is to be furnished:	
Only the wood-based material entitled to use the Environmental Label according to RAL-UZ 76 is used for the product:	
Trade Name:	
No. of the Contract on the Use of Environmental Label:	
of the Manufacturer:	
<sup>2)</sup> or	
Attached is a test report according to the Test Method for wood-based materials (Federal Health Bulletin 10/91 p. 488-489).	
2) Please delete what does not apply	



#### Leather, Paragraph 3.1.4<sup>2)</sup>

- Test report according to para. 3.1.4.1	
- Declaration from the leather supplier according to para. 3.1.4.2	
- Declaration on dyes and pigments according to para. 3.1.4.3 as	
- Annex 3 to the Contract pursuant to RAL-UZ 117 <sup>2)</sup>	
or	
- Test Report (Method mentioned in Öko-Tex Standard 200) <sup>2)</sup>	
Textiles, Paragraph 3.1.5 <sup>2)</sup>	
- Declaration on dyes and pigments according to para. 3.1.5.1 as	
- Annex 3 to the Contract pursuant to RAL-UZ 117 <sup>2)</sup>	
or	
- Test report (Method mentioned in Öko-Tex Standard 200) <sup>2)</sup>	
- Measurement results regarding biocides according to para. 3.1.5.2	
(Test method mentioned in Öko-Tex Standard 200)	
- Alternative tests relating to paras. 3.1.5.1 and 3.1.5.2	
Compliance verification by means of a certificate/contract by	
Öko-Tex 100	
EU eco-label for textiles	
Quality Label Natural Textiles	
Moth Proofing , Paragraph 3.1.6	
- Determination of the absolute content of phyretroid/permethrin in the material	
- Consumer information	
<u>Upholstery</u> , Paragraph 3.1.7 <sup>2)</sup>	
<u>Please Note:</u> Compliance verification will only be required if the respective	
proportion of upholstery materials exceeds 5 percent by volume of the total	
volume of the piece of upholstered furniture.	
<u>Latex foam</u>	
- Test reports on latex foam according to para. 3.1.7.1	
Polyurethane foam	
- Declaration from the pre-supplier regarding organic tin and HFC	
PFC, H-CFC, CFC or methylene chloride pursuant according	
to para. 3.1.7.2	

<sup>&</sup>lt;sup>2)</sup> Please delete what does not apply



#### Coconut fibres

- Rubber-coated coconut fibres have not been used.	
If yes,	
- test reports are submitted, like for latex foam.	
Coating Systems, Paragraph 3.1.8 <sup>2)</sup>	
Please Note: Compliance verification will be required only if coated wood surface	ces exist
(small parts with a content of less then 5 percent by volume will be exempted.)	
The painting plant is equipped with an exhaust gas purification system meeting the	
requirements of TA Luft or EU Directive on Solvents.	
(If this is not the case the applicant shall present a declaration according to	
Annex 4 to the Contract pursuant to RAL-UZ 117.)	
Attached are Technical Data Sheets and Safety Data Sheets according to	
EU Directive 91/155/EEC.	

#### **Applicant's Statement**

It is hereby stated that

- the packaging system is so designed as to allow the out gassing of volatile <sup>3)</sup>,
- the upholstered furniture is up to the usual quality standards regarding serviceability (e.g. safety, abrasion resistance, tensile strength, light fastness, rub fastness, deformation by compression) according to current ISO/EN/DIN Standards,
- functionally compatible replacements are guaranteed for a period of at least five years for those parts contained in upholstered furniture which are subject to wear, e.g. hinges and table leaves,
- neither material protection agents (fungicides, insecticides, flame-retardants) nor halogenated organic compounds (e.g. chloro-organic carriers in textiles, chlorinated paraffins in leather oil) have been added to upholstered furniture, including the materials used for the manufacture (leather, textiles, foams, wood-based materials, adhesives etc). [Exempted are fungicides exclusively used for pot preservation of aqueous coatings and adhesives, preservatives for transport preservation of hides and tanned semi-finished products (see para. 3.1.4.2), moth proofing of textiles made of animal fibres (see para. 3.1.6), adhesives based on aqueous dispersions and flame retardants using inorganic ammonium phosphates (diammonium phosphate, ammonium polyphosphate etc.), boron compounds (boric acid, borates) or other dehydrating minerals (aluminium trihydrate or the like) for flame retarding purposes],



- Advertisements do not include any information, such as "tested for its biological living quality" or those which play down risks in terms of Article 23, para. 4, of Directive 67/548/EEC, as, for example, "non-toxic", "non-harmful or the like".).

#### Further Annexes<sup>2)</sup>

- Test report according to para. 3.2.1
- Description of the packaging system according to para. 3.2.2
- Declaration from the pre-supplier according to para. 3.3 in accordance with Annexes 3 and 4
- Consumer information according to para. 3.4

Place:	Applicant
lace.	Abblicant

Date: (signature of authorized representative and corporate stamp)

<sup>1)</sup> Please complete one Annex for each different product designation

Please delete what does not apply

<sup>3)</sup> If outgassing is impossible, please explain the reasons why.

Products having a Supply Reg.No. are reported by the Federal Environmental Agency to the Bundesmaterialkatalogis-ierungszentrale (Central Federal Office for Material Registration). Its information system kept for various procurement offices of the Federal Government lists these products with a special mark indicating that they have been awarded the Environmental Label. The Environmental Label has no influence on the issuance of a Supply Reg.No. .



### Annex 2 to the Contract pursuant to RAL-UZ 117 Environmental Label for

"Low-Emission Upholstered Furniture"

Please use this form!

### Manufacturer's Declaration with respect to the Materials Used<sup>1)</sup>

	on with the Application for Award of the ntal Label according to RAL-UZ 117 (para. 3.1.3.)			
by the firm:				
headquarte	red in:			
	g compliance verification is confirmed erials used (trade names):			
Please prov	vide full information.			
Para.			Yes	No
3.1.3	General Substance Requirements The materials used do not contain any substances as which are classified in Annex I to Directive 67/548/EE Section 4a, para. 3, Ordinance on Hazardous Substantas very toxic (T+), toxic (T)	C or according to		
	or which are classified ■ as carcinogenic according to EC Category Carc.Cat.1, Carc.Cat.2			
	■ as mutagenic according to EC Category Mut.Cat.1	, Mut.Cat.2,		
	as toxic to reproduction according to Repr.Cat.1, F	Repr.Cat.2,		
	■ in TRGS 905 as carcinogenic, mutagenic or toxic	to reproduction		
	<ul> <li>in the MAK Value List as</li> <li>carcinogenic working material Category 1 or Cate</li> <li>germ-cell mutagenic working material Category 1</li> </ul>			
Confirmatio	on by the company.			
Place: Date:		e by authorized repre orate seal	sentati	ve

1/1

<sup>1)</sup> According to para. 3.1.3 manufacturers' declarations are to be submitted for the following materials: leather, textiles, upholstery materials, coating materials, adhesives. If different materials are used one Annex 2 to the Contract pursuant to RAL-UZ 117 is to be completed for each material.



### Annex 3 to the Contract pursuant to RAL-UZ 117 Environmental Label for

"Low-Emission Upholstered Furniture"

Please use this form!

## Manufacturer's Declaration relating to Dyes and Pigments used as well as Substances added to Leather<sup>1)</sup> and Textiles<sup>1)</sup>

In connection with the Application for Award of the Environmental Label according to RAL-UZ 117 (paras. 3.1.4.3, 3.1.5.1 and 3.3)		
by the firm:		
headquartered in:		
the following compliance verification is confirmed for the materials used:		

We hereby confirm, that neither leather<sup>1)</sup> nor textiles<sup>1)</sup> contain any of the dyes and pigments listed below:

Azo dyes, which potentially cleave 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).

<sup>1)</sup> Please delete what does not apply



**Dyes that are carcinogenic, mutagenic or toxic to reproduction** (according to Commission Decision 2002/371/EC (Community 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 sensitising dyes (according to Commission Decision 2002/371/EC and Öko-Tex Standard 100):

C.I. Disperse Blue 3 C.I. Disperse Blue 7 C.I. Disperse Blue 26 C.I. Disperse Blue 35, C.I. Disperse Blue 102, C.I. Disperse Blue 106, C.I. Disperse Blue 124,	C.I. 61 505, C.I. 62 500, C.I. 63 305,
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.

#### We hereby declare that:

- Neither material protection agents (fungicides, insecticides, flame-retardants) nor halogenated organic compounds (e.g. chloro-organic carriers in textiles, chlorinated paraffins in leather oil) have been added to the materials used for the manufacture (leather, textiles). [Exempted are fungicides exclusively used for pot preservation of aqueous coatings and adhesives, preservatives for transport preservation of hides and tanned semi-finished products (see para. 3.1.4.2), moth proofing of textiles made of animal fibres (see para. 3.1.6), adhesives based on aqueous dispersions and flame retardants using inorganic ammonium phosphates (diammonium phosphate, ammonium polyphosphate etc.), boron



compounds (boric acid, borates) or other dehydrating minerals (aluminium trihydrate or the like) for flame retarding purposes].

Confirmation	by	the	com	pany.
--------------	----	-----	-----	-------

Place: Applicant:

Date: (Signature of authorized representative

and corporate seal)



### Annex 4 to the Contract pursuant to RAL-UZ 117 Environmental Label for

"Low-Emission Upholstered Furniture"

In connection with the Application for Award of the

Please use this form!

### Manufacturer's Declaration with respect to the Coating Systems<sup>1)</sup>

Environmental Label according to RAL-UZ 117 (paras. 3.1.8.1 and 3.1.8.2)

red in:			
g compliance verification is confirmed ing system (trade name):			
vide full information.			
		Yes	No
Requirements for liquid coating systems (to be completed only if applicable)  The liquid coating system does not exceed			
	g compliance verification is confirmed ing system (trade name):  ride full information.  Requirements for liquid coating systems (to be completed only if applicable)	g compliance verification is confirmed	g compliance verification is confirmed and system (trade name):  ride full information.  Yes  Requirements for liquid coating systems (to be completed only if applicable)

■ the maximum VOC content of 420g/l for the coating materials

by way of calculation the maximum VOC content of 420g/l for the entire coating system of the product in upholstered furniture and other materials taking into account the quantity of the coating ma-

The liquid coating systems meet the requirements of para. 3 of VdL-Richtlinie Holzlacksysteme (VdL Directive on Wood Paint Systems).

used in upholstered furniture

or

terials used.

1) Manufacturer's Declarations won't be required for small parts with a share of less than 5 percent by volume. If the coating system is composed of materials supplied by different manufacturers one Annex 2 to the Contract pursuant to RAL-UZ 117 is to be completed for each coating material.

3.1.8.2



Para.		Ja	Nein
3.3	- Neither material protection agents (fungicides, insecticides, flame-retardants) nor halogenated organic compounds (e.g. chloro-organic carriers in textiles, chlorinated paraffins in leather oil) have been added to the coating system. [Exempted are fungicides exclusively used for pot preservation of aqueous coating materials and adhesives, preservatives for transport preservation of hides and tanned semi-finished products (see para. 3.1.4.2), moth proofing of textiles made of animal fibres (see para. 3.1.6), adhesives based on aqueous dispersions and flame retardants using inorganic ammonium phosphates (diammonium phosphate, ammonium polyphosphate etc.), boron compounds (boric acid, borates) or other dehydrating minerals (aluminium trihydrate or the like) for flame retarding purposes].		

Confirmation by the company (Manufactu	rer of the Coating Material):
Place: Date:	Signature of authorized representative and corporate seal



#### To the

#### **Applicant**

#### **Check List**

Re: Application for Award of the Environmental Label according to RAL-UZ 117

for "Low-Emission Upholstered Furniture"

Dear Madam, Dear Sir,

to make sure that your application for Award of the Environmental Label is processed without delay you are kindly requested to submit the following documents to RAL:

- Product-related informal application on the firm's letter-head paper indicating the federal state where applicant's factory is located that manufactures the product to be marked with the label,
- Annex 1 to the Contract pursuant to RAL-UZ 117
- Certificate according to para. 3.1.1
- Test certificate according to para. 3.1.2
- Suppliers' declaration according to para. 3.1.3 in accordance with Annex 2
- Product information of the suppliers according to para. 3.1.3
- Test report according to para. 3.1.4.1
- Declaration from the leather supplier according to para. 3.1.4.2
- Declaration from the leather supplier according to para. 3.1.4.3 in accordance with Annex 3
   (alternative compliance verifications according to Öko-Tex Standard 200)
- Declaration from the textile supplier according to para. 3.1.5.1 in accordance with Annex 3
  (alternative compliance verifications according to Öko-Tex Standard 200)
- Measurement results according to para. 3.1.5.2
- Certificate/Contract according to para. 3.1.5.3 as alternative compliance verification with respect to paras. 3.1.5.2 and 3.1.5.3
- Analysis (determination of the absolute content) according to para. 3.1.6
- Consumer information according to para. 3.1.6
- Test reports according to para. 3.1.7.1
- Declaration from the pre-suppliers according to para. 3.1.7.2
- Test reports according to para. 3.1.7.3 if rubber-coated coconut fibres are used
- Declaration from the manufacturer of the coating material according to paras. 3.1.8.1 and 3.1.8.2 in accordance with Annex 4
- Test report according to para. 3.2.1
- Description of the packaging system according to para. 3.2.2
- Declaration from the pre-supplier according to para. 3.3 in accordance with Annexes 3 and 4
- Consumer information according to para. 3.4
- Expected sales of the products to be marked with the Environmental Label during the year of application. This information is required only if, so far, no other Contract on the Use of the Environmental Label according to RAL-UZ 117 has been concluded with RAL.