



IKEA of Sweden AB

Specification

Chemical compounds and substances

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Replaces:
AA-10911-11

Chemical compounds and substances

Contents

This specification describes IKEA bans and restrictions on certain chemical compounds and substances due to national or international regulations and/or health and environmental concerns.

Implementation of changes

Changes in this specification, version no AA-10911-13, shall be implemented the latest from packaging date stamp 1619 (year 2016 week 19) unless otherwise stated below.

Packaged products having a packaging date stamp earlier than as specified above shall be shipped to IKEA before shipping products compliant with this version of the specification.

Renewal of verification documentation

Signing of the self declaration by the raw material supplier/final chemical processor means that all their materials delivered after signature date comply with all applicable requirements in IOS-MAT-0010 version 13 (AA-10911-13) – regardless of the specification's latest implementation date stamp - for the IKEA sales article – of the changed requirements.

For requirements that have not changed from version AA-10911-11, or only been modified for clarifications or minor changes, existing verification documentation does not have to be renewed in advance of normal renewal. This means that self declarations do not need to be renewed for:

- solid wood, wood-based materials, and wood-like natural materials,
- paper and cardboard materials,
- polymerics,
- polyurethane foam,
- metal (existing documentation for metal does not need to be renewed, but there is a new document demand for radionuclides),
- adhesives,
- glass and enamelware,
- other materials without material-specific sections.

Changes in official substance lists and classifications

When new substances are added to lists of substances (in laws, in standards or from authorities) or classified according to the classifications that are referred to in this specification, the requirements for these substances shall be fulfilled within four months after the substance has been added to the cited list, unless otherwise specified. Annual Self Declaration (SD) does not need extra renewal in case new substances are added to such lists, unless otherwise stated.



Approvals

Approvals for use of the following substances that require approval from IKEA are only valid if they are connected to the Product Documentation:

- flame retardants,
- biocides added in order to impart properties to the final product,
- wood preservatives in rubber wood and tropical fruit-tree wood,
- fragrances
- per- and polyfluoroalkyl substances (PFASs), (only approvals based on previous versions of IOS-MAT-0010)

About this specification

The purpose of IKEA requirements concerning chemical substances in IKEA products is to:

- minimise harmful effects to customers' health and to the environment from IKEA products.
- ensure compliance of IKEA articles with health and environmental regulations in all IKEA markets.

Unless otherwise stated, the requirements in this specification are valid for each separate homogeneous material in the article.

This specification concerns chemical substances in all materials and components in IKEA articles, except:

- surface coatings and coverings that are included in the scope of *IOS-MAT-0066*.
- leather that is included in the scope of *IOS-MAT-0011*.
- hair on leather that is included in the scope of *IOS-MAT-0104*.
- artificial leather (PU-coated fabric) that is included in the scope of *IOS-MAT-0079*.
- candle raw materials, see instead *IOS-MAT-0049*.
- adhesives that are included in the scope of *IOS-MAT-0069*.
- electrical materials/components as defined in *IOS-PRG-0027*.
- latex in mattresses that is in the scope of *IOS-MAT-0012*.
- labels that are in the scope of *IOS-PRG-0019*.
- chemical products retailed by IKEA in the scope of *IOS-MAT-0074*.
- art materials that contain chemical products in the scope of *IOS-MAT-0095*.
- zip fasteners that are in the scope of *IOS-PRG-0029*. This exception starts to apply when the next version of *IOS-PRG-0029* (AA-359955-3) comes into effect.
- according to other exceptions to the scope that may be made in the Technical Description (TED) for a particular article or in other, material-specific IKEA specifications.

The requirements stated in *section 1* are valid for all materials and complete products. This includes all material categories regardless if they are included in material-specific sections of *section 2* of this specification or not, but it does not include the exceptions to *IOS-MAT-0010* listed above.

For composite materials that are made of a mixture of materials from two different material-specific sections in *section 2*, the requirements in both sections apply. For example:

- Supporting high-pressure laminate (thickness ≥ 2 mm): paper and polymeric requirements both apply.
- Wood-plastic composite: wood/wood-based and polymeric requirements both apply.
- Elastic band with rubber core and textile thread.

Unless otherwise stated, requirements in *section 3* are valid for the complete product, including any materials that otherwise are outside the scope of this specification.



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Further chemical and documentation requirements for the product or constituent materials can be specified in the individual technical description or in other IKEA specifications (for instance children's articles and food-contact products).

Note that the requirements apply to materials in products. This means that it is not sufficient to secure compliance for a material as it is used in production; avoiding contamination during the manufacturing process and during storage and transport is also necessary.

All references to standards and legislations shall be seen as referring to the latest updated version, unless otherwise stated.



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1 General requirements for all materials

Note: The requirements in this section are valid for all materials. This includes all material categories listed in *section 2* Material-specific requirements, below as well as those materials not specifically listed.

| Substance | Requirements | Test method | Documentation |
|--|--|--|---------------|
| Biocides of all kinds | Biocides added in order to impart properties to the final product are not allowed to be used without approval from IKEA. This includes any addition of biocides for preservation/protection during transport or storage of the final IKEA product (e.g. antimould treatment). Specifically, the biocide dimethylfumarate (CAS No 624-49-7) is not allowed to be used. Contamination limit value: 0.1 mg/kg. This requirement is not applicable for the materials glass, ceramics, enamel and metal. | Extraction and GC-MS or similar | SD |
| Cadmium (Cd) and its compounds | Not allowed to be used. Contamination limit value: 40 mg cadmium/kg. | Total digestion followed by <ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) or <ul style="list-style-type: none"> • ICP (Inductively Coupled Plasma) | SD |
| CMR substances (category 1A or 1B) and Substances of Very High Concern (SVHC) | CMR-substances and SVHC are not allowed to be used (unless otherwise stated in a material-specific section of this specification). Contamination limit value: 0.10 %. | Screening test. Different extraction and analysis methods depending on which materials and substances to be tested. | SD |
| Fragrances | Fragrances, perfumes and masking agents are not allowed to be used without approval from IKEA. This requirement is not relevant for the following materials: glass, ceramics, enamel and metal. | | SD |



Table 1 General requirements for all materials

| Substance | Requirements | Test method | Documentation |
|--|--|--|---------------|
| Hazardous waste in material that contains any proportion of recycled material | <p>It is not allowed to use any hazardous waste in any materials for IKEA articles unless this is in accordance with permits from competent authorities for the recycling of such hazardous waste.</p> <p>Examples of hazardous waste not allowed (note, not complete list):</p> <ul style="list-style-type: none">• Waste oil• Recycled plastic from electronic products that contains brominated flame retardants,• Recycled wood chips from any kind of preservative-impregnated wood, e.g. creosote-containing railway sleepers and telephone poles,• Radioactive metal scrap | | SD |
| Lead (Pb) and its compounds | <p>Not allowed to be used.</p> <p>Contamination limit value: 90 mg lead/kg.</p> | <p>Total digestion followed by</p> <ul style="list-style-type: none">• AAS (Atomic Absorption Spectroscopy) or• ICP (Inductively Coupled Plasma). | SD |



2 Material-specific requirements

2.1 Solid wood, wood-based materials, and wood-like natural materials

Note: Includes also leaf and straw, and linoleum.

Note: For requirements regarding formaldehyde in solid wood and wood-based materials, see specification *IOS-MAT-0003*. For requirements regarding formaldehyde in glued bamboo, see specification *IOS-MAT-0096*. For requirements specifically regarding formaldehyde in adhesives for wood and wood-based materials, see specification *IOS-MAT-0069*.

| Table 2 Solid wood, wood-based, and wood-like natural materials | | | |
|--|---|---|--|
| Substance | Requirements | Test method | Documentation |
| Lead (Pb) and its compounds in particleboard and wet- and dry-process fibre-board | Requirement as stated in <i>section 1</i> . Here: extra documentation requirement due to risk of contamination in boards made of recycled materials from post-consumer waste. | Test method as stated in <i>section 1</i> . | <ul style="list-style-type: none"> Materials containing >30% recycled wood material from post-consumer waste calculated as an average on a weekly basis: SD and TR¹ Other materials: SD |
| Lindane | Not allowed to be used. Contamination limit value: 1.0 mg/kg. | Extraction and GC-MS or similar | <ul style="list-style-type: none"> Rubberwood: SD and TR Board materials that contain >30 % recycled wood material from post-consumer waste calculated as an average on a weekly basis: SD and TR1 Other materials: SD |
| Organotin compounds | No kind of organotin compounds are allowed to be used. Contamination limit value: Sum of all compounds listed in <i>Appendix C</i> : 2.5 mg/kg. | Extraction and GC/MS or similar | SD |
| Pentachlorophenol (PCP) including salts and esters of PCP | Not allowed to be used. Contamination limit value: 3.0 mg/kg. | CEN/TR 14823:2003 | <ul style="list-style-type: none"> Rubberwood: SD and TR Board materials that contain >30 % recycled wood material from post-consumer waste calculated as an average on a weekly basis: SD and TR1 Other materials: SD |

¹ Test shall be made on sample with > 30 % recycled wood material from post-consumer waste; the sample shall also have at least average annual level of such recycled material.



| Table 2 Solid wood, wood-based, and wood-like natural materials | | | |
|--|---|---------------------|--|
| Substance | Requirements | Test method | Documentation |
| <p>Quality assurance programme for recycled material in particleboard and wet- and dry-process fibre-board that contain any post-consumer recycled material</p> | <p>Boards that contain post-consumer recycled materials shall be produced with a documented quality assurance (Q.A.) program for recycled material with respect to heavy metals and other hazardous substances that might occur.</p> <p>If >30 % post-consumer recycled material, calculated as an average on a weekly basis, is used in the production of board for IKEA products, the Q.A. program shall involve monitoring by a third party quality control organisation.</p> | | SD from the board manufacturer |
| <p>Radioactivity</p> | <p>Maximum level: 300 Bq/kg.</p> | Gamma spectroscopy. | <p>For wood (solid wood, veneer and other raw material for wood-based boards) that comes from areas of Ukraine, Belarus, Russia, Austria, Finland and Sweden (countries affected by the Chernobyl fall-out) with >1 Curie Cesium-137 fallout per km²:</p> <ul style="list-style-type: none"> • TR (testing frequency as per agreement between IKEA and supplier).² <p>For all other such material:</p> <ul style="list-style-type: none"> • SD that material does not come from areas with fall-out >1 Curie per km². |

² For information about areas affected by the Chernobyl fall-out see Atlas of Caesium Deposition on Europe after the Chernobyl Accident.



| Substance | Requirements | Test method | Documentation |
|--|--|---|---------------|
| Wood preservatives in rubberwood and in tropical fruit-tree wood | Not allowed to be used without approval from IKEA. Contamination limit value migration of boron and its compounds: 100 mg boron/kg. | If the wood is coated, the coating shall be removed before testing. Boron: DIN 53160 (extraction with synthetic perspiration solution, 16h, 23 °C) followed by ISO 11885 (ICP/AES analysis). Organic preservatives: EN 71-10 and EN 71-11 | SD |



2.2 Paper and cardboard materials

Note: Includes solid paperboard.

Note: Includes gluing of paper/cardboard to paper/cardboard.

| Table 3 Requirements for paper and cardboard materials | | | |
|--|---|--|---|
| Substance | Requirement | Test method | Documentation |
| Azodyes that may release carcinogenic arylamines (see <i>Appendix A</i>) in materials where colouring agents have been added | Not allowed to be used. Contamination limit values for each arylamine: 20 mg/kg product. | EN 14362-1 and EN 14362-3 | SD |
| Boric acid, borax and other borates in starch-based adhesive in cardboard materials | Exception from general CMR requirement: Allowed to be used. Limit value of content of boron compounds in the ready-to-use adhesive: 0.30 % boron. | Total digestion followed by determination of boron by <ul style="list-style-type: none"> • AAS or • CP-OES/MS | SD - if boron compounds are used, this needs to be declared |
| Elemental chlorine (chlorine gas) used for pulp bleaching | Pulp that has been bleached with elemental chlorine (chlorine gas) is not allowed to be used in the manufacturing of paper and cardboard. I.e., ECF or TCF paper pulp shall be used. | | SD |
| Phthalates | The following phthalates are not allowed to be used: <ul style="list-style-type: none"> • phthalates that are CMR substances category 1A or 1B • phthalates that are SVHC • phthalates listed on the State of California "Proposition 65" list • dioctyl phthalate (di-n-octylphthalate) (DNOP), (CAS no. 117-84-0) Contamination limit value for each phthalate: 100 mg/kg. Note: For information purposes IKEA will aim to keep an updated list on IKEA Supplier Portal of phthalates that are classified as CMR (cat. 1A and 1B) or SVHC, or that are on the Californian Proposition 65 list, and thus in the scope of this requirement. | Extraction and GC-MS or similar | SD |
| Primary aromatic amines (PAA) | PAA according to <i>Appendix B</i> are not allowed to be used. Contamination limit value: 5 mg/kg for each PAA. | EN 71-10 and EN 71-11 | SD |

Note: The "not allowed to be used" requirements are not valid for recycled paper raw material, i.e. the requirements are not applied to the original paper that became the recycled raw material. However, the "not allowed to be used" requirements as well as the limit values do apply to the reprocessing of the recycled raw material to make new paper material.

2.3 Textile materials

Note: Including fabrics, non-woven, hook and loop fastener (“velcro”), fibre filling, fibre-based materials in carpets, and textile applications of natural fibre materials.

Note: Latex backings of carpets, with a backing grammage ≤ 200 g/m², are seen as part of the textile.

Note: Includes gluing of textile to textile.

| Table 4 Textile materials | | | |
|--|---|--|--|
| Substance | Requirements | Test method | Documentation |
| <ul style="list-style-type: none"> • Alkylphenol-ethoxylates (APEO) • Alkylphenols (AP) • Alkylphenol phosphites | Not allowed to be used. Exception: may be used in processing of wool up to and including the spinning stage. Contamination limit value for non-wool and mixtures with < 20 % wool: 100 mg/kg (sum of APEO, AP and AP phosphites). Limit value for mixtures with ≥ 20 % wool: 250 mg/kg (sum of APEO, AP and AP phosphites). | Extraction (methanol, or methanol + ammonium acetate) and HPLC | <ul style="list-style-type: none"> • All materials except fibre filling and non-woven polypropylene fabric: SD and TR³ • Fibre filling and non-woven polypropylene fabric: SD |
| Antimoth agents in wool | Treatment of wool with antimoth agents is not allowed unless otherwise stated in the TED. Contamination limit value: 5.0 mg/kg. | Extraction followed by GC-MS or similar | SD |
| Aromatic hydrocarbon solvents used for cleaning of textile surfaces (e.g. spot cleaning) | The content of total aromatic hydrocarbons in solvents shall be less than 1.0 %. Benzene-containing solvents are not allowed to be used. Contamination limit value in the solvent: 0.10 % benzene (CAS no: 71-43-2). | | SD |
| Azodyes that may release carcinogenic arylamines (see <i>Appendix A</i>) in materials where colouring agents have been added | Not allowed to be used. Contamination limit values for each arylamine in textiles: 20 mg/kg. | EN 14362-1 and EN 14362-3 | SD |

³ If risk assessment in the supply chain shows that there are no possible sources of alkylphenol (AP) or AP phosphite, then test report for only APEO is sufficient. If risk assessment shows any risk for presence of alkylphenol or AP phosphite, then test report needs to include these substances, too.



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|--|--|---|---|
| Bisphenol A (CAS no. 80-05-7) in material with any content of external recycled synthetic material | Migration limit value: 0.60 mg/l. | EN 14372 | <ul style="list-style-type: none"> Fibres of polypropylene, polyester, or polycarbonate that contain external recycled material: SD and TR Other synthetic fibres that contain external recycled material: SD |
| Cadmium (Cd) and its compounds | Requirement as stated in <i>section 1</i> . Note: Extra documentation requirement. | Total digestion followed by <ul style="list-style-type: none"> AAS (Atomic Absorption Spectroscopy) or <ul style="list-style-type: none"> ICP (Inductively Coupled Plasma). | <ul style="list-style-type: none"> Synthetic fibres that contain external recycled material: SD and TR Others: SD |
| Chlorinated aromatic dye carriers/levelling agents used for polyester and polyester-containing blends | Not allowed to be used. Contamination limit value: 2.0 mg/kg for each compound. | Solvent extraction and GC-MS or similar | SD |
| Chlorinated hydrocarbon solvents used for cleaning of textile surfaces (e.g. spot cleaning) | Not allowed to be used. | | SD |
| Chlorine and chlorine compounds for bleaching and delignification | Not allowed to be used. Exception for fibre-production of bast fibres and regenerated cellulose (for example, viscose, modal and lyocell): Chlorine compound bleaching agents are allowed to be used (for example sodium hypochlorite, sodium chlorite, chlorine dioxide); whereas, elemental chlorine (chlorine gas) is not allowed to be used. That is, ECF or TCF shall be used. | | SD |



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|--|---|--|--|
| Dimethyl formamide (CAS. no 68-12-2) in polyurethane-containing textiles including coatings | Not allowed to be used. | ISO 16000-9 and ISO 16000-6. Conditions according to <i>section 3</i> . | SD |
| Dyestuffs classified as carcinogenic or allergenic in dyed, printed or otherwise coloured materials. | Not allowed to be used. List of dyestuffs and contamination limit values: See <i>Appendix E</i> . | DIN 54231 | SD |
| Flame retardants | Flame retardants are only allowed to be used with approval from IKEA. For any approved usage, the data concerning flame retardants shall be documented (SDS). See <i>Appendix F</i> for further requirements if flame retardants are used, as well as for contamination limit values. | See <i>Appendix F</i> | <ul style="list-style-type: none"> • Synthetic fibres that contain external recycled material: SD and TR • Other materials: SD |
| Formaldehyde | Exception from general CMR requirement: Formaldehyde-containing auxiliaries, resins, coatings, printing pastes etc., used in the production of textiles are allowed to be used. Note: Use of formaldehyde-containing preparations always requires that requirements regarding formaldehyde emission and/or content specified elsewhere in this specification, or in other parts of the product documentation, shall be fulfilled. Limit value according to reference in TED. ⁴ For textiles without limit value in reference in TED (e.g. fibre filling, unless otherwise specified): Limit 100 ppm. | ISO 14184-1 | <ul style="list-style-type: none"> • Materials with test requirements according to reference in TED: SD and TR • All other materials: SD |

⁴ Reference can either be to another specification or be a value stated directly in TED.



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|--|--|--|--|
| Heavy metals (extractable) | Arsenic: 0.2 mg/kg Antimony: 40 mg/kg Lead: 0.2 mg/kg Cadmium: 0.1 mg/kg Chromium (VI): 3.0 mg/kg Mercury: 0.02 mg/kg Nickel: 1.0 mg/kg Copper: 20 mg/kg Cobalt: 1.0 mg/kg | Extraction: 2 g sample to 100 ml acidic sweat simulating solution at 40 °C, shake for 1 hour, Sweat solution according to EN ISO 105-E04. Analysis: <ul style="list-style-type: none"> ICP (Inductively Coupled Plasma). or <ul style="list-style-type: none"> ICP-MS (Inductively Coupled Plasma Mass Spectroscopy). If Cr-tot is > 3 mg/kg, Cr-VI shall be tested according to EN ISO 17075. | <ul style="list-style-type: none"> Material containing external recycled synthetic fibre: SD and TR Others: SD |
| Hexavalent chromium (Cr-VI) compounds in synthetic fibre and wool | Not allowed to be used. Contamination limit value: 100 mg Cr-VI /kg | Alkaline digestion and colorimetric analysis | <ul style="list-style-type: none"> Synthetic fibres that contain external recycled material: SD and TR Other materials: SD |
| Lead (Pb) and its compounds | Requirement as stated in <i>section 1</i> . Note: Extra documentation requirement | Total digestion followed by <ul style="list-style-type: none"> AAS (Atomic Absorption Spectroscopy) or <ul style="list-style-type: none"> ICP (Inductively Coupled Plasma) | <ul style="list-style-type: none"> Synthetic fibres that contain external recycled material: SD and TR Others: SD |
| Lindane | Not allowed to be used. Contamination limit value: 1.0 mg/kg. | Extraction and GC-MS or similar | SD |



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|---|---|--|--|
| Mercury (Hg) and its compounds in synthetic fibres | Not allowed to be used. Contamination limit value: 10 mg Hg/kg. | Total mercury content by microwave digestion and cold vapour AAS | SD |
| Optical brightening agents (OB) | For skin-contact materials with optical brighteners, migration test shall fulfil Grade 5 (i.e. no transfer detected). Note: For some materials, OB is not allowed to be used according to reference in the TED ⁵ . | Qualitative test to determine presence/absence of optical brighteners: UV-fluorescence (light cabinet) Migration test if OB are present: Preparation of synthetic perspiration solution and extraction according to German legislation LMBG B 82-10-1 Analysis of solution according to EN 648 | <ul style="list-style-type: none"> • Skin contact materials with OB: SD and TR • Skin contact materials without OB: SD. • For materials with ban on OB stated in TED: SD. |
| Organic solvents in printing paste | Solvent-borne printing paste is not allowed to be used. Water-borne printing paste shall contain less than 7 % organic solvent (VOC) by weight as ready-to-use mixture. Kerosene is not allowed to be used. | Content of solvent (VOC): ISO 11890-2 Odour of kerosene can be assessed according to IKEA odour test as described for <i>Emissions</i> ; in <i>Table 10 Complete product – emissions and colour</i> . | For printed textile materials: SD |

⁵ Reference can either be to another specification or be a value stated directly in TED.



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|---|---|---------------------------------|---|
| Organotin compounds | No kind of organotin compounds are allowed to be used. Contamination limit values: <ul style="list-style-type: none"> • for DBT and for TBT: 0.2 mg/kg each. • for sum of all compounds listed in <i>Appendix C</i>, 2.5 mg/kg. | Extraction and GC/MS or similar | <ul style="list-style-type: none"> • Textile that has been treated, coated or printed with chemical products that contain any polyurethane resin: SD and TR • Textile that has been treated with any treatment containing silicone oil: SD and TR⁶ • Others: SD |
| Pentachlorophenol (PCP), Tetrachlorophenol (TeCP) and Trichlorophenol (TriCP) including their salts and esters | Not allowed to be used. Contamination limit value: <ul style="list-style-type: none"> • 0.5 mg/kg for PCP, • 0.5 mg/kg for sum of all TeCP • 0.5 mg/kg for sum of all TriCP. | ISO 17070 | SD |
| Per- and polyfluoroalkyl substances (PFASs) in materials treated for oil, water and/or stain repellency. All requirements also apply to any salt or derivative of the respective compounds | PFASs are not allowed to be used. Contamination limit values for some specific substances: <ul style="list-style-type: none"> • Perfluorooctane sulfonic acid (PFOS): 1 µg/m² • Perfluorooctanoic acid (PFOA): 1 µg/m² | Methanol extraction and LC/MS | SD |

⁶ For material where the only reason for test demand is presence of silicone oil, the test can be made on the silicone oil directly.



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|---|---|--|---------------|
| Phthalates | <p>The following phthalates are not allowed to be used:</p> <ul style="list-style-type: none"> phthalates that are CMR substances category 1A or 1B phthalates that are SVHC phthalates listed on the State of California "Proposition 65" list dioctyl phthalate (di-n-octylphthalate) (DNOP), (CAS no. 117-84-0) <p>Contamination limit value for each phthalate: 100 mg/kg.</p> <p>Note: For information purposes IKEA will aim to keep an updated list on IKEA Supplier Portal of phthalates that are classified as CMR (cat. 1A and 1B) or SVHC, or that are on the Californian Proposition 65 list, and thus in the scope of this requirement.</p> | Extraction and GC-MS or similar | SD |
| Polycyclic aromatic hydrocarbons (PAH) | <p>Not allowed to be used.</p> <p>Contamination limit values for total of 18 polycyclic aromatic hydrocarbons (see list in <i>Appendix D</i>): 20 mg/kg</p> <p>Contamination limit values for total of 18 polycyclic aromatic hydrocarbons excluding naphthalene (see list in <i>Appendix D</i>): 10 mg/kg</p> <p>Contamination limit values for each prioritised PAH substance (see list in <i>Appendix D</i>): 0.2 mg/kg</p> | Extraction with toluene, followed by GC-MS according to GS specification AfPS GS 2014:01 PAK | SD |
| Polyvinylchloride (PVC) | Not allowed to be used. This ban also includes usage as printing binders and in coatings. | Screening test: Beilstein test | SD |
| Primary aromatic amines (PAA) | <p>PAA according to <i>Appendix B</i> are not allowed to be used.</p> <p>Contamination limit value: 5 mg/kg for each PAA.</p> | EN 71-10 and EN 71-11 | SD |



Table 4 Textile materials

| Substance | Requirements | Test method | Documentation |
|--|--|-------------|--|
| Recycled material from external source | <p>Recycled material from external source is only allowed to be used with approval from IKEA.</p> <p>Note:</p> <p>When approval is given for using external recycled material, there might also be statements in the approval modifying the requirements for documentation or for optical brightening agents (could be either less strict or more strict). If such modifications of requirements are given in the approval, they are valid, i.e. they replace demands in this specification or in other parts of the Product Documentation.</p> | | SD - if recycled materials from external source are used, this needs to be declared. |

2.4 Polymeric including plastics, silicone and rubber/elastomers/latex

Note: Excluding PU foam (see *section 2.5*).

Note: For latex used as filling material in mattresses, see *IOS-MAT-0012*.

Note: Latex backings of carpets, with a backing grammage > 200 g/m², are within the scope of this section.

Note: Artificial leather (PU-coated fabric) that is not used in upholstery is included in the scope of this section.

Note: If plastic film is applied on paper/cardboard, the plastic film is in the scope of this section.

Note: Composite materials consisting of inert filler (that does not belong to any other material-specific section of this specification or have other IKEA chemical requirements in other specifications) bonded with a resin are also included in polymeric, even if the resin is much less than 50 % of the total weight of the material.

Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex

| Substance | Requirements | Test method | Documentation |
|--|---|---|---------------|
| <ul style="list-style-type: none"> • Alkylphenol-ethoxylates (APEO) • Alkylphenols (AP) • Alkylphenol phosphites | <p>Not allowed to be used.</p> <p>Contamination limit value:</p> <ul style="list-style-type: none"> • 250 mg/kg for APEO and AP phosphites • 100 mg/kg for AP | Extraction (methanol or methanol + ammonium acetate) and HPLC | SD |
| <p>Azodyes that may release carcinogenic arylamines (see <i>Appendix A</i>) in materials where colouring agents have been added</p> | <p>Not allowed to be used.</p> <p>Contamination limit value for each arylamine: 30 mg/kg.</p> | EN 14362-1 and EN 14362-3 | SD |



Table 5 Polymerics incl. plastics, silicone, and rubber/elastomers/latex

| Substance | Requirements | Test method | Documentation |
|--|--|---|--|
| Bisphenol A (CAS no. 80-05-7) in plastic material | Migration limit value: 0.60 mg/l. | EN 14372 | <ul style="list-style-type: none"> Polycarbonate plastics: SD and TR Material containing external recycled PP and PET: SD and TR Others: SD |
| Cadmium (Cd) and its compounds | Requirement as stated in <i>section 1</i> Note: Extra documentation requirement | Total digestion followed by <ul style="list-style-type: none"> AAS (Atomic Absorption Spectroscopy) or ICP (Inductively Coupled Plasma). | <ul style="list-style-type: none"> Yellow to orange to red shades: SD and TR Material containing external recycled polymerics: SD and TR Others: SD |
| CFC (chlorofluorocarbons) and HCFC (hydrochlorofluorocarbons) in foamed plastic | Not allowed to be used. | | SD |
| Flame retardants | Flame retardants are only allowed to be used with approval from IKEA. For any approved usage, the data concerning flame retardants shall be documented (SDS). <i>See Appendix F</i> for further requirements if flame retardants are approved for use, as well as for contamination limit values. | <i>See Appendix F</i> | <ul style="list-style-type: none"> Material containing external recycled polymerics: SD and TR Others: SD |
| Formaldehyde | Exception from general CMR requirement: Formaldehyde-containing resins used in the production of supporting laminates (e.g. high-pressure laminate, HPL, with a thickness ≥ 2 mm) are allowed to be used. Note: Use of formaldehyde-containing preparations always requires that requirements regarding formaldehyde emission and/or content specified elsewhere in this specification, or in other parts of the product documentation, shall be fulfilled. | | SD |



Table 5 Polymerics incl. plastics, silicone, and rubber/elastomers/latex

| Substance | Requirements | Test method | Documentation |
|--|---|---|--|
| Heavy metals (extractable) | Arsenic 0.2 mg/kg Antimony 40 mg/kg Lead 0.2 mg/kg Cadmium 0.1 mg/kg Chromium (VI) 3.0 mg/kg Mercury 0.02 mg/kg Nickel 1.0 mg/kg Copper 20 mg/kg Cobalt 1.0 mg/kg | Extraction: 2 g sample to 100 ml solution acidic sweat simulating solution at 40 °C, shake for 1 hour. Sweat solution according to EN ISO 105-E04. Analysis: • ICP (Inductively Coupled Plasma) or • ICP-MS (Inductively Coupled Plasma Mass Spectroscopy). If Cr-tot is > 3 mg/kg, Cr-VI shall be tested according to EN ISO 17075. | <ul style="list-style-type: none"> Material containing external recycled polymerics: SD and TR Others: SD |
| Hexavalent chromium (Cr-VI) compounds | Not allowed to be used. Contamination limit value: 100 mg Cr-VI /kg | Alkaline digestion and colorimetric analysis | <ul style="list-style-type: none"> Material containing external recycled polymerics: SD and TR Others: SD |
| Lead (Pb) and its compounds | Requirement as stated in <i>section 1</i> . Note: Extra documentation requirement. | Total digestion followed by • AAS (Atomic Absorption Spectroscopy) or • ICP (Inductively Coupled Plasma). | <ul style="list-style-type: none"> Yellow to orange to red shades: SD and TR Material containing external recycled polymerics: SD and TR Others: SD |
| Lindane in materials consisting wholly or partly of natural latex/rubber | Not allowed to be used. Contamination limit value: 1.0 mg/kg. | Extraction and GC-MS or similar | SD |



Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex

| Substance | Requirements | Test method | Documentation |
|--|---|--|--|
| Mercury (Hg) and its compounds | Not allowed to be used. Contamination limit value: 10 mg Hg/kg. | Total mercury content by microwave digestion and cold vapour AAS | <ul style="list-style-type: none"> Material containing external recycled polymeric: SD and TR Others: SD |
| Organotin compounds | No kind of organotin compounds are allowed to be used. Contamination limit values: <ul style="list-style-type: none"> for DBT and for TBT: 0.2 mg/kg each. for sum of all compounds listed in <i>Appendix C</i>, 2.5 mg/kg. | Extraction and GC/MS or similar | <ul style="list-style-type: none"> Material containing external recycled polymeric: SD and TR Others: SD |
| Pentachlorophenol (PCP) including salts and esters of PCP in materials consisting wholly or partly of natural latex/rubber | Not allowed to be used. Contamination limit value is 3.0 mg/kg. | Extraction and GC-MS or similar | SD |
| Phthalates | The following phthalates are not allowed to be used: <ul style="list-style-type: none"> phthalates that are CMR substances category 1A or 1B phthalates that are SVHC phthalates listed on the State of California "Proposition 65" list dioctyl phthalate (di-n-octylphthalate) (DNOP), (CAS no. 117-84-0) Contamination limit value for each phthalate: 100 mg/kg. Note: For information purposes IKEA will aim to keep an updated list on IKEA Supplier Portal of phthalates that are classified as CMR (cat. 1A and 1B) or SVHC, or that are on the Californian Proposition 65 list, and thus in the scope of this requirement. | Extraction and GC-MS or similar | <ul style="list-style-type: none"> Material containing external recycled polymeric: SD and TR Others: SD |



Table 5 Polymerics incl. plastics, silicone, and rubber/elastomers/latex

| Substance | Requirements | Test method | Documentation |
|---|--|---|--|
| Polycyclic aromatic hydrocarbons (PAH) | <p>Not allowed to be used.</p> <ul style="list-style-type: none"> Contamination limit values for total of 18 polycyclic aromatic hydrocarbons (see list in <i>Appendix D</i>): 10 mg/kg Contamination limit values for each prioritised PAH substance (see list in <i>Appendix D</i>): 0.2 mg/kg <p>Exception: For rubber components that contain carbon black, that are without skin-contact during usage, and where tensile and abrasion wear properties are needed (e.g. sealings), the following limit values for PAH are allowed:</p> <ul style="list-style-type: none"> Contamination limit values for total of 18 polycyclic aromatic hydrocarbons (see list in <i>Appendix D</i>): 150 mg/kg Contamination limit values for each prioritised PAH substance (see list in <i>Appendix D</i>): 10 mg/kg | Extraction with toluene, followed by GC-MS according to GS specification AfPS GS 2014:01 PAK | <ul style="list-style-type: none"> Material containing external recycled polymerics: SD and TR Rubber, latex, or other elastomers that are black or pigmented with carbon black: SD and TR Others: SD |
| Polyvinyl-chloride (PVC) | <p>Not allowed to be used.</p> <p>Limit for PVC contamination in recycled plastic materials: 300 mg total chlorine per kg.</p> | <p>Screening test for chlorine: Beilstein test.</p> <p>Test for PVC contamination: Wickbold combustion; or sintering and dissolving and ICP-SFMS.</p> | SD |
| Recycled material from external source | <p>Recycled material from external source is only allowed to be used with approval from IKEA. Such an approval will be based on additional requirements in IOS-MAT-0077.</p> <p>Note: When approval is given for using external recycled material, there might also be statements in the approval modifying the requirements for documentation (could be either less strict or more strict). If such modifications of requirements are given in the approval, they are valid, i.e. they replace demands in this specification or in other parts of the Product Documentation.</p> | | SD - if recycled materials from external source are used, this needs to be declared. |



2.5 Polyurethane foam

Note: If a foam manufacturer manufactures a range of foam of the same type with different densities, it is sufficient to test a representative selection of densities - to be agreed upon between supplier and IKEA. As a guideline, the lowest and highest density in the range should be included in the selection.

Table 6 Polyurethane foam

| Substance | Requirements | Test method | Documentation |
|---|--|---|------------------------|
| 2,4-Toluene-diamine (2,4-TDA, , 2,4-diamino-toluene, CAS no: 95-80-7) and 2,6-Toluene-diamine (2,6-TDA, 2,6-diamino-toluene, CAS no: 823-40-5) in foam made with TDI | Limit value: Max 5.0 mg/kg for each substance | <ul style="list-style-type: none"> Extraction with 0,1% acetic acid followed by derivatization with pentafluoropropionic acid anhydride (PFPA) and LC or GC-MS analysis, as described in Analytica Chimica Acta 510 (2004) 109-119 or <ul style="list-style-type: none"> Europur method, provided correlation factor to reference method is taken into account. | SD and TR ⁷ |
| 4,4'-Diamino-diphenyl-methane (4,4'-MDA, 4,4'-Dimethylene-diamine) and 2,2'-Diamino-diphenyl-methane (2,2'-MDA, 2,2'-Dimethylene-diamine) and 2,4'-Diamino-diphenyl-methane (2,4'-MDA, 2,4'-Dimethylene-diamine) in foam made with MDI | Limit value: Max 5.0 mg/kg for each substance | Extraction with 0,1% acetic acid followed by derivatization with pentafluoropropionic acid anhydride (PFPA) and LC or GC-MS analysis, as described in Analytica Chimica Acta 510 (2004) 109-119. | SD and TR |
| Chlorine in isocyanate raw material | Isocyanate raw material: Max limit of 0.07 % total chlorine content. (This requirement regarding the purity of the raw material used aims at avoiding the risk of formation of foul-smelling dichlorobenzene compound in the produced foam). | ASTM D4661-09 | SD |

⁷ A test report showing compliance with the CertiPUR requirements is sufficient as a test report for verification of compliance with this requirement. Note that IKEA requirements on test frequency, number of foams tested, IKEA approved test laboratory, and content of test report shall be followed.



Table 6 Polyurethane foam

| Substance | Requirements | Test method | Documentation |
|---|---|---------------------------------|---|
| CFCs (Chlorofluorocarbons) and HCFCs (hydrochlorofluorocarbons) | Not allowed to be used. | | SD |
| Flame retardants | Flame retardants are only allowed to be used with approval from IKEA. For any approved usage, the data concerning flame retardant used is to be documented (SDS). <i>See Appendix F</i> for further requirements if flame retardants are used, as well as for contamination limit values. | <i>See Appendix F</i> | SD |
| Organotin compounds | No kind of organotin compounds are allowed to be used. Contamination limit value for DBT and for TBT: 0.2 mg/kg each. Sum of all compounds listed in <i>Appendix C</i> , maximum 2.5 mg/kg. PU foam for mattresses, pillows, upholstery furniture and loose and fixed seating pads, shall not be sourced from a factory where organotins are used to manufacture PU foam for other customers. Note: Release agents that contain organotin compounds are not allowed either. | Extraction and GC/MS or similar | SD and TR ⁸ |
| Phthalates | The following phthalates are not allowed to be used: <ul style="list-style-type: none"> phthalates that are CMR substances category 1A or 1B phthalates that are SVHC phthalates listed on the State of California "Proposition 65" list dioctyl phthalate (di-n-octylphthalate) (DNOP), (CAS no. 117-84-0) Contamination limit value for each phthalate: 100 mg/kg. Note: For information purposes IKEA will aim to keep an updated list on IKEA Supplier Portal of phthalates that are classified as CMR (cat. 1A and 1B) or SVHC, or that are on the Californian Proposition 65 list, and thus in the scope of this requirement. | Extraction and GC-MS or similar | <ul style="list-style-type: none"> For filling in mattresses and pillows: SD and TR For other materials: SD |

⁸ A test report showing compliance with the CertiPUR requirements is sufficient as a test report for verification of compliance with this requirement. Note that IKEA requirements on test frequency, number of foams tested, IKEA approved test laboratory, and content of test report shall be followed.



2.6 Metals

| Table 7 Metals | | | |
|----------------------------------|---|---|--|
| Substance | Requirements | Test method | Documentation |
| Cadmium and its compounds | Cadmium and its compounds are not allowed to be used, as stated in <i>section 1</i> . | Total digestion followed by <ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) or • ICP (Inductively Coupled Plasma). | Exceptions to the documentation requirements for cadmium in <i>section 1</i> apply. Documentation does not have to be SD. Documentation can consist of any of the following: <ul style="list-style-type: none"> • material analysis certificate (from the metal supplier)⁹, • a declaration of compliance with a material standard⁹, • TR, • SD. |
| Lead and its compounds | Lead and its compounds are not allowed to be used, as stated in <i>section 1</i> , with the following exceptions. Lead is allowed to be used in: <ul style="list-style-type: none"> • Zink alloys with intentional addition of lead (i.e. Zamak). The lead content shall be less than 90 mg Pb/kg. • Copper-based alloys: The lead content shall be less than 0.25 %. • Aluminium-based alloys: The lead content shall be less than 0.20 %. | Total digestion followed by <ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) or • ICP (Inductively Coupled Plasma). | Exceptions to the documentation requirements for lead in <i>section 1</i> apply. Documentation does not have to be SD. Documentation can consist of any of the following: <ul style="list-style-type: none"> • material analysis certificate (from the metal supplier)⁹, • a declaration of compliance with a material standard⁹, • TR, • SD. |

⁹ The material standard or material analysis certificate will maybe not contain data about lead and cadmium, but they are still valid as documentation



Table 7 Metals

| Substance | Requirements | Test method | Documentation |
|--|--|---|---|
| Radionuclides of artificial origin | Maximum contamination limit values of activity concentration for radionuclides of artificial origin shall be in accordance with the EU Council Directive 2013/59/Euratom, Table A Part 1. See <i>Appendix G</i> for limit values as summarized by the International Atomic Energy Agency (IAEA). | See <i>IAEA Safety standards series No. SSG-17</i> in section 6 <i>References</i> | <p>A self declaration from a link in the supply chain declaring that the radioactivity is controlled at source.</p> <p>It is acceptable if the self declaration is in the format and language of the issuer.</p> <p>Note: When the IKEA supplier connects this self declaration to the material or component combination in Connect corresponding to a given metal material, this constitutes a statement that this SD is valid for that metal material.</p> |
| All other requirements in section 1 | Same requirements as in <i>section 1</i> | | <p>Exceptions to the documentation requirements in <i>section 1</i>:</p> <p>No documentation required.</p> |



2.7 Adhesives

Note: This does not include adhesives used to glue paper/cardboard to paper/cardboard or textile to textile.

| Table 8 Adhesives | | | |
|---------------------|---|---------------------------------|--|
| Substance | Requirements | Test method | Documentation |
| Formaldehyde | <p>Exception from general CMR requirement: Formaldehyde-containing resins are allowed to be used.</p> <p>Note: Use of formaldehyde-containing preparations always requires that requirements regarding formaldehyde emission and/or content specified elsewhere in this specification, or in other parts of the product documentation, shall be fulfilled.</p> | | According to requirements regarding formaldehyde emission and/or content given in other parts of the product documentation |
| Phthalates | <p>The following phthalates are not allowed to be used:</p> <ul style="list-style-type: none"> • phthalates that are CMR substances category 1A or 1B • phthalates that are SVHC • phthalates listed on the State of California "Proposition 65" list • dioctyl phthalate (di-n-octylphthalate) (DNOP), (CAS no. 117-84-0) <p>Contamination limit value for each phthalate: 100 mg/kg.</p> <p>Note: For information purposes IKEA will aim to keep an updated list on IKEA Supplier Portal of phthalates that are classified as CMR (cat. 1A and 1B) or SVHC, or that are on the Californian Proposition 65 list, and thus in the scope of this requirement.</p> | Extraction and GC-MS or similar | SD |

2.8 Glass, ceramic glazes and enamelware

| Table 9 Glass, ceramic glazes and enamelware | | | |
|---|--|--|---|
| Substance | Requirements | Test method | Documentation |
| Boric acid, borax and other borates in enamelware and in heat-resistant glass, as well as in glass frits to get colour in mass of the glass, or for decoration enamel on glass | <p>Exception from general CMR requirement: Allowed to be used.</p> | <p>Total digestion followed by determination of boron by</p> <ul style="list-style-type: none"> • AAS or • ICP-OES/MS | SD - if borates are used, this needs to be declared |



Table 9 Glass, ceramic glazes and enamelware

| Substance | Requirements | Test method | Documentation |
|---------------------------------------|--|---|---------------|
| Cadmium (Cd) and its compounds | <p>Not allowed to be used.</p> <p>Contamination limit value: 40 mg cadmium/kg.</p> <p>Additionally, for glass, ceramic glazes and enamel:</p> <p>Maximum contamination level in stains or pigment is 600 mg/kg (calculated on the raw stain or pigment before it is mixed into glaze, glass or used for decoration).</p> | <p>Total digestion followed by</p> <ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) <p>or</p> <ul style="list-style-type: none"> • ICP (Inductively Coupled Plasma) | SD |
| Lead (Pb) and its compounds | <p>Additionally to <i>section 1</i> for glass, ceramic glazes and enamelware:</p> <p>Maximum contamination level in stains and pigments is 600 mg/kg (calculated on the raw stain or pigment before it is mixed into glass, glaze or used for decorations).</p> | <p>Total digestion followed by</p> <ul style="list-style-type: none"> • AAS (Atomic Absorption Spectroscopy) <p>or</p> <ul style="list-style-type: none"> • ICP (Inductively Coupled Plasma). | SD |



3 Complete product – emissions and odour

Note: The requirements in *Table 10* are valid for the complete product as delivered, with all its constituent parts and materials.

| Substance | Requirements | Test Method | Documentation |
|---|--|--|---|
| Emissions: – CMR substances cat. 1A and 1B – Toxic substances – Sum of VOC (Volatile Organic Compounds) – Formaldehyde – Odour | <p>Odour If any shipment of goods emits and unpleasant or unexpected smell, or deviates from earlier shipments or from reference sample in terms of emissions/odour, which by IKEA is deemed to involve a risk of discomfort or negative health effects for customers, this is to be considered a valid cause for claim of said shipment¹⁰. Evaluation of odour to be made by IKEA with an evaluation group of at least six persons.</p> <p>Emissions of volatile substances: The following minimum requirements apply:</p> <ol style="list-style-type: none"> Assessment based on evaluation of individual VVOC, VOC and SVOC substances emitted, after 48 hours for: <ul style="list-style-type: none"> Each individual CMR substance cat. 1A and 1B: $\leq 10 \mu\text{g}/\text{m}^3$, The sum of all CMR substances cat 1A and 1B: $\leq 50 \mu\text{g}/\text{m}^3$, Each individual Toxic substance (excl. CMR cat. 1A and 1B): $\leq 30 \mu\text{g}/\text{m}^3$, Formaldehyde: $\leq 120 \mu\text{g}/\text{m}^3$, (applies to all products except those only containing materials covered by specifications <i>IOS-MAT-0003</i> and <i>IOS-MAT-0096</i>). Sum of VOC $\leq 1.2 \text{ mg}/\text{m}^3$ after 48 hours. Sum of VOC $\leq 0.6 \text{ mg}/\text{m}^3$ after 28 days. <p>Note: For leather/artificial leather upholstery products, any testing done on a furniture/product sample involving the cover material (wholly or partly), the requirements according to <i>IOS-MAT-0011</i> and <i>IOS-MAT-0079</i> apply respectively, instead of the above.</p> | <p>VOC emission test: ISO 16000-9. Default loading factor: $1:1 \text{ m}^2/\text{m}^3$ and air exchange rate: 1 time/h. Analysis according to other appropriate method if necessary to quantify in the first analysis before the 48 hours. Test report shall include sum of VOC and all identified individual VOCs. In addition, total VOC (TVOC) as toluene equivalents shall also be reported (although there is no limit). In case of testing for formaldehyde and other lower aldehydes: analysis according to ISO 16000-3 (DNPH and LC).</p> | <ul style="list-style-type: none"> Carpets and rugs with latex backing: TR Flooring: Test and documentation according to AgBB scheme, and to Belgian Royal Decree <p>Test reports are also required in case of:</p> <ul style="list-style-type: none"> First delivery of a mattress article¹¹ Emission test requirement stated in TED A dispute concerning odour. Emission assessment (reference laboratory WKI, Braunschweig, Germany) <p>Unless otherwise specified, test/TR requirement above means: VOC emission test 48 hours, with analysis according to ISO 16000-6. If the sum of VOC fails after 48 hours, test can be extended to 28 days, if sum of VOC passes, IKEA will assess the emissions of individual emitted substances and of sum of VOC.</p> |

¹⁰ A neutral smell is expected from materials such as glass, plastic, lacquer, textile and foam. Smell from rubber, leather and wood is expected – e.g. “normal” rubber smell is expected, whereas solvent smell from a rubber material is considered unexpected. Comparison with a representative reference sample (e.g. sample from an accepted batch) is always recommended. In case of neutral smell, cleaned conditioned air can be used as reference.

¹¹ This also includes test after any change of ingredients in any material.



Table 11 Complete product – emissions and colour

| Substance | Requirements | Test Method | Documentation |
|---|---|---|------------------------|
| <p>Emissions (cont.):</p> <ul style="list-style-type: none"> - CMR substances cat. 1A and 1B - Toxic substances - Sum of VOC (Volatile Organic Compounds) - Formaldehyde - Odour | <p>Possible subtraction of terpene emissions that originate from solid wood:</p> <ul style="list-style-type: none"> • For individual monoterpenes, a background concentration of max 1400 µg/m³ after 48 hours is subtracted from the measured sum of VOC-emission value. • The corresponding subtraction value after 28 days is 700 µg/m³. <p>This applies to each of:</p> <ul style="list-style-type: none"> • 3-Carene • α-Pinene • β-Pinene • Limonene • Sum of other monoterpenes <p>Maximum total subtraction of terpenes is 2800 µg/m³ after 48 hours and 1400 µg/m³ after 28 days.</p> <p>Possible subtraction of acetic acid emissions that originate from solid wood:</p> <ul style="list-style-type: none"> • A background concentration of max 500 µg/m³ after 48 hours is subtracted from the measured sum of VOC-emission value. • The corresponding subtraction value after 28 days is 250 µg/m³. <p>This extra tolerance for acetic acid is allowed provided that a pronounced odour is not present.</p> | <p>When sampling: The taking of a sample from production should reflect a realistic worst case in comparison to when the product could reach a customer (i.e. normal handling in factory, storage time, packaging and transport to the nearest destination).</p> | |
| <p>Methyl bromide, ethylene oxide and other fumigation chemicals classified as hazardous according to EU classification of chemical substances (EU CLP regulation 1272/2008).</p> | <p>Fumigation (gassing of products/containers with the purpose of eliminating insects, vermin or larvae or other harmful organisms) with hazardous chemical products, is not allowed.</p> | <p>Test method: VDI 2100/2 (headspace analysis) and ISO 16000-9.</p> | <p>No SD required.</p> |



4 Documentation

4.1 Verifying tests

Verifying tests according to minimum test demands in this specification shall be made at IKEA approved test laboratories. Test from IKEA approved laboratory always has precedence in assessing compliance. Contact IKEA for a list of approved laboratories.

When ordering verifying tests according to minimum test demands, the orderer shall inform the laboratory that IKEA has permission to receive copies of the test report from the laboratory.

Samples of articles for testing shall be representative of produced articles, and samples of materials shall be representative of the material when ready for use. The IKEA supplier shall follow any specific instructions from IKEA that may be given, in order to secure that the sample is representative.

When a limit value consists of the sum of several substances, any substance that is not detected shall count as zero when calculating the sum.

4.2 Sample information

The test report shall, in addition to the test result, state a full identification of the tested sample. For any chemical test, the required identification of the material sample is:

- a. Material producer.
- b. Material description (type of material such as material base content, physical characteristics, colour etc.).
- c. Material identification (trade name, article code, quality and/or other identification).
- d. Material batch number or equivalent.

In the case of testing a separate material, there is no need to list any IKEA article numbers. Instead, connection to article numbers should be made through correct connection of combinations in Connect (continuously updated as needed).

A self declaration shall contain the information in bullets a to c.

When a test is made to verify an already produced article or if the article consists of only one material, the following identification of the sample is required in addition to the above:

- IKEA supplier number and name.
- IKEA article number and name.
- Date stamp (or production date).

When a material has been tested in an article in this way, and that article number is given, there is no need to list all other IKEA article numbers relevant at the time of testing. Instead, as for direct material tests, connection to other article numbers should be made through correct connection of combinations in Connect (continuously updated as needed); or, for plastic, may also be connected directly to article.

When an emission test is made of a complete article, the required material sample data described above shall be given for all materials in the article except:

- Materials present below the documentation exception limits (unless requested by IKEA).
- Completely inorganic materials such as metal, glass, ceramics, enamel.

Note: The material sample information for emission tests is also required for materials that are not otherwise in the scope of IOS-MAT-0010, such as coatings and coverings.

This required sample information shall be provided to the laboratory in the test order.



4.3 Requirements on test reports and self declarations

Test reports and self declarations required as minimum documentation according to this specification shall, unless otherwise stated, be:

- Available before first delivery
- Renewed when changes are made which influence the content of a material (e.g. change of sub-supplier of any material or change of composition or supplier of any chemical product that may remain in the final material/article)
- In any case renewed within 12 months
- In English
- Correctly registered in Connect before delivery of products.

Any TR/SD pertaining to a specific material/component/process shall be connected to the article through that material/component/process combination in Connect. The identification (designation, identity, producer etc.) of the material (or component or process) combination registered in Connect shall correspond to its description in the SD/TR and reflect the trade name and other necessary unique parameters for identification and traceability of the material.

For plastic raw materials, further requirements for test reports and self declarations are given in *Appendix H*.

4.4 Supply chain communication and control

When purchasing raw materials, semi-finished goods, components, or chemical products, the IKEA requirements shall be quoted. The material producer/supplier shall confirm fulfilment e.g. on the invoice or – mandatory for most final materials according to this specification – on self-declaration.

4.4.1 Traceability

It shall be possible to trace used raw materials/semi-finished goods, components for each date stamp via records connecting raw material batches etc to production weeks.

4.4.2 Self declarations in the supply chain

SD for the final material as present in the article shall be signed by the manufacturer who is the last link in the supply chain to add any chemicals to the material, i.e. the final chemical processor of the material, (unless otherwise stated below or in the IKEA SD format). If the IKEA supplier cannot get a self declaration covering all relevant requirements from the final chemical processor, then the IKEA supplier can instead sign the self declaration, including an explanation of why final chemical processor does not sign the self declaration, as well as requirements for sub-supplier moulder/extruder SD in *Appendix H, Table H*.

4.4.2.1 Examples of who is the final chemical processor

Examples of the final chemical processor in the case of SD for textile material are whoever carries out the last of these processes:

- Dyeing/printing,
- Last washing,
- Finishing.

Examples of final chemical processors for wood and wood-based materials:

- Board producers of for instance PB, OSB, fibreboard, plywood, layer-glued.

Examples of the final chemical processor in the case of SD for polymeric material are:

- Injection moulder or extruder in case where they mix basic plastic granules with masterbatch or any other additives.



- Supplier of granules if they are pre-coloured and the moulder/extruder does not add any additives when forming the plastic component.

(But see section 4.4.2.4 below for special rules on who signs SDs in case of plastic.)

4.4.2.2 Signing the self declaration in the supply chain

If the final chemical processor is not the IKEA supplier, then the IKEA supplier does not need to sign self-declaration for that final material. By connecting the SD to the material (or process or component) combination in Connect, the IKEA supplier shows the connection of SD to material.

SD signed by sub-supplier does not have to be IKEA format SD, as long as it contains at least all the same information as is given in IKEA format SD.

4.4.2.3 Solid wood

Self declaration is not required for solid wood, including glued solid wood panel; except SD is required for rubber wood and tropical fruit tree wood.

4.4.2.4 Raw material self declarations for plastic materials

In the case of plastic materials, if the IKEA supplier is the final processor (moulder, extruder), then the final SDs shall be from the suppliers of the raw materials used by the IKEA supplier, such as base plastic granules and masterbatch (and any other additives, if used directly by the IKEA supplier for making up the plastic formulation). Requirements on SD from plastic raw material supplier according to *Appendix H* apply. If the IKEA supplier connects self declarations for plastic granules and masterbatch to the article in Connect, and no other additives, this constitutes a statement by the IKEA supplier that no other additives were used in the final formulation (moulding or extrusion) of the final plastic material.

If the final chemical processor is a sub-supplier or sub-sub-(etc.-) supplier, then the self declaration should, if possible, be signed by the raw material suppliers as described above, together with an SD by the final chemical processor stating that they only use the raw materials that are presented in the raw material SDs. If that is not possible, the SD shall be signed by the final chemical processor, in accordance with *section 4.4.2*, and fulfilling the usual requirements on SD according to *section 4.3*.

4.5 IKEA supplier's testing responsibility

The documentation requirements (test reports and self-declarations) indicated in the chemical requirement tables of this specification are the minimum requirements. However, the IKEA supplier is responsible to test as much as is needed to secure compliance, given their conditions concerning process control and their supply chain. When appropriate, IKEA may also require a higher frequency of verifying testing, or testing when verifying test is not the minimum requirement.

4.6 Safety Data Sheets (SDS)

The IKEA supplier shall have Safety Data Sheet (SDS) available for all chemical products used by the IKEA supplier to produce IKEA products. Chemical products are for instance adhesive, lacquer, solvents, dyes, additives, textile finishing agents, masterbatch, injection moulding release agents, enamel raw material and polyurethane foam raw material. The SDS does not have to be available in English. Upon request, the SDS, including an English translation of the composition and classification part (Chapters 2 and 3) of the SDS, shall be made available to IKEA within three days.

The IKEA supplier shall ensure that the chemical supplier updates the SDS whenever there is a change that impacts the information in the SDS (e.g. a new classification of a substance in the



chemical product). The SDS shall fulfil the legal requirements in the country where the chemical product is purchased. An SDS shall in any case be updated within 5 years.

If a supplier gets IKEA approval to use a chemical product when approval is required according to this specification, the supplier shall connect the SDS for said chemical product in Connect to the relevant material/process/component combination.

4.7 Documentation exception

Documentation requirements do not apply - but bans on use and limit values do still apply – to:

- Material components (separate homogeneous materials) of an article, which fulfil all the following criteria:
 - Constitute less than 2 % by weight of the product, and weigh less than 20 g.
 - Constitute less than 2 % of the outside surface area of the product, and less than 2 dm² of the outside surface area.
- Adhesives otherwise within the scope of IOS-MAT-0010 but where the total glued area in the whole article of each used adhesive is less than 1 dm².

In assessing these criteria, all components consisting of one and the same material shall be added up.

Note: Regardless of the above exceptions, documentation requirements always apply for:

- Fittings (i.e. components on fitting list).
- Knobs and handles.
- If there is a specific requirement in the technical description for documentation of that particular component.

4.8 Warning limits (investigation limits) as a support for compliance

IKEA supplier shall review test report values, not only for pass or fail, but also to check if a pass test result is close to the limit. The supplier shall have a warning limit (investigation limit) for each limit value. When a test result shows presence of a banned substance above the warning limit, the source of this contamination shall be investigated, and corrective action taken. The result of the investigation shall be available in written form.

For contamination limit values, the warning limit shall be maximum 60 % of the contamination limit value (CLV), or the detection limit if this is higher than 60 % of CLV, unless the IKEA supplier has made an investigation that shows that a higher warning limit is sufficient.

For other values than contamination limit values, e.g. for migration limit values, the IKEA supplier shall define the warning (investigation) limits.



5 Definitions

| Term | Description |
|--|--|
| Alkylphenoethoxylates (APEO) | Sum of NPEO (nonylphenoethoxylates) and OPEO (octylphenoethoxylates). (Surface active agents. Examples of use: wetting agents, dispersing agents, detergents, emulsifiers.) |
| Aromatic hydrocarbon solvents | Solvents of unsaturated cyclic compounds (so-called benzene ring structure) made of hydrogen and carbon atoms including e.g. benzene (CAS no: 71-43-2), toluene (CAS no: 108-88-3), xylene (CAS no (group): 1330-20-7), ethylbenzene (CAS no: 100-41-4), styrene (CAS no: 100-42-5), trimethylbenzenes and higher aromatic hydrocarbons. |
| Biocides added in order to impart properties to the final product | <p>Biocides are chemical substances that are intended to kill living organisms. Examples are bactericides, fungicides, insecticides, herbicides. Preservatives can be biocides.</p> <p>Biocides added in order to impart properties to the final product are biocides which are contained in a material in order to have some kind of biocidal (organism-killing) effect in that material in the final article. There is no absolute ban on such additions, but in each case approval by IKEA is needed concerning the addition and the substance used. Typical examples of what is meant are biocides used:</p> <ul style="list-style-type: none"> • against smell in skin-contact fabrics, • to preserve wood that is to be used in damp environments, • in impregnated mosquito nets, • to prevent mould during transport/storage of final product, • anti-bacterial treatments. <p>The following are examples of what are not "biocides added in order to impart properties to the final product":</p> <ul style="list-style-type: none"> • Biocides/preservatives to preserve raw materials or components during production, storage and transport – prior to assembly of the article at the IKEA supplier. • Biocides/preservatives to preserve chemical products (in order to lengthen their shelf life, "in-can preservatives") that are subsequently used in the manufacture of the final product. |
| CFCs (chlorofluorocarbons) and HCFCs (hydrochlorofluorocarbons) | <p>CFCs are listed in the <i>Montreal Protocol on Substances that Deplete the Ozone Layer</i>, in <i>Group I of Annex A</i> and <i>Group I of Annex B</i>.</p> <p>HCFCs are listed in the <i>Montreal Protocol on Substances that Deplete the Ozone Layer</i>, in <i>Group I of Annex C</i>.</p> |
| Chemical product | A chemical product is a product of which the chemical properties are more important than the shape or design. It is used because of its chemical content or properties. |
| Chlorinated aromatic dye carriers/levelling agents | <p>Dye carriers/levelling agents are used in low-temperature dyeing of polyester. Typical chlorinated aromatic dye carriers are:</p> <ul style="list-style-type: none"> • chlorobenzenes • chloronaphthalenes • chlorotoluenes • chloroxylenes |
| Chlorinated hydrocarbon solvents | Solvents consisting of hydrocarbon compounds containing at least one covalently bonded atom of chlorine. Some examples of such solvents are methylene chloride (CAS no: 75-09-2), chloroform (CAS no: 67-66-3), perchloroethylene (CAS no: 127-18-4), trichloroethylene (CAS no: 79-01-6), and 1,1,1-trichloroethane (CAS no: 71-55-6). |



| Term | Description |
|---|--|
| CMR-substances category 1A or 1B | Substances meeting the criteria for classification as carcinogenic, mutagenic or toxic for reproduction (CMR) category 1A or 1B in accordance with Regulation (EC) No 1272/2008 (the CLP regulation); Identification: Substances with harmonized classification according to Annex VI in the CLP regulation (including all subsequent adaptation to technical progress (ATP)) with hazard statement code: H350, H350i, H340 or H360. |
| Contamination limit value (CLV) | There is always a level of uncertainty in the testing, and moreover there may occur a low level of contamination in materials (virgin or recycled) and process chemicals used in manufacturing - therefore the contamination limit value sets the level for what is allowed in the test result. Unless otherwise specified, contamination limit values are given as a proportion (e.g. mg/kg) of each separate homogeneous material. Note: The contamination limit value does not mean that it is allowed to intentionally use the substance up to this limit. |
| ECF | Elemental chlorine free (ECF) is a technique that uses chlorine compounds, e.g. chlorine dioxide – but not chlorine gas (elemental chlorine) - as well as other non-chlorine-containing bleaching agents for the bleaching of pulp from wood or other cellulose fibres. |
| ECHA | European Chemicals Agency |
| Fibre filling (textile) | Fibres with function as filling material including both loose fibres and fibre wadding. |
| Fittings | Components on fitting list. |
| Hazardous waste | Waste is defined in this specification as hazardous if it meets any one of the following criteria: <ul style="list-style-type: none"> • it is classified as hazardous in the country of production of the IKEA article (or of components thereof or of constituent materials), • it is classified as hazardous in the country from which such waste material has been exported, • it is defined as hazardous waste according to the European Union waste legislation (EU Commission Decision on the European List of Waste, COM 2000/532/EC). |
| ICP-SFMS | Inductively coupled plasma sector field mass spectroscopy. |
| Interliner | A fabric used between inner and outer fabric layers of an upholstery or mattress product. |
| Leaf and straw | Natural materials such as banana leaves, palm leaves, sea grass, water hyacinth and straw. |
| Not allowed to be used | “Not allowed to be used” means that a substance shall not be added to or used to manufacture, treat or process a material for an IKEA article, in any step of the manufacturing process of material and article, unless otherwise specified. “Not allowed to be used” does not include the use of organic compounds used for chemical synthesis if the original substance disappears (i.e. is chemically transformed) during a chemical manufacturing process. Nor does it include the use, for manufacturing polymers (including synthetic textile fibres), of Polymerization Production Aids (PPA), i.e. substances used in the medium in which the polymerization takes place (surfactants, solvents). However, if a substance that is not allowed to be used according to this specification is used for chemical synthesis or as a PPA, the residue shall be less than the specified contamination limit value. |



| Term | Description |
|--|--|
| Organotin compounds | <p>A group of compounds composed of the metal tin covalently bonded with an organic molecule/radical, for instance butyl, octyl or phenyl. (These radicals are collectively known as alkyls and aryls.) The tin is in the tetravalent state - Sn (IV). Organotin compounds may also be known as tinorganic compounds.</p> <p>Each kind of organotin, e.g. dibutyltin (DBT), is actually several different substances. DBT, MBT, TBT, DOT etc. are positive ions, cations, and they can have many different negative counter-ions (anions), e.g. chloride, oxide, laurate.</p> <p>Note: The limit values in the requirements refer to the alkyl-/aryl-tin cation, without the counter-ion.</p> <p>An example list of organotin compounds, those that are included in standard tests, is given in <i>Appendix C</i>.</p> <p>Note that organic salts of divalent tin (Sn(II)), stannous salts, are not organotins compounds. Example: tin (di) octoate (tin 2-ethylhexanoate) is not banned. In this substance the octoate (ethylhexanoate) is the anion; it is not the same substance as dioctyltin, where the octyl is part of the cation.</p> |
| Per- and polyfluoroalkyl substances (PFASs) | For this specification: PFASs are organic compounds that contain one or more perfluoroalkyl moieties, $-C_nF_{2n+1}$, where $n \geq 3$. |
| Phthalates | Diesters of 1,2-benzenedicarboxylic acid. |
| Post-consumer recycled material | A material that has been used by a consumer (i.e. not including production waste). In the case of wood chips, it would mean, for instance, chips made from scrapped furniture or scrap wood from housing and other building structures, e.g. after pulling down a house and sorting out the wood waste. |
| Proposition 65 | <p>"Proposition 65", (formally titled "The Safe Drinking Water and Toxic Enforcement Act of 1986"), administered by California Office of Environmental Health Hazard Assessment (OEHHA), regulates substances officially listed by California as having a 1 in 100 000 chance of causing cancer over a 70 year period or birth defects or other reproductive harm.</p> <p>An updated list of Proposition 65 at time of publication of this specification is available on http://www.oehha.ca.gov/prop65.html (Select "Proposition 65 List of Chemicals" in the menu in the left-hand margin.)</p> |
| Radionuclides of artificial origin | Radionuclides for which - contrary to natural occurring radionuclides - the radioactivity has been induced by irradiation in e.g. nuclear reactors, cyclotrons, particle accelerators or radionuclide generators. |
| Recycled material from external source | Production waste from other factory than the manufacturer of the article and post-consumer recycled material. |
| Reference laboratory | A laboratory in the group of laboratories approved by IKEA, which by IKEA is considered the most authoritative for a certain kind of test. This laboratory is therefore used by IKEA in interlaboratory trials as the reference point against which other laboratories are compared and is also made use of in cases of dispute (e.g. conflicting test results from other approved laboratories). |
| Self declaration (SD) | A declaration issued by supplier and/or sub-supplier (e.g. chemical or material supplier) to confirm that a requirement is fulfilled. |
| Skin-contact during usage (for polymeric) | <p>For determination of whether the skin-contact requirement is applicable: if the product in usage involves an estimated skin contact of a duration of more than 30 seconds, it is deemed a skin-contact item.</p> <p>Example: latex-backings of rugs are not considered as skin-contact.</p> |



| Term | Description |
|--|--|
| Skin-contact textile | For articles in the scope of IOS-PRG-0023 'Textiles – general requirements for finished products', skin-contact textiles are defined in that specification. For other textiles, skin-contact textiles are: <ul style="list-style-type: none"> • Mattress ticking |
| Solid wood | Pure natural wood and glued solid wood (solid wood panel). (The term glueboard has also been used for glued solid wood.) |
| Sub-supplier | A supplier to an IKEA supplier |
| Sum of Volatile Organic Compounds (VOC) | <p>In the ISO 16000-6 test of VOC emissions: Sum of the individual concentrations of VOC (Volatile Organic Compounds) detected in the chromatography between and including n-hexane and n-hexadecane (often indicated as C₆-C₁₆ in the test reports). This sum does not include SVOC (Semivolatile Organic Compounds) or VVOC (Very Volatile Organic Compounds).</p> <p>SVOC are the substances which are found in the ISO 16000 test of VOC emissions, but are found in the chromatography after n-hexadecane.</p> <p>VVOC are the substances which are found in the ISO 16000 test of VOC emissions, but are found in the chromatography before n-hexane.</p> <p>For the purpose of this specification, VOC also includes inorganic volatile compounds, such as CS₂, that can be quantified with analysis according to ISO 16000-6 or related analytical procedures.</p> |
| SVHC (Substances of Very High Concern) | <p>SVHC are substances selected according to EU REACH regulation 1907/2006¹² Art. 59(1), for inclusion in the "Candidate list" for eventual inclusion in Annex XIV. This list is published on the European Chemical Agency (ECHA) website, as "Candidate List of substances of very high concern for Authorisation", and includes:</p> <ul style="list-style-type: none"> • Substances which are carcinogenic, mutagenic or toxic for reproduction (CMR) category 1A or 1B as defined in the EU REACH regulation 1907/2006¹² Art. 57 (a), (b), and (c); (Note: SVHC that are CMR cat 1A or 1B are a subgroup of all CMR cat. 1A and 1B); • Substances which are persistent, bio-accumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII of the REACH Regulation; • Substances which are very persistent and very bio-accumulative (vPvB) in accordance with the criteria set out in Annex XIII of the REACH Regulation; • Other SVHC: Substances as defined in the EU REACH regulation 1907/2006¹² Art. 57 (f), giving rise to an equivalent level of concern to substances meeting the above criteria. Such substances may have endocrine disrupting properties or have properties, that although not meeting the criteria for being a CMR, PBT or vPvB, there is scientific evidence of probable serious effects to human health or the environment. Such substances will be identified on a case-by-case basis by ECHA. |
| SVOC | Semivolatile Organic Compounds, see <i>Sum of Volatile Organic Compounds</i> |

¹² With amendments in Regulation (EC) No 1272/2008 (the CLP regulation).



| Term | Description |
|---|---|
| Synthetic fibre | Synthetic fibres are often based on petroleum as a raw material – e.g. polyester, nylon (polyamide), polypropylene and polyacrylic fibres. They can also be based on biological raw material – e.g. polylactic acid (PLA). Note: “Synthetic fibre” does not include regenerated fibres, i.e. materials which are based on natural, renewable materials that are broken down to monomers and then reconstituted, e.g. viscose, lyocell and acetate fibres. |
| TCF | Total chlorine free (TCF) is a technique that uses no chlorine compounds for the bleaching of pulp from wood or other cellulose fibres. |
| Technical description (TED) | Document listing the requirements of a specific IKEA article, including references to relevant specifications. |
| Test report (TR) | A report of one or several tests performed by an IKEA approved laboratory. |
| Textile | Fibres, filaments and yarns and materials made of these such as woven, knitted and non-woven fabrics. Fibre fillings are also included in the requirements listed under the heading textile; whereas feathers and down-fillings are however not counted as “textile” in this specification. Coatings on textile materials are seen as part of the textile material. |
| Textile applications for natural fibre materials | Materials based on natural fibre materials such as: <ul style="list-style-type: none"> • banana fibres, • cactus fibres, • coir, • hemp, • jute, • maize fibres, • palm leaves, • sisal, • sea grass, and where the fibrous material is woven, knitted or otherwise like a fabric. Carpets based on these and similar natural fibre materials also count as textile applications. |
| Total Volatile Organic Compounds (TVOC) | The toluene equivalent measurement of all VOC in the ISO 16000-6 test of VOC emissions. See also definition of “ <i>Sum of VOC</i> ”. |
| Toxic substances | Substances, which according to the CLP-regulation 1272/2008 are classified as CMR Cat 1A or 1B, STOT RE 1 (specific target organ toxicity repeated exposure), STOT SE 1 (specific target organ toxicity single exposure) or Acute Tox cat 1-3. Toxic includes both chronic and acute toxic substances. |
| Tropical fruit-tree wood | Wood from fruit trees that chiefly grow in the tropic, such as mango, jack fruit, cashew and tamarind. |
| VVOC | Very Volatile Organic Compounds, see <i>Sum of Volatile Organic Compounds (VOC)</i> |
| Wood-based materials | Materials made from wooden particles or layers, e.g. particleboard, OSB, fibreboard, plywood, layer-glued materials, or veneer. Particleboard, OSB, or fibreboard made of any other cellulosic materials are also included. |
| Wood-like natural materials | This includes natural materials such as bamboo, cork, rattan and willow. |



IKEA of Sweden AB

Specification

Chemical compounds and substances

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Appendix A: Prohibited arylamines

| Table A Prohibited arylamines | | |
|-------------------------------|---|----------|
| Substance | | CAS no. |
| 1 | 4-aminodiphenyl | 92-67-1 |
| 2 | benzidine | 92-87-5 |
| 3 | 4-chloro-o toluidine (2-amino-5-chloro-toluene) | 95-69-2 |
| 4 | 2-naphtylamine (2-amino-naphtalene) | 91-59-8 |
| 5 | 2-amino-azotoluene | 97-56-3 |
| 6 | 2-amino-4-nitrotoluene | 99-55-8 |
| 7 | 4-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 (2 methoxy-5-methylaniline) | 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 (2-amino-toluene) | 95-53-4 |
| 19 | 2,4-toluenediamine (2,4-diamino-toluene) | 95-80-7 |
| 20 | 2,4,5-trimethylaniline | 137-17-7 |
| 21 | 2-methoxyaniline | 90-04-0 |
| 22 | 4-amino azobenzene | 60-09-3 |
| 23 | 2,4-xylydine | 95-68-1 |
| 24 | 2,6-xylydine | 87-62-7 |



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Appendix B: Primary aromatic amines (PAA)

| Table B Primary aromatic amines (PAA) | | |
|---------------------------------------|---------------------|----------------|
| Compound | CAS no. | Health effects |
| benzidine | 92-87-5 | carcinogenic |
| 2-naphthylamine | 91-59-8 | carcinogenic |
| 4-chloroaniline | 106-47-8 | carcinogenic |
| 3,3-dichlorobenzidine | 91-94-1 | carcinogenic |
| 3,3-dimethoxybenzidine | 119-90-4 | carcinogenic |
| 3,3-dimethylbenzidine | 119-93-7 | carcinogenic |
| o-toluidine | 95-53-4 | carcinogenic |
| 2-methoxyaniline (o-anisidine) | 90-04-0 | carcinogenic |
| aniline and salts of aniline | 62-53-3 and various | carcinogenic |



Appendix C: List of organotin compounds included in standard tests

| Compounds | Abbreviation |
|----------------------------|--------------|
| dibutyltin compounds | DBT |
| dioctyltin compounds | DOT |
| monobutyltin compounds | MBT |
| monooctyltin compounds | MOT |
| tetrabutyltin compounds | TeBT |
| tributyltin compounds | TBT |
| tricyclohexyltin compounds | TCyT (TCHT) |
| triphenyltin compounds | TPhT |
| monomethyltin compounds | MeT |
| dipropyltin compounds | DProT |
| diphenyltin compounds | DPhT |

Appendix D: List of polycyclic aromatic hydrocarbons (PAH)

| Table D1 Prioritised polycyclic aromatic hydrocarbons (PAH) | |
|--|----------|
| Compounds | CAS no. |
| benzo(a)anthracene | 56-55-3 |
| benzo(a)pyrene | 50-32-8 |
| benzo(e)pyrene | 192-97-2 |
| benzo(b)fluoranthene | 205-99-2 |
| benzo(j)fluoranthene | 205-82-3 |
| benzo(k)fluoranthene | 207-08-9 |
| chrysene | 218-01-9 |
| dibenzo(a,h)anthracene | 53-70-3 |

| Table D2 Other polycyclic aromatic hydrocarbons (PAH) | |
|--|----------|
| Compounds | CAS no. |
| acenaphthene | 83-32-9 |
| acenaphtylene | 208-96-8 |
| anthracene | 120-12-7 |
| benzo(ghi)perylene | 191-24-2 |
| fluoranthene | 206-44-0 |
| fluorene | 86-73-7 |
| indeno(1,2,3-cd)pyrene | 193-39-5 |
| naphthalene | 91-20-3 |
| phenanthrene | 85-01-8 |
| pyrene | 129-00-0 |



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Appendix E: List of banned textile dyestuffs

| Table E List of banned textile dyestuffs | | | |
|--|------------------|------------|--|
| Dyestuffs | Colour index no. | CAS no. | Contamination limit (DIN 54231) mg/kg in textile |
| Disperse Blue 1 | 64500 | 2475-45-8 | 15 mg/kg |
| Disperse Blue 3 | 61505 | 2475-46-9 | 75 mg/kg |
| Disperse Blue 7 | 62500 | 3179-90-6 | 75 mg/kg |
| Disperse Blue 26 | 63305 | 3860-63-7 | 75 mg/kg |
| Disperse Blue 35 | -- | 12222-75-2 | 75 mg/kg |
| Disperse Blue 102 | -- | 12222-97-8 | 75 mg/kg |
| Disperse Blue 106 | -- | 12223-01-7 | 75 mg/kg |
| Disperse Blue 124 | -- | 61951-51-7 | 75 mg/kg |
| Disperse Brown 1 | -- | 23355-64-8 | 75 mg/kg |
| Disperse Red 1 | 11110 | 2872-52-8 | 75 mg/kg |
| Disperse Red 11 | 62015 | 2872-48-2 | 75 mg/kg |
| Disperse Red 17 | 11210 | 3179-89-3 | 75 mg/kg |
| Disperse Orange 1 | 11080 | 2581-69-3 | 75 mg/kg |
| Disperse Orange 3 | 11005 | 730-40-5 | 75 mg/kg |
| Disperse Orange 11 | 60700 | 82-28-0 | 15 mg/kg |
| Disperse Orange 37/59/76 ¹³ | 11132 | 13301-61-6 | 75 mg/kg |
| Disperse Orange 149 | -- | 85136-74-9 | 15 mg/kg |
| Disperse Yellow 1 | 10345 | 119-15-3 | 75 mg/kg |
| Disperse Yellow 3 | 11855 | 2832-40-8 | 15 mg/kg |
| Disperse Yellow 9 | 10375 | 6373-73-5 | 75 mg/kg |
| Disperse Yellow 23 | 26070 | 6250-23-3 | 75 mg/kg |
| Disperse Yellow 39 | -- | 12236-29-2 | 75 mg/kg |
| Disperse Yellow 49 | -- | 54824-37-2 | 75 mg/kg |
| Acid Red 26 | 16150 | 3761-53-3 | 15 mg/kg |
| Acid Red 114 | 23635 | 6459-94-5 | 15 mg/kg |
| Acid Violet 49 | 42640 | 1694-09-3 | 15 mg/kg |
| Basic Blue 26 | -- | 2580-56-5 | 15 mg/kg |
| Basic Red 9 | 42500 | 569-61-9 | 15 mg/kg |
| Basic Violet 1 | 42535 | 8004-87-3 | 15 mg/kg |
| Basic Violet 3 | 42555 | 548-62-9 | 15 mg/kg |
| Basic Violet 14 | 45510 | 632-99-5 | 15 mg/kg |
| Direct Black 38 | 30235 | 1937-37-3 | 15 mg/kg |
| Direct Blue 6 | 22610 | 2602-46-2 | 15 mg/kg |
| Direct Red 28 | 22120 | 573-58-0 | 15 mg/kg |
| Solvent Blue 4 | -- | 6786-83-0 | 15 mg/kg |
| Solvent Yellow 2 | 11020 | 60-11-7 | 15 mg/kg |
| Solvent Yellow 3 | 11160 | 97-56-3 | 15 mg/kg |
| Direct Brown 95 | | 16071-86-6 | 15 mg/kg |
| Michler's Base | | 101-61-1 | 15 mg/kg |
| 4,4-bis(dimethylamino)-4-(methylamino)trityl alcohol | | 561-41-1 | 15 mg/kg |

¹³ Note: Disperse Orange 37 previously had CAS no 12223-33-5 and Disperse Orange 76 previously had CAS no 51811-42-8.



Appendix F: Flame retardant requirements

The overall rule is that flame retardants are only allowed to be used with approval from IKEA. When such approval is given the specific flame retardant treatment shall be documented by the IKEA supplier. Minimum information:

- Flame retardant trade name
- manufacturer
- active ingredients and their concentrations
- SDS

Totally banned flame retardants

The following flame retardants are never allowed to be used, even when permission is given for use of some flame retardant:

- Organic brominated compounds
- Antimony compounds; **exception:** antimony is allowed with approval, when approval is given for use of flame retardant, as a flame retardant integrated inside the fibre (e.g. Kanecaron and similar fibres) - as opposed to addition of antimony as a finish to the material.
- Chlorinated paraffins (alkanes) with 10-13 carbon atoms and a degree of chlorinating exceeding 48 % by weight
- TEPA (tris-(aziridinyl)phosphine oxide), CAS no. 545-55-1
- TDCP (tris(1,3-dichloro-2-propyl) phosphate, CAS no. 13674-87-8)
- TCEP (tris-(2-chloroethyl) phosphate, CAS no. 115-96-8)

Contamination limit values

- Antimony¹⁴: 200 mg/kg. Note: This limit value refers to antimony when added as a finish.
- Brominated flame retardants: 100 mg Br/kg (for expanded polystyrene: 250 mg Br/kg)
- Chlorinated paraffins: 100 mg Cl/kg
- Other flame retardants (TEPA, TDCP and TCEP, as well any other flame retardant unless specifically allowed in the TED): 200 mg/kg

Test methods

- Antimony: Total digestions and AAS or ICP
- Organic brominated compounds and chlorinated paraffins:
Total bromine/chlorine content may be screened by XRF or comparable method when appropriate. Pass if total bromine or chlorine content each below 100 mg/kg.
When verifying by test (e.g. when screening test indicates Cl/Br-value above 100 mg/kg):
Extraction (with acetone or toluene depending on material) followed by GC-MS as a qualitative test to identify type of bromine/chlorine compound present.
- Other flame retardant substances (for instance typical phosphorous-based flame retardants):
extraction and GC-MS.

Allowed substances with flame retardant effect

The following substances with flame retardant effect are allowed without approval from IKEA (unless otherwise banned or restricted):

- Chalk
- Graphite
- Kaolin
- Melamine
- Modacrylic fibre
- Talcum

¹⁴ Antimony may also occur in polyester due to production process up to 400 mg/kg, without connection to flame retardant use. This is not banned.



Appendix G: Radionuclides of artificial origin

Values of maximum activity concentrations for some radionuclide of artificial origin commonly encountered in bulk material (as summarized in: IAEA Safety standards series No. SSG-17, "Control of orphan sources and other radioactive material in the metal recycling and production industries", International Atomic Energy Agency, Vienna (2012)).

| Radionuclide | Maximum activity concentration (Bq/g) |
|--|---------------------------------------|
| Am-241, Ag-110m, Co-60, Cs-137, Pu-239, Zn-65 | 0.1 |
| Cm-244, Ir-192, Nb-95, Sr-90, Tc-99, Tl-204, Zr-95 | 1 |
| Au-198 | 10 |
| Ni-63 | 100 |
| Pm-147 | 1000 |

Appendix H: Material information in test reports and self declarations for plastic

SD from plastic raw material supplier

The final SD from plastic raw material supplier (masterbatch and plastic granule suppliers; as well as from suppliers of any other additives used directly by the final chemical processor, when applicable) shall fulfil the requirements in section 4.3 'Requirements on test reports and self declarations', with the following modifications:

- It may be in the format of the raw material supplier as long as it can be judged that it gives all the needed information to secure compliance of the final plastic part
- It shall state compliance with the requirements listed in this specification IOS-MAT-0010 relevant for that material.
- It shall state issuer of SD (company name, address, phone number and email address), and date of issue.
- It shall contain material information as specified in *Table H Material information requirements in test reports and self declarations for plastic* (see below).
- It shall be in English; if not available in English, IKEA supplier shall provide a translation into English. The original and the English translation shall be connected together in Connect.
- It shall contain a statement assuring that the signing company (raw material supplier) has a routine to follow chemical lists referred to in IOS-MAT-0010, such as EU CMR 1A and 1B and SVHC, as well as California Proposition 65 for phthalates, and to remove any substances added to those categories/lists within 2 months.
- It does not need an individual signature or stamp/chop as long as it is an official document from the material/additive supplier, with the company logo.
- It should be connected in Connect to the material combination made for the respective raw material.
- It shall be renewed on any change in content or in applicable IKEA requirements, but in any case after 5 years (base plastic granules) or after 2 years (masterbatch and any other additives used by the final chemical processor).

Not-allowed-to-be-used requirements in plastic raw material self declarations

For base plastic granules, SD statement of "fulfils" for a substance that is not allowed to be used means that the substance is not added anywhere in the supply chain of the raw material, in accordance with definition of "not allowed to be used" in this specification, and that the contamination limit value is not exceeded.

For masterbatch or other additive ingredients, SD statement of "fulfils" means the same, that the substance is not added anywhere in the supply chain of the raw material, in accordance with definition of "not allowed to be used" in this specification, and that the contamination limit value (CLV) is not exceeded. But with one possible exception: If the masterbatch/additive supplier cannot guarantee that the IKEA CLV for the final material is fulfilled in the masterbatch/additive, they need to inform the final chemical processor of their maximum contamination level for that substance in the masterbatch/additive, so that the final chemical processor can secure that the IKEA CLV will not be exceeded in the final material.



Material information requirements in test reports for plastic, and in self declarations for plastic raw materials from moulders/extruders who are not IKEA suppliers

| Table H Material information requirements in test reports and self declarations for plastic | | | |
|---|---|-------------------------------|---|
| Required information | Required in: | | |
| | Test Report | Raw Material self declaration | Self Declaration ¹⁵ from moulder/extruder (final chemical processor) |
| Material producer | Yes, both for base material and for masterbatch | Yes | Yes, both for base material and for masterbatch |
| Material description (type of material such as material base content, physical characteristics, colour etc) | Yes, both for base material and for masterbatch | Yes | Yes, both for base material and for masterbatch |
| Material identification (trade name, article code, quality/grade name and/or other identification) | Yes, both for base material and for masterbatch | Yes | Yes, both for base material and for masterbatch |
| Material batch number or equivalent | Yes, both for base material and for masterbatch | Not required | Not required |
| Identity (product name and supplier) of any separate additives used in the final formulation of the final plastic material (in the moulding/extrusion process); | Yes | Not applicable | Yes |

¹⁵ This is valid in case the sub-supplier (or sub-etc-supplier) is the moulder/extruder, and it is not possible to get the SD from the raw material suppliers. Then IKEA requires at least information about the raw material suppliers and the raw materials used. If this is not possible to give, there should be a statement in the SD from the moulder/extruder why is it is not possible.



IKEA of Sweden AB

Specification

Chemical compounds and substances

Spec. no: IOS-MAT-0010

Date: 2015-11-13

Version no: AA-10911-13

6 References

| Table I References related to specification | |
|---|---|
| Related standards | Name |
| AgBB scheme | Ausschuss zur gesundheitlichen Bewertung von Bauprodukten (Committee for Health-related Evaluation of Building Products). Health-related Evaluation Procedure for Volatile Organic Compounds Emissions (VOC and SVOC) from Building Products, available at time of publication at http://www.umweltbundesamt.de |
| ASTM D4661-09 | Standard Test Methods for Polyurethane Raw Materials: Determination of Total Chlorine in Isocyanates |
| Belgian Royal Decree | The Royal Decree of 8 th May 2014 establishing threshold levels for the emissions to the indoor environment from construction products for certain intended uses, published in the Belgian Official Gazette (Moniteur belge/Belgisch Staatsblad) of 18 th August, 2014. |
| Caesium Atlas | Atlas of Caesium Deposition on Europe after the Chernobyl Accident |
| CEN/TR 14823:2004 | Durability of wood and wood based products – Quantitative determination of pentachlorophenol in wood – Gas chromatographic method |
| CertiPUR | Certificate for polyurethane, following criteria set by Europur |
| DIN 53160 | Determination of the colourfastness of articles for common use – Part 1: Resistance to artificial saliva |
| DIN 54231 | Textiles – Detection of disperse dyestuffs |
| EN 71-10 | Safety of toys - Part 10: Organic chemical compounds – Sample preparation and extraction |
| EN 71-11 | Safety of toys – Part 11: Organic chemical compounds - Methods of analysis |
| EN 648 | Paper and board intended to come into contact with foodstuffs - Determination of the fastness of fluorescent whitened paper and board |
| EN 14362-1 | Textiles - Methods for determination of certain aromatic amines derived from azo colorants - Part 1; Detection of the use of certain azo colorants accessible with and without extraction the fibres |
| EN 14362-3 | Textiles - Methods for determination of certain aromatic amines derived from azo colorants - Part 3; Detection of the use of certain azo colorants which may release 4-aminoazobenzene |
| EN 14372 | Child use and care articles - Cutlery and feeding utensils - Safety requirements and tests |
| EU Council Directive 2013/59/Euratom, Table A Part 1 | EU Council Directive 2013/59/Euratom concerning safety standards for protection against the dangers arising from exposure to ionising radiation |
| EU Regulation (EC) No 1272/2008 (CLP) | Regulation (EC) No 1272/2008 on the 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 99/45/EC, and amending Regulation (EC) No 1907/2006 |
| EU Regulation (EC) No. 1907/2006 (REACH) | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency. |
| Europur | European Association of Flexible Polyurethane Foam Blocks Manufacturers |
| GS specification AfPS GS 2014:01 PAK | Testing and assessment of polycyclic aromatic hydrocarbons (PAHs) in the course of awarding the GS mark - Specification pursuant to article 21(1) no. 3 of the Product Safety Act (ProdSG) –AfPS GS 2014:01 PAK, Federal Institute for Occupational Safety and Health (Dortmund, Germany) |
| IAEA Safety standards series No. SSG-17 | Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries |



| Table I References related to specification | |
|---|---|
| Related standards | Name |
| ISO 11885 | Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy |
| ISO 11890-2 | Paint and varnishes – Determination of volatile organic compound (VOC) content – part 2: Gas-chromatographic method |
| ISO 14184-1 | Textiles - Determination of formaldehyde - Part 1: Free and hydrolysed formaldehyde (water extraction method) |
| ISO 16000-3 | Indoor air - Part 3: Determination of formaldehyde and other carbonyl compounds - Active sampling method |
| ISO 16000-6 | Indoor air - Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS/FID |
| ISO 16000-9 | Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method |
| ISO 17070 | Leather – Chemical tests – Determination of pentachlorophenol content. Note: also applied to other materials in this specification. |
| LMBG B 82-10-1 | The German Foodstuff and Consumer Product legislation |
| Montreal Protocol | Available at date of publication at: http://ozone.unep.org/Publications/MP_Handbook/Section_1.1_The_Montreal_Protocol/ |
| Proposition 65 | “The Safe Drinking Water and Toxic Enforcement Act of 1986”), California Office of Environmental Health Hazard Assessment (OEHHA), available at time of publication at http://www.oehha.ca.gov/prop65.html |
| VDI 2100/2 | Determination of gaseous compounds in ambient air; Determination of indoor air pollutants; Gas chromatographic determination of organic compounds. |

Summary of Changes in version 13

Note: Because of editorial changes in version 12, resulting in an immediate replacement with version number 13. This summary of changes describes changes in version 13 compared to version 11.

Changes are also marked with a line in the left-hand margin of the document. Double line to the left of a heading means that the whole section is new.

| Page | Section | Requirement | Amendment |
|------|---|---|---|
| 1 | Implementation of changes | | <ul style="list-style-type: none"> • Date stamp for implementing version no AA-10911-13 • Clarification on signing of self declaration by raw material supplier/final chemical processor • Information on materials exempted from renewal of verification documentation • Added text regarding changes in official substance lists and classification in order to avoid unnecessary documentation updates |
| 2 | Approvals | | Clarification on validity of approvals |
| 2 | About this specification | Scope of IOS-MAT-0010 | Added materials/components that are regulated by other specifications than IOS-MAT-0010: <ul style="list-style-type: none"> • IOS-MAT-0104 (hair on leather) • IOS-PRG-0019 (labels) • IOS-PRG-0029 (zip fasteners) • IOS-MAT-0074 (chemical products) • IOS-MAT-0095 (art materials) |
| 2 | About this specification | Scope of IOS-MAT-0010 | Clarification on composite materials |
| 5 | Table 1 General requirements for all materials | CMR substances (category 1A or 1B) and Substances of Very High Concern (SVHC) | Several requirements merged into one, no significant change in actual chemical requirements. (Reference to harmonized classification (EU CLP) in the Definition of CMR) |
| 6 | Table 1 General requirements for all materials | Hazardous waste | <ul style="list-style-type: none"> – Clarification on issuer of permits – Clarification on sources of recycled wood chips |
| 7 | 2.1 | Solid wood, wood-based materials, and wood-like natural materials | <ul style="list-style-type: none"> – Change of wording from: natural materials to wood-like natural materials – Clarification of scope |
| 7 | Table 2 Solid wood, wood-based, and wood-like natural materials | Lead and its compounds | Clarification that percentage of recycled wood material refers to a weekly average |
| 7 | Table 2 Solid wood, wood-based, and wood-like natural materials | Pentachlorophenol (PCP) including salts and esters of PCP | Clarification that percentage of recycled wood material refers to a weekly average |



| Page | Section | Requirement | Amendment |
|------|---|---|---|
| 7 | Table 2 Solid wood, wood-based, and wood-like natural materials | Footnote 1 | New footnote on testing of recycled material |
| 8 | Table 2 Solid wood, wood-based, and wood-like natural materials | Quality assurance programme for recycled material | – Editorial change – Clarification that it is use per week of post-consumer waste that is the time frame intended for the requirement. |
| 9 | Table 2 Solid wood, wood-based, and wood-like natural materials | Wood preservatives | – Clarification that requirement is valid for tropical fruit-tree wood – Added test method for organic preservatives |
| 10 | 2.2 | Note | Added Note on scope clarifying that gluing of paper/cardboard is included |
| 10 | Table 3 Requirements for paper and cardboard materials | Phthalates | Update of requirement; mainly referring to CMR 1 A and 1B, SVHC and Proposition 65 |
| 11 | 2.3 | Textile materials | – Clarification in notes on materials – Gluing of textile to textile included in the scope |
| 11 | Table 4 Textile materials (APEO, AP) | <ul style="list-style-type: none"> • Alkylphenol-ethoxylates (APEO) • Alkylphenols (AP) • Alkylphenol phosphites | Revised requirement with stricter limit for fibre filling, and updated test method |
| 11 | Table 4 Textile materials | Aromatic hydrocarbon solvents | New requirement |
| 11 | 2.3 Textile materials | Footnote 3 | Updated |
| 12 | Table 4 Textile materials | Chlorinated hydrocarbon solvents | New requirement |
| 13 | Table 4 Textile materials | Formaldehyde | Exception from general CMR ban |
| 16 | Table 4 Textile materials | Organotin compounds | – Limit value changed for individual DBT and TBT (from 0.1 to 0.2 mg/kg). – Clarification on documentation |
| 16 | Table 4 Textile materials | Per- and polyfluoroalkyl substances (PFASs) | – Changed requirement; PFASs are not allowed to be used – Update of requirement for PFOA due to Norwegian legislation |
| 17 | Table 4 Textile materials | Phthalates | Update of requirement; mainly referring to CMR 1A and 1B, SVHC and Proposition 65 |
| 17 | Table 4 Textile materials | Polycyclic aromatic hydrocarbons (PAH) | New test method |
| 18 | Table 4 Textile materials | Recycled material | Added note clarifying possible modified requirements in the approval |



| Page | Section | Requirement | Amendment |
|------|---|---|--|
| 18 | 2.4 | Polymeric including plastics, silicone and rubber/elastomers/latex | Added notes on scope of section |
| 18 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | <ul style="list-style-type: none"> Alkylphenol-ethoxylates (APEO) Alkylphenols (AP) Alkylphenol phosphites | Revised requirement and updated test method |
| 19 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | Formaldehyde | Exception from general CMR ban |
| 21 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | Organotin compounds | Limit value changed for individual DBT and TBT (from 0.1 to 0.2 mg/kg) |
| 21 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | Phthalates | Update of requirement; mainly referring to CMR 1A and 1B, SVHC and Proposition 65 |
| 22 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | Polycyclic aromatic hydrocarbons (PAH) | Added note clarifying possible modified requirements in the approval |
| 22 | Table 5 Polymeric incl. plastics, silicone, and rubber/elastomers/latex | Recycled material | Added note clarifying possible modified requirements in the approval |
| 24 | Table 6 Polyurethane foam | Organotin compounds | <ul style="list-style-type: none"> Limit value changed for individual DBT and TBT (from 0.1 to 0.2 mg/kg) Clarification on sourcing of PU foam products |
| 24 | Table 6 Polyurethane foam | Phthalates | Update of requirement; mainly referring to CMR 1A and 1B, SVHC and Proposition 65 |
| 25 | Table 7 Metals | Lead and its compounds | Clarification of limit value in copper-based alloys in order to align with standard test reporting |
| 26 | Table 7 Metals | Radionuclides of artificial origin | New requirement |
| 27 | 2.7 | Adhesives | Clarification note on scope |
| 27 | Table 8 Adhesives | Formaldehyde | Exception from general CMR ban |
| 27 | Table 8 Adhesives | Phthalates | Update of requirement; mainly referring to CMR 1A and 1B, SVHC and Proposition 65 |
| 27 | 2.8 | Glass, ceramic glazes and enamelware | <ul style="list-style-type: none"> New section. Requirements moved from General section in version 3 Clarification that the exception for borates also applies for glass frits to get colour and decoration enamel |
| 29 | Table 10 Complete product – emissions and colour | | Clarification that requirement refers to “sum of VOC” |



| Page | Section | Requirement | Amendment |
|------|---|-----------------------|---|
| 29 | Table 10 Complete product – emissions and colour | | Clarification relation between results of VOC emissions after 48 hours and 28 days. Added furniture/product in note. |
| 31 | 4 Verifying tests | | Clarification on verifying tests |
| 31 | 4.2 Sample information | | Clarification on SD content and description in Connect |
| 32 | 4.3 Requirements on test reports and self declarations | | Clarification that documentation stated in IOS-MAT-0010 is the minimum level required. |
| 32 | 4.3 Requirements on test reports and self declarations | Connect | All relevant documentation shall be available in Connect before delivery |
| 32 | 4.3 Requirements on test reports and self declarations | Plastic raw materials | Reference to Appendix H where specific documentation requirements are listed |
| 32 | 4.4 | Signing of SD | Clarification on procedure if no SD can be received from sub-supplier |
| 33 | 4.4.2.3 Solid wood | | New section |
| 33 | 4.4.2.4 Raw material self declarations for plastic materials | | New section |
| 33 | 4.5 IKEA supplier's testing responsibility | | Clarification that supplier is always responsible to test at a frequency enough to ensure continuous compliance |
| 34 | 4.7 Documentation exception | | Stricter requirement concerning maximum weight and surface area of exempted components |
| 34 | 4.7 Documentation exception | | Documentation exception for adhesives |
| 34 | 4.8 Warning limits (investigation limits) as a support for compliance | | Implementation of investigation limits that shall trigger a source investigation |



| Page | Section | Requirement | Amendment |
|------|--|-------------|---|
| 35 | 5 Definitions | | Definitions that are new or updated: <ul style="list-style-type: none"> • Aromatic hydrocarbon solvents: New • Chlorinated hydrocarbon solvents: New • CMR: Updated • Contamination limit value (CLV): Updated • Hazardous waste: Updated • Leaf and straw: New • Per- and polyfluoroalkyl substances (PFASs): New • Proposition 65: New • Radionuclides of artificial origin: New • Sum of VOC: New • SVHC: New • Textile applications for natural fibre materials: New • Total Volatile Organic Compounds (TVOC): Updated • Tropical fruit-tree wood: New • Wood-like natural materials: New |
| 42 | Appendix C: List of organotin compounds included in standard tests | | Added compounds included in the limit value: <ul style="list-style-type: none"> • MeT • DProT • DPhT |
| 45 | Appendix F: Flame retardant requirements | | Talcum added to allowed substances with flame retardant effect |
| 46 | Appendix G: Radionuclide of artificial origin | | New appendix |
| 47 | Appendix H: Material information in test reports and self declarations for plastic | | New appendix |
| 49 | 6 References | | New references: <ul style="list-style-type: none"> • Belgian Royal Decree • EU Council Directive 2013/59/Euratom, Table A Part 1 • GS Specification AfPS GS 2014:01 PAK • IAEA Safety standards series No. SSG-17 • Proposition 65 |