#### **ENVIRONMENTAL LABEL CRITERIA FOR**

#### **BED MATTRESSES**

**ARTICLE 1**- These criteria are regulated within the scope of Environmental Label Regulation dated 19.10.2018 and numbered 30570.

**ARTICLE 2**- The product group 'bed mattresses' shall comprise products consisting of a cloth cover that is filled with materials and that can be placed on an existing supporting bed structure or designed for freestanding in order to provide a surface to sleep or rest upon for indoor use.

The product group shall not include wooden and upholstered bed bases, inflatable mattresses and water mattresses, as well as mattresses classified under "Medical Device Regulation" dated 02.06.2021 and numbered 31499.

**ARTICLE 3**- Within the scope of the Environmental Label Regulation, the criteria specified in this document must be fulfilled in order to be given an environmental label for the products in the hard surface cleaner product group.

**ARTICLE 4**- The assessment and verification requirements regarding the environmental label criteria determined for the bed mattresses product group will be valid for 5 (five) years. The criteria may be updated when deemed necessary by the Environmental Labeling Board within five years. The criteria's validity period can be extended with the Environmental Labeling Board's approval.

#### **DEFINITIONS**

For the purpose of application of this criteria, the following definitions shall apply:

**Cot mattress:** A mattress with the length shorter than 1 400 mm;

**Eliminable substance:** A substance that shows 80 % degradation of dissolved organic carbon within 28 days using one of the following test methods: OECD 303A/B, TS EN ISO 11733;

**Inherently biodegradable substance:** A substance that shows 70 % degradation of dissolved organic carbon within 28 days or 60 % of theoretical maximum oxygen depletion or carbon dioxide generation within 28 days using one of the following test methods: TS EN ISO 14593, OECD 302 A, TS EN ISO 9887, OECD 302 B, TS EN ISO 9888, OECD 302 C;

**Readily biodegradable substance:** A substance that shows 70 % degradation of dissolved organic carbon within 28 days or 60 % of theoretical maximum oxygen depletion or carbon dioxide generation within 28 days using one of the following test methods: OECD 301 A, TS EN ISO 7827, OECD 301 B, TS EN ISO 9439, OECD 301 C, OECD 301 D, TS EN ISO 10708, OECD 301 E, OECD 301 F, TS EN ISO 9408;

**Semi-volatile organic compound (SVOC):** Any organic compound eluting in a gas chromatographic (GC) column between n-hexadecane (excluded) and n-docosane (included) and with a boiling point approximately higher than 287 °C, where the measurement is carried out using a capillary column coated with 5 % phenyl/95 % methyl-polysiloxane;

**Volatile organic compound (VOC):** Any organic compound eluting in a gas chromatographic column between, and including, n-hexane and n-hexadecane with a boiling point in the range of approximately 68 °C to 287 °C, where the measurement is carried out using a capillary column coated with 5 % phenyl/95 % methylpolysiloxane.

#### CRITERIA

The criteria for granting the Environmental Label to the bed mattress product group are as follows:

- 1. Latex foam
- 2. Polyurethane (PUR) foam
- 3. Wire and springs
- 4. Coconut fibres
- 5. Textiles (fabrics and fibres used as a mattress cover and/or filling materials)
- 6. Glues and adhesives
- 7. Flame retardants
- 8. Biocides
- 9. Plasticizers
- 10. Excluded or limited substances and mixtures
- 11. Emission of specified volatile organic compounds (VOCs, SVOCs) from the mattress
- 12. Technical performance
- 13. Design for disassembly and recovery of materials
- 14. Information appearing on the Turkish Environmental Label
- 15. Additional information to consumers

#### ASSESSMENT AND VERIFICATION REQUIREMENTS

The specific assessment and verification requirements are indicated within each criterion

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

The Ministry recognizes the tests performed by laboratories accredited by an accreditation body that is a party to the International Laboratory Accreditation Association (ILAC) Mutual Recognition Agreement (MRA) according to TS EN ISO/IEC 17025. (TÜRKAK accredited organizations can be accessed at <a href="https://portal.turkak.org.tr/tr/accreditation/accreditationagencysearch">https://portal.turkak.org.tr/tr/accreditation/accreditationagencysearch</a> ) If it is proved that there is no accredited institution for the test technique, which is mandatory within the scope of assessment and verification criteria, TS EN ISO/IEC 17025 accreditation criterion is not required.

When generating data for the classification of substances or mixtures, the second 28848 published in the Official Gazette dated 11.12.2013 of substances and mixtures physicochemical, toxicological, and ecotoxicological test methods to be applied in determining the properties on the regulations' provisions or procedures in accordance with internationally recognized scientific principles or internationally validated methods shall be taken into consideration.

Where appropriate, test methods other than those indicated for each criterion may be used if the Ministry assessing the application accepts their equivalence.

Where appropriate, the Ministry may require supporting documentation and may carry out independent verifications and site visits.

As a pre-requisite, the product must meet all respective legal requirements of the country in which the product is intended to be placed on the market. The applicant shall declare the product's compliance with this requirement.

### **CRITERIA AND REQUIREMENTS**

#### **CRITERION 1. Latex Foam**

The following requirements need to be met only if latex foam contributes to more than 5 % of the total weight of the mattress.

#### **Criterion 1.1 Restricted Substances**

The concentrations in the latex foam of the substances listed below shall not exceed the following values.

Substance/Group of Substances	Substance/Group of Substances	Limit Value (ppm)	Assessment and verification conditions	
	Mono ve di-chlorinated phenols	1	۸	
Chlorophenols	(salts and esters)	1	Α	
	Other chlorophenols	0,1	Α	
	As (Arsenic)	0,5	В	
	Cd (Cadmium)	0,1	В	
Heavy metal	Co (Cobalt)	0,5	В	
	Cr (Chromium)	1	В	
	Cu (Copper)	2	В	

Substance/Group of Substances	Sunstance/Group of Sunstances		Assessment and verification conditions
	Hg (Mercury)	0,02	В
	Ni (Nickel)	1	В
	Pb (Lead)	0,5	В
	Sb (Antimony)	0,5	В
	Aldrin	0,04	С
	o,p-DDE	0,04	С
	p,p-DDE	0,04	С
	o,p-DDD	0,04	С
	p,p-DDD	0,04	С
	o,p-DDT	0,04	С
	p,p-DDT	0,04	С
	Diazinone	0,04	С
	Dikchlorfenthion	0,04	С
	Dichlorvos	0,04	С
	Dieldrin	0,04	С
	Endrin	0,04	С
Pesticides (*)	Heptachlor	0,04	С
	Heptachlorepoxide	0,04	С
	Hexachlorobenzene	0,04	С
	Hexachlorocyclohexane	0,04	С
	α Hexachlorocyclohexane	0,04	С
	β- Hexachlorcyclohexane	0,04	С
	γ- Hexachlorcyclohexane	0,04	С
	δ- Hexachlorcyclohexane	0,04	С
	Malathion	0,04	С
	Methoxichlor	0,04	С
	Mirex	0,04	С
	Parathion-ethyl	0,04	С
	Parathion-methyl	0,04	С
Other specific substances that are restricted	Butadiene	1	D

<sup>\*</sup> Only for foams composed of natural latex for at least 20 % by weight.

# **Assessment and Verification:**

- **A.** For chlorophenols the applicant shall provide a report presenting the results of the following test procedure.
  - 5 g of the sample shall be milled and chlorophenols shall be extracted in the form of phenol (pentachlorophophenols, PCP), sodium salt (sodium pyrophosphate, SPP) or esters. The extracts shall be analysed by means of GC. Detection shall be made with a mass spectrometer or electron capture detector (ECD).
- **B.** For heavy metals, the applicant shall provide a report presenting the results of the following test procedure.
  - Milled sample material is eluted in accordance with DIN 38414-S4 or equivalent in a ratio of 1:10. The resultant filtrate shall be passed through a  $0.45 \mu m$  membrane filter (if necessary by

pressure filtration). The solution obtained shall be examined for the content of heavy metals by inductively coupled plasma optical emission spectrometry (ICP-OES), also known as inductively coupled plasma atomic emission spectrometry (ICP-AES), or by atomic absorption spectrometry using a hydride or cold vapour process.

- **C.** For pesticides, the applicant shall provide a report presenting the results of the following test procedure.
  - 2 g of sample is extracted in an ultrasonic bath with a hexane/dichloromethane mixture (85/15). The extract is cleaned up by acetonitrile agitation or by adsorption chromatography over florisil. Measurement and quantification are determined by GC-ECD or by GC-MS. The testing on pesticides is requested for latex foams with a content of at least 20 % natural latex.
- **D.** For butadiene, the applicant shall provide a report presenting the results of the following test procedure.
  - Following milling and weighing of the latex foam, headspace sampling shall be performed. Butadiene content shall be determined by GC with detection by flame ionization.

# **Criterion 1.2 Dyes**

Should dyes be used, criterion 5.5 shall be respected. Assessment and verification: the applicant shall provide either a declaration of non-use of dyes from the manufacturer of the foam or, in case of use, a declaration of compliance with this criterion, together with supporting documentation.

# **CRITERION 2. Polyurethane (PUR) Foam**

The following requirements need to be met only if PUR foam contributes to more than 5 % of the total weight of the mattress.

#### **Criterion 2.1 Restricted Substances**

The concentrations in the PUR foam of the substances listed below shall not exceed the following values.

Substance/Group of Substances	Substance/Group of Substances	Limit Value	Assessment and verification conditions
Biocides	Substances restricted according to	Not added	Α
	criterion 8.1	intentionally	
Heavy metals	As (Arsenic)	0,2 ppm	В
	Cd (Cadmium)	0,1 ppm	В
	Co (Cobalt)	0,5 ppm	В
	Cr (Chromium)	1,0 ppm	В
	Cr VI (Chromium VI)	0,01 ppm	В
	Cu (Copper)	2,0 ppm	В
	Hg (Mercury)	0,02 ppm	В
	Ni (Nickel)	1,0 ppm	В

Substance/Group of Substances  Substance/Group of Substances		Limit Value	Assessment and verification conditions
	Pb (Lead)	0,2 ppm	В
	Sb (Antimony)	0,5 ppm	В
	Se (Selenium)	0,5 ppm	В
Plasticizers	Di-iso-nonylphthalate (DINP, 28553-12-0)	1.	С
	Di-n-octylphthalate (DNOP, 117-84-0)		
	Di (2-ethylhexyl)-phthalate (DEHP, 117-81-7)	0,01 % w/w (sum)	
	Di-iso-decylphthalate (DIDP, 26761-40-0)		
	Butylbenzylphthalate (BBP, 85-68-7)		
	Dibutylphthalate (DBP, 84-74-2)		
	Phthalates	Not added intentionally	А
Toluenediamine	2,4 TDA	5,0 ppm	D
and	4,4'-Diaminodiphenylmethane	5,0 ppm	D
Methylenedianillin	(4,4'-MDA, 101-77-9)	-7- 1-1	
Tinorganic	Tributyltin (TBT)	50 ppb	E
substances	Dibutyltin (DBT)	100 ppb	E
	Monobutyltin (MBT)	100 ppb	E
	Tetrabutyltin (TeBT)	100 ρρυ	_
		_	_
	Monooctyltin (MOT)	_	_
	Dioctyltin (DOT)	_	_
	Tricyclohexyltin (TcyT)	_	_
	Triphenyltin (TPhT)	_	_
	Sum	500 ppb	E
Other specific susbstances that	Chlorinated or brominated dioxines or furans	Not added intentionally	А
are restricted	Chlorinated hydrocarbons (1,1,2,2- Tetrachloroethane, Pentachloroethane, 1,1,2- Trichloroethane, 1,1-Dichloroethylene)	Not added intentionally	А
	Chlorinated phenols (PCP, TeCP, 87-86-5)	Not added intentionally	А
	Hexachlorocyclohexane (58-89-9)	Not added intentionally	А
	Monomethyldibromo–Diphenylmethane (99688-47-8)	Not added intentionally	А
	Monomethyldichloro-Diphenylmethane (81161-70-8)	Not added intentionally	А
	Nitrites	Not added intentionally	А
	Polybrominated Biphenyls (PBB, 59536-65-1)	Not added intentionally	А

Substance/Group of Substances	Substance/Group of Substances Limit Value		Assessment and verification conditions
	Pentabromodiphenyl Ether (PeBDE,	Not added	Α
	32534-81-9)	intentionally	
	Octabromodiphenyl Ether (OBDE,	Not added	Α
	32536-52-0)	intentionally	
	Polychlorinated Biphenyls (PCB, 1336-	Not added	Α
	36-3)	intentionally	
	Polychlorinated Terphenyls (PCT, 61788-	Not added	Α
	33-8)	intentionally	
	Tris(2,3-dibromopropyl) phosphate	Not added	Α
	(TRIS, 126-72-7)	intentionally	
	Trimethylphosphate (512-56-1)	Not added	Α
		intentionally	
	Tris-(aziridinyl)-phosphinoxide (TEPA,	Not added	Α
	545-55-1)	intentionally	
	Tris(2-chloroethyl)-phosphate (TCEP,	Not added	Α
	115-96-8)	intentionally	
	Dimethyl methylphosphonate (DMMP,	Not added	Α
	756-79-6)	intentionally	

## **Assessment and Verification:**

- **A.** For biocides, phthalates and other specific substances that are restricted the applicant shall provide a declaration supported by declarations from manufacturers of the foam confirming that the listed substances have not been added intentionally to the foam formulation.
- **B.** For heavy metals the applicant shall provide a report presenting the results of the following test procedure. Milled sample material is eluted in accordance with DIN 38414-S4 or equivalent in a ratio of 1:10. The resultant filtrate shall be passed through a 0,45  $\mu$ m membrane filter (if necessary by pressure filtration). The solution obtained shall be examined for the content of heavy metals by atomic emission spectrometry with inductively coupled plasma (ICP-AES or ICP-OES) or by atomic absorption spectrometry using a hydride or cold vapour process.
- **C.** For the total amount of plasticizers the applicant shall provide a report presenting the results of the following test procedure. The sample shall be a composite of 6 pieces to be taken from beneath each sample's face (to a maximum of 2 cm from the surface). Extraction shall be performed with dichloromethane using a validated method and followed by analysis with gas chromatography—mass spectrometry (GC/MS) or high-performance liquid chromatography (HPLC/UV).
- D. For TDA and MDA the applicant shall provide a report presenting the results of the following test procedure. The sample shall be a composite of 6 pieces to be taken from beneath each sample's face (to a maximum of 2 cm from the surface). Extraction shall be performed with 1 % aqueous acetic acid solution. Four repeat extractions of the same foam sample shall be performed maintaining the sample weight-to-volume ratio of 1:5 in each case. The extracts

- shall be combined, made up to a known volume, filtered and analysed by HPLC-UV or HPLC-MS. If HPLC-UV is performed and interference is suspected, reanalysis with HPLC-MS shall be performed.
- E. For tinorganic substances the applicant shall provide a report presenting the results of the following test procedure. The sample shall be a composite of 6 pieces to be taken from beneath each sample face (to a maximum of 2 cm from the surface). Extraction shall be performed for 1 hour in an ultrasonic bath at room temperature. The extracting agent shall be a mixture composed of as follows: 1 750 ml methanol + 300 ml acetic acid + 250 ml buffer (pH 4,5). The buffer shall be a solution of 164 g of sodium acetate in 1 200 ml of water and 165 ml of acetic acid, to be diluted with water to a volume of 2 000 ml. After extraction, the alkyl tin species shall be derivatized by adding sodium tetraethyl borate solution in tetrahydrofuran (THF). The derivative shall be extracted with n-hexane and the sample shall be submitted to a second extraction procedure. Both hexane extracts shall be combined and further used to determine the organotin compounds by gas chromatography with mass selective detection in SIM modus.

### **Criterion 2.2 Dyes**

Should dyes be used, criterion 5.5 shall be respected.

**Assessment and Verification:** The applicant shall provide either a declaration of non-use of dyes from the manufacturer of the foam or, in case of use, a declaration of compliance with this criterion, together with supporting documentation.

#### **Criterion 2.3 Total Chlorine Content of Isocyanates**

Should mixed isomers of toluene diisocyanate (TDI) be used in the production of the PUR foam, the total chlorine content of these isocyanates shall not exceed 0,07 % by weight.

**Assessment and Verification:** The applicant shall provide either a declaration of non-use from the manufacturer of the foam or the results of the test methods carried out in accordance with ASTM D4661-93 or equivalent.

### **Criterion 2.4 Total Chlorine Content of Isocyanates**

Halogenated organic compounds shall not be used as blowing agents or as auxiliary blowing agents.

**Assessment and Verification:** The applicant shall provide a declaration of non-use from the manufacturer of the foam.

### **CRITERION 3. Wire and Springs**

The following requirements need to be met only if wire and springs contribute to more than 5 % of the total weight of the mattress.

## **Criterion 3.1 Degreasing**

If degreasing and/or cleaning of wire and/or springs is carried out with organic solvents, use shall be made of a closed cleaning/degreasing system.

**Assessment and Verification:** The applicant shall provide a corresponding declaration from the manufacturer of wire and/or springs.

#### **Criterion 3.2 Galvanisation**

The surface of springs shall not be covered with a galvanic metallic layer.

**Assessment and Verification:** The applicant shall provide a corresponding declaration from the manufacturer of wire and/or springs.

#### **CRITERION 4. Coconut Fibres**

The following requirement needs to be met only if coconut fibre contributes to more than 5 % of the total weight of the mattress.

Criteria for latex foam shall be considered if coconut fibre material is rubberized using latex.

**Assessment and Verification:** The applicant shall either provide a declaration of non-use of rubberized coconut fibres, or the test reports required in criterion 1 for latex foam.

## CRITERION 5. Textiles (fabrics and fibres used as a mattress cover and/or filling materials)

- (1) 11 sub-criteria of Criterion 5 (Criterion 5.1-Criterion 5.11) shall be respected for the mattress cover.
- (2) Filling materials shall respect Criterion 5.1. Where wool is used as filling material, Criterion 5.1, Criterion 5.2 and Criterion 5.8 shall be respected.
- (3) All textiles that have been awarded the Environmental Label, as in accordance with Environmental Label Regulation numbered 30570, are considered being automatically compliant with all sub-criteria of Criterion 5 (Criterion 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.10 and 5.11). Nevertheless, in order to allow mattresses to be awarded the Environmental Label, it shall be demonstrated that also Criterion 5.9 is satisfied for the mattress cover.

# Criterion 5.1 General Requirements on Hazardous Substances (Including Flame Retardants, Biocides and Plasticizers) (Applicability: All textiles)

All textiles; Criteria 7 (flame retardants), Criteria 8 (biocides), Criteria 9 (plasticizers) and Criteria 10 (hazardous substances) shall be respected by all textiles.

**Assessment and Verification:** The applicant shall provide a declaration of compliance with this criterion, together with the supporting documentation required in the respective criterion (Criterion 7, 8, 9 and 10).

# Criterion 5.2 Auxiliaries Used in Preparations and Formulations (Applicability: Covers made of any fibres and filling materials made of wool)

<u>All covers:</u> The following substances shall not be used in any preparations or formulations used for the production of all mattress covers. The limit values specified in the table below for the presence of Alkylophenols and Alkylophenolethoxylates (APEOs) on the cover shall be respected.

<u>Filling materials made of wool:</u> Alkylophenols and APEOs shall not be used in any preparations or formulations used for the production of filling materials made of wool and limit values for their presence in the filling material shall be respected.

Substance (CAS number)	Limit value (mg/kg)	Assessment and verification conditions
Alkylphenols:		
- Nonylphenol, mixed isomers (25154-52-3)		
- 4-Nonylphenol (104-40-5)		
- 4-Nonylphenol, branched (84852-15-3)	25 (total)	Α
- Octylphenol (27193-28-8)		
- 4-Octylphenol (1806-26-4)		
- 4-tert-Octylphenol (140-66-9)		
Alkylphenolethoxylates (APEOs) and their derivatives		
- Polyoxyethylated octyl phenol (9002-93-1)		
- Polyoxyethylated nonyl phenol (9016-45-9)		
- Polyoxyethylated p-nonyl phenol (26027-38-3)		
- bis(hydrogenated tallow alkyl) dimethyl ammonium chloride		
(DTDMAC)		
- distearyl dimethyl ammonium chloride (DSDMAC)	Not used	В
- di(hardened tallow) dimethyl ammonium chloride (DHTDMAC)		
- ethylene diamine tetra acetate (EDTA)		
- diethylene triamine penta acetate (DTPA)		
- 4-(1,1,3,3-tetramethylbutyl)phenol		
- 1-Methyl-2-pyrrolidone		
- nitrilotriacetic acid (NTA)		

#### **Assessment and Verification:**

- **A.** The applicant shall provide a report presenting the results of the final product testing which shall be performed through solvent extraction followed by liquid chromatography—mass spectrometry (LC-MS).
- **B.** The applicant shall provide a declaration of non-use of specified chemicals from the supplier supported by safety data sheets (SDS) for all production stages.

# Criterion 5.3 Surfactants, Fabric Softeners and Complexing Agents in Wet Processes (Applicability: Covers made of any fibres)

<u>All surfactants, softeners and complexing agents:</u> At least 95 % by weight of surfactants, softeners and complexing agents shall comply with one of the following conditions:

- (i) they shall be readily biodegradable under aerobic conditions;
- (ii) they shall be inherently biodegradable or eliminable in wastewater treatment plants.

<u>Non-ionic and cationic surfactants:</u> All non-ionic and cationic surfactants shall also be readily biodegradable under anaerobic conditions. The latest revision of the Detergents Ingredients Database should be used as a reference point for biodegradability:

# http://ec.europa.eu/environment/ecolabel/documents/did list/didlist part a en.pdf

**Assessment and Verification:** the applicant shall provide appropriate documentation through safety data sheets and declarations from suppliers. For all surfactants, softeners and complexing agents, this shall be supported by results of appropriate OECD or TS EN ISO tests for:

- (i) Readily biodegradability (OECD 301 A, TS EN ISO 7827, OECD 301 B, TS EN ISO 9439, OECD 301 C, OECD 301 D, TS EN ISO 10708, OECD 301 E, OECD 301 F, TS EN ISO 9408)
- (ii) Inherently biodegradability (TS EN ISO 14593, OECD 302 A, TS EN ISO 9887, OECD 302 B, TS EN ISO 9888, OECD 302 C)
- (iii) Eliminability (OECD 303A/B, TS EN ISO 11733)

For non-ionic and cationic surfactants, this shall be supported by results of appropriate OECD or ISO tests (ISO 11734, OECD 311).

# Criterion 5.4 Bleaching of Pulp, Yarn, Fabric and End Products (Applicability: Covers made of any fibres)

Chlorine agents shall not be used for the bleaching of any yarns, fabrics or end-products with the exception of manmade cellulose fibres.

Pulp used to manufacture man-made cellulose fibres (e.g. viscose) shall be bleached without the use of elemental chlorine (Cl<sub>2</sub>). The resulting total amount of chlorine and organically-bound chlorine in the finished fibres (OX) shall not exceed 150 ppm or in the wastewater from pulp manufacturing (AOX) shall not exceed 0,170 kg/ADt pulp.

**Assessment and Verification:** The applicant shall provide a declaration of non-use of chlorinated bleaching agents from the supplier.

For man-made cellulose fibres, the applicant shall provide a test report showing compliance with either the OX or the AOX requirement, using the test methods listed below:

- (i) OX: TS ISO 11480 (controlled combustion and micro coulometry)
- (ii) AOX: TS EN ISO 9562

# Criterion 5.5 Dyes (Applicability: Covers made of any fibres)

The following restrictions apply to dyes.

The use of dyes in textiles shall be also compliant with Criterion 10 on hazardous substances and thus the related derogation conditions shall apply. Derogation conditions relate to the handling of dyes in the dye house, the dyeing process and colour removal from wastewater from dye houses.

Group of Subtances	C	riterion	Assessment and verification
Halogenated carriers	shall not be used to dye polyester fabrics made of these fibres or po	• • • • •	Α
Azo dyes	Azo dyes that may cleave to arom carcinogenic shall not be used in a fibres and fabrics made of these fof each arylamine in the final products.	acrylic, cotton, polyamide and wool ibres. The limit value for the content	В
	Arylamine	CAS number	
	4-aminodiphenyl	92-67-1	
	Benzidine	92-87-5	
	4-chloro-o-toluidine	95-69-2	
	2-naphtylamine	91-59-8	
	o-amino-azotoluene	97-56-3	
	2-amino-4-nitrotoluene	99-55-8	
	p-chloroaniline	106-47-8	
	2,4-diaminoanisol	615-05-4	
	4,4'-diaminodiphenylmethane	101-77-9	
	3,3'-dichlorobenzidine	91-94-1	
	3,3'-dimethoxybenzidine	119-90-4	
	3,3'-dimethylbenzidine	119-93-7	
	3,3'-dimethyl-4,4- diaminodiphenylmethane	838-88-0	
	p-cresidine	120-71-8	
	4,4'-methylene-bis-(2 chloroaniline)	101-14-4	
	4,4'-oxydianiline	101-80-4	
	4,4'-thiodianiline	139-65-1	
	o-toluidine	95-53-4	
	2,4- diaminotoluen	95-80-7	
	2,4,5- trimetilanilin	137-17-7	
	o- anisidin (2-Methoxyanilin)	90-04-0	
	2,4-Xylidine		
	2,6-Xylidine	87-62-7	
	4-aminoazobenzene 60-09-3		
	An indicative list of azodyes that in the following.	t may cleave to arylamines is provided	

Group of	Criterion				Assessment and
Subtances	Citiciton				verification
	Disperse dyes that m	ay cleave t	1		
			Disperse Yellov		
			Disperse Yellow 23		
	Disperse Red 151		Disperse Yellow 56		
	Disperse Red 221		Disperse Yellov	v 218	
	Basic dyes that may o	leave to a			
	Basic Brown 4		Basic Red 114		
	Basic Red 42		Basic Yellow 82		
	Basic Red 76		Basic Yellow 10	)3	
	Basic Red 111	.1 .	<u> </u>		
			cleave to aroma		
	CI Acid Black 29	CI Acid R		CI Acid Red 128	
	CI Acid Black 94	CI Acid R		CI Acid Red 115	
	CI Acid Black 131	CI Acid R		CI Acid Red 128	
	CI Acid Black 132	CI Acid R		CI Acid Red 135	
	CI Acid Black 209	CI Acid R		CI Acid Red 148	
	CI Acid Black 232	CI Acid R		CI Acid Red 150	
	CI Acid Brown 415	CI Acid R		CI Acid Red 158	
	CI Acid Orange 17	CI Acid R		CI Acid Red 167	
	CI Acid Orange 24	CI Acid R		CI Acid Red 170	
	CI Acid Orange 45	CI Acid R		CI Acid Red 264	
	CI Acid Red 4	CI Acid R		CI Acid Red 265	
	CI Acid Red 5	CI Acid R		CI Acid Red 420	
	CI Acid Red 8	CI Acid Red 119:1		CI Acid Violet 12	
		cleave to aromatic amines Direct Brown 4		D: + D   142	
	Direct Black 4			Direct Red 13	
	Direct Black 29	Direct Br		Direct Red 17	
	Direct Black 38	Direct Br		Direct Red 21	
	Direct Black 154	Direct Br		Direct Red 24	
	Direct Blue1	Direct Br		Direct Red 26	
	Direct Blue2	Direct Br		Direct Red 22	
	Direct Blue3	Direct Br		Direct Red 28	
	Direct Blue6	Direct Br		Direct Red 37	
	Direct Blue8	Direct Br		Direct Red 39	
	Direct Blue9	Direct Br		Direct Red 44	
	Direct Blue10	Direct Br		Direct Red 46	
	Direct Blue14		own 101	Direct Red 62	
	Direct Blue15		own 154	Direct Red 67	
	Direct Blue21		own 222	Direct Red 72	
	Direct Blue22		own 223	Direct Red 126	
	Direct Blue25	Direct Gr		Direct Red 168	
	Direct Blue35	Direct Gr		Direct Red 216	
	Direct Blue76	Direct Gr		Direct Red 264	
	Direct Blue116	Direct Gr		Direct Violet 1	
	Direct Blue151	Direct Gr		Direct Violet 4	
	Direct Blue160	Direct O		Direct Violet 12	
	Direct Blue173	Direct O	_	Direct Violet 13	
	Direct Blue192	Direct O	range /	Direct Violet 14	

Group of Subtances	Criterion				Assessment and verification	
	Direct Blue201	Direct Orange	e 8	Direct Violet 21		
	Direct Blue215	Direct Orange		Direct Violet 22		
	Direct Blue295	Direct Orange		Direct Yellow 1		
	Direct Blue306	Direct Red 1		Direct Yellow 24		
	Direct Brown 1	Direct Red 2		Direct Yellow 48		
	Direct Brown 1:2	Direct Red 7				
	Direct Brown 2	Direct Red 10	)			
CMR dyes	Dyes that are carcinoge	_	or toxic to r	eproduction shall	1	Α
	not be used in all fibres	and fabrics.			•	
	Dyes that are	•				
	mutagenic or	toxic to	CAS No			
	reproduction					
	C.I. Asit Kırmızı 2		3761-53-3			
	C.I. Alkali Kırmızı		569-61-9			
	C.I. Alkali Mor 14		632-99-5			
	C.I. DirektSiyah 3	8	1937-37-7			
	C.I. Direct Blue6		2602-46-2			
	C.I. Direct Red 28		573-58-0			
	C.I. Disperse Blue		2475-45-8			
	C.I. Disperse Ora	_	82-28-0			
	C.I. Disperse Yell		2832-40-8			
Potentially	Dyes that are potentiall	-			amide	Α
sensitising dyes	and polyester fibres and		of these fibr	es.		
	Disperse dye		CAS number			
	potentially s					
	C.I. Disperse Blu		2475-45-8			
	C.I. Disperse Blu		2475-46-9			
	C.I. Disperse Blu		3179-90-6			
	C.I. Disperse Blu		3860-63-7			
	C.I. Disperse Blu		12222-75-2			
	C.I. Disperse Blu		12222-97-8			
	C.I. Disperse Blu		12223-01-7			
	C.I. Disperse Blu		61951-51-7			
	C.I. Disperse Br		23355-64-8			
	C.I. Disperse Or		2581-69-3			
	C.I. Disperse Or		730-40-5			
	C.I. Disperse Or		12223-33-5			
	C.I. Disperse Or		13301-61-6			
	C.I. Disperse Re		2872-52-8			
	C.I. Disperse Re		2872-48-2			
	C.I. Disperse Re		3179-89-3			
	C.I. Disperse Ye		119-15-3			
	C.I. Disperse Ye		2832-40-8			
	C.I. Disperse Ye		6373-73-5			
	C.I. Disperse Ye		12236-29-2			
Cl :	C.I. Disperse Ye		54824-37-2			•
	Chrome mordant dyes		ed in polyam	ide and wool fibre	es	Α
dyes	and fabrics made of the	ise fibres.				

Group of Subtances	Criterion	Assessment and verification
Metal complex	Metal complex dyes based on copper, chromium and nickel shall only	Α
dyes	be permitted for dyeing wool, polyamide or blends of these fibres with	
	man-made cellulose fibres (e.g. viscose).	

## **Assessment and Verification:**

**A.** The applicant shall provide a declaration of non-use of specified dyes from the supplier supported by SDSs.

**B.** The applicant shall provide a report presenting the results of the final product testing. The content of azo dyes in the final product shall be tested according to TS EN 14362-1 and TS EN 14362-3. The limit value is 30 mg/kg for each arylamine. (Note: false positives may be possible with respect to the presence of 4-amino azobenzene, and confirmation is therefore recommended).

# Criterion 5.6 Extractable metals (Applicability: covers made of any fibres)

The following limit values shall apply.

Madel	Limit values (n	ng/kg dış kılıf)
Metal	Covers for cot mattresses	All other products
Antimony (Sb)	30,0	30,0
Arsenic (As)	0,2	1,0
Cadmium (Cd)	0,1	0,1
Chromium (Cr):		
- Textiles dyed with metal complex dyes	1,0	2,0
- All other textiles	0,5	1,0
Cobalt (Co)		
- Textiles dyed with metal complex dyes	1,0	4,0
- All other textiles	1,0	1,0
Copper (Cu)	25,0	50,0
Lead (Pb)	0,2	1,0
Nickel (Ni):		
- Textiles dyed with metal complex dyes	1,0	1,0
All other textiles	0,5	1,0
Mercury (Hg)	0,02	0,02

**Assessment and Verification:** The applicant shall provide a report presenting the results of the final product testing as verification for the limit values. The tests shall be extraction according to TS EN ISO 105-E04 (acid sweat solution) and detection with inductively coupled plasma mass spectrometry (ICP-MS) or inductively coupled plasma optical emission spectrometry (ICP-OES, also referred to as ICP-AES).

# Criterion 5.7 Water, Stain and Oil Repellents (Applicability: Covers made of any fibres)

Fluorinated water, stain and oil repellent treatment shall not be used. This shall include perfluorinated and polyfluorinated carbon treatments.

Non-fluorinated treatments shall be readily biodegradable and non-bioaccumulative in the aquatic environment including aquatic sediment. They shall additionally comply with criterion 10 on hazardous substances.

**Assessment and Verification:** The applicant shall provide a declaration of non-use from the supplier supported by SDSs and compliance with Criterion 10 shall be demonstrated accordingly.

# Criterion 5.8 Wastewater Discharges from Wet Processing (Applicability: Covers made of any fibres and filling materials made of wool)

Wastewater discharges from wet processing (weaving, dyeing, printing and finishing processes) to the environment shall not exceed 20 g COD/kg textile processing. The requirement shall be measured downstream of on-site wastewater treatment plant or off-site wastewater treatment plant receiving wastewater from those processing sites.

If the effluent is treated on-site and discharged directly to surface waters, it shall also meet the following requirements:

- (i) pH between 6.0 and 9.0 (unless the pH of the receiving water is outside this range)
- (ii) Temperature of less than 35°C (unless the temperature of the receiving water is above this value)

If colour removal is required by a derogation condition in Criterion 10(a) then the following spectral absorption coefficients shall be met:

- (i) 436 nm (yellow sector) 7 m<sup>-1</sup>
- (ii) 525 nm (red sector) 5 m<sup>-1</sup>
- (iii) 620 nm (blue sector)  $3 \text{ m}^{-1}$

**Assessment and Verification:** The applicant shall provide detailed documentation and test reports, using ISO 6060/TS 2789 for the determination of COD and TS EN ISO 7887 for the determination of colour, and showing compliance with this criterion on the basis of monthly averages for the six months preceding the application, together with a declaration of compliance.

The data shall demonstrate compliance by the production site or, if the effluent is treated offsite, by the wastewater treatment operator.

If the wastewater resulting from wet processes is discharged to an urban or common treatment plant or organized industry zone's wastewater treatment plant (indirect discharge), it is sufficient for the applicant to submit a confirmation notification confirming the approval of the discharge process or to verify that the discharged wastewater meets the "Urban Wastewater Treatment

Regulation" dated 08.01.2006 and numbered 26047. The submitted approval notice or verification documentation must not be older than six months as of the date of application.

# Criterion 5.9 Mechanical Resistance (Applicability: Covers made of any fibre)

Mattress cover shall achieve satisfactory mechanical properties, which are defined by the following testing standards.

Property	Requirement	Test method
Tear strength	Woven fabrics≥15 N Nonwoven fabrics≥ 20N Knitted fabrics: not applicable	TS EN ISO 13937-2 (woven fabrics) TS EN ISO 9073-4 (nonwoven fabrics)
Seam slippage	Woven fabrics ≥ 16 dikiş: maksimum 6 mm  Nonwoven fabrics< 16 dikiş: maksimum 10 mm  Knitted fabrics and nonwovens: not applicable	TS EN ISO 13936-2 (under a load of 60 N for all woven fabrics)
Tensile strength	Woven fabrics≥ 350 N Knitted fabrics and nonwovens: not applicable	TS EN ISO 13934-1

**Assessment and Verification:** The applicant shall provide reports describing the results of the tests performed according to TS EN ISO 13937-2 or TS EN ISO 9073-4 for tear strength, ISO 13936-2 (under a load of 60 N) for seam slippage and TS EN ISO 13934-1 for tensile strength.

# Criterion 5.10 Durability of Flame Retardant Function (Applicability: Covers made of any fibre)

Removable and washable covers shall retain their functionality after 50 wash and tumble dry cycles at a minimum of 75°C. Covers that are not intended to be removed and washed shall retain their functionality after a soak test.

**Assessment and Verification:** The applicant shall provide reports from tests carried out according to the following standards, as appropriate:

- TS EN ISO 6330 in combination with TS EN ISO 12138 for domestic wash cycles and TS EN ISO 10528 for industrial laundry cycles in case of removable and washable covers.
- BS 5651 or equivalent in case the cover is not intended to be removed and washed.

# Criterion 5.11 Dimensional Change (Applicability: Removable covers made of any fibres)

For mattress covers that are removable and washable, the dimensional changes after washing and drying at either domestic or industrial washing temperatures and conditions shall not exceed:

- Woven fabrics: ± 3 %

- Nonwoven fabrics: ± 5 %

This criterion does not apply to fabrics that are not promoted as 'washable'.

**Assessment and Verification:** The applicant shall provide test reports referring to appropriate standards (TS EN ISO 5077 and TS EN ISO 6330). Unless the cover states otherwise, the default conditions shall be washing 3A (60°C), drying C (flat drying) and ironing according to the composition of the fabric.

#### **CRITERION 6. Glues and adhesives**

Glues containing organic solvents shall not be used. Glues and adhesives used for assembling the product shall be also compliant with Criterion 10 on hazardous substances.

**Assessment and Verification:** The applicant shall provide a declaration of non-use or a declaration from suppliers together with supporting documentation and compliance with Criterion 10 shall be demonstrated accordingly.

#### **CRITERION 7. Flame retardants**

The following flame retardants shall not be added intentionally to the product, any article of it and any homogeneous part of it.

Substance Name	CAS number	Acronym
Decabromodiphenlyether	1163-19-5	decaBDE
Hexabromocyclododecane	25637-99-4	HBCD/HBCDD
Octabromodiphenylether	32536-52-0	octaBDE
Pentabromodiphenylether	32534-81-9	pentaBDE
Polybrominated biphenyls	59536-65-1	PBBs
Short chain chlorinated paraffins (C10-C13)	85535-84-8	SCCP
Tris-(2,3-dibromopropyl)-phosphate	126-72-7	TRIS
Tris(2-chloroethyl)phosphate	115-96-8	TCEP
Tris-(aziridinyl)-phosphinoxide	545-55-1	TEPA

The use of any flame retardant shall be compliant with criterion 10 on hazardous substances.

**Assessment and Verification:** The applicant shall provide and shall make suppliers to provide a declaration of nonuse confirming that the listed flame retardants have not been included in the product, any article of it, and any homogeneous part of it. A list of substances added to enhance the flame retarding properties shall be also provided, including concentrations and related H statements/R phrases, and compliance with criterion 10 shall be demonstrated accordingly.

#### **CRITERION 8. Biocides**

#### Criterion 8.1 Production

In case of use of any biocidal active substance in the product, only biocidal products containing approved active substances are allowed to be used within the scope of the "Biocidal Products

Regulation" published in the Official Gazette dated 31.12.2009 and numbered 27449. Criterion 10 for dangerous substances shall be complied with.

**Assessment and Verification:** The applicant shall provide either declaration of non-use or evidence that the use of biocides is authorized under the scope of the "Biocidal Products Regulation" published in the Official Gazette dated 31.12.2009 and numbered 27449. A list of biocidal products added to the product shall be also provided, including concentrations and related H statements/R phrases, and compliance with criterion 10 shall be demonstrated accordingly.

# **Criterion 8.2 Transportation**

Chlorophenols (their salts and esters), polychlorinated biphenyl (PCB), organo-tin compounds (including TBT, TPhT, DBT, and DOT) and dimethyl fumarate (DMFu) shall not be used during the transportation or storage of the product, any article of it and any homogeneous part of it.

**Assessment and Verification:** The applicant shall provide and shall make suppliers to provide a declaration of non-use, as appropriate, confirming that the listed substances have not been used during the transportation or storage of the product, any article and any homogeneous part of it. A list of biocidal products added to the product shall be also provided, including concentrations and related H statements/R phrases, and compliance with Criterion 10 shall be demonstrated accordingly.

#### **CRITERION 9. Plasticizers**

The following plasticizers shall not be added intentionally to the product, any article of it and to any homogeneous part of it.

Substance/Group of Substances	CAS number	Acronym
Di-iso-nonylphtalate (*)	28553-12-0; 68515-48-0	DINP
Di-n-octylphthalate	117-84-0	DNOP
Di(2-ethylhexyl)-phthalate	117-81-7	DEHP
Diisodecylphthalate (*)	26761-40-0; 68515-49-1	DIDP
Butylbenzylphthalate	85-68-7	BBP
Dibutylphthalate	84-74-2	DBP
Di-iso-butylphthalate	84-69-5	DIBP
Di-C6-8-branched alkylphthalates	71888-89-6	DIHP
Di-C7-11-branched alkylphthalates	68515-42-4	DHNUP
Di-n-hexylphthalate	84-75-3	DHP
Di-(2-methoxyethyl)-phthalate	117-82-8	DMEP

#### (\*) only for cot mattresses

The sum of the prohibited plasticizers shall be lower than 0,10 % by weight. The use of any plasticizer shall be compliant with Criterion 10 on hazardous substances.

Assessment and Verification: The applicant shall provide and shall make suppliers to provide a declaration of nonuse confirming that the listed substances have not been used in the product, any article of it and any homogeneous part of it. SDSs for the formulation of polymers may be requested to confirm that the listed substances have not been included in the product. A list of plasticizers added to the product shall be provided, including concentrations and related H statements/R phrases, and compliance with Criterion 10 shall be demonstrated accordingly. Additional verification for the total content of phthalates may be required in accordance with TS EN ISO 14389 when the quality of information is considered insufficient.

### **CRITERION 10. Excluded or Limited Substances and Mixtures**

# (a) Hazardous substances and mixtures

The product or any of its components must be produced in accordance with Annex-2 of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (KKDIK)" published in the Official Gazette dated 23/06/2017 and numbered 30105, or in accordance with the "Regulation on Safety Data Sheets for Hazardous Substances and Mixtures", which entered into force by being published in the Official Gazette dated 13/12/2014 and numbered 29204.

The most recent classification rules adopted by the Union shall take precedence over the listed hazard classifications and risk phrases. Applicants shall therefore ensure that any classifications are based on the most recent classification rules.

The hazard statements and the risk phrases in the table below generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures apply.

The restricted hazard classes are listed in the table below. The use of substances or mixtures which change their properties upon processing (e.g. become no longer bioavailable or undergo chemical modification) so that the identified hazards no longer apply are exempted from the above requirements. This shall include for instance modified polymers and monomers or additives which become covalently bonded within plastic coatings.

Acute toxicity			
Categories 1 and 2	Category 3		
H300 Fatal if swallowed	H301 Toxic if swallowed		
H310 Fatal in contact with skin	H311 Toxic in contact with skin		
H330 Fatal if inhaled H331 Toxic if inhaled			
H304 May be fatal if swallowed and enters the airways EUH070 Toxic by eye contact			
Specific target organ toxicity			

Category 1	Category 2	
H370 Causes damage to organs	H371 May cause damage to organs	
H372 Causes damage to organs through prolonged or	H373 May cause damage to organs through	
repeated exposure	prolonged or repeated exposure	
Respiratory and sk	in sensitization	
Category 1A	Category 1B	
H317 May cause allergic skin reaction.	H317 May cause allergic skin reaction	
H334 May cause allergy or asthma symptoms or	H334 May cause allergy or asthma symptoms or	
breathing difficulties if inhaled	breathing difficulties if inhaled	
Carcinogenic, mutagenic, o	or toxic for reproduction	
Categories 1A and 1B	Category 2	
H340 May cause genetic defects	H341 Suspected of causing genetic defects	
H350 May cause cancer	H351 Suspected of causing cancer	
H350i May cause cancer by inhalation		
H360F May damage fertility	H361d Suspected of damaging the unborn child	
H360D May damage the unborn child	H361d Suspected of damaging the unborn child	
H360FD May damage fertility. May damage the unborn	H361fd Suspected of damaging fertility. Suspected of	
child	damaging the unborn child	
H360Fd May damage fertility. Suspected of damaging the	H362 May cause harm to breast fed children	
unborn child		
H360Df May damage the unborn child. Suspected of	f	
damaging fertility		
Hazardous to the aquatic environment		
Categories 1 and 2	Categories 3 and 4	
H400 Very toxic to aquatic life	H412 Harmful to aquatic life with long-lasting effects	
H410 Very toxic to aquatic life with long-lasting effects.	H413 May cause long-lasting effects to aquatic life	
H411 Toxic to aquatic life with long-lasting effects		
Hazardous to the ozone layer		
H420 Harms public health and the environment by	·	
destroying the ozone layer in the upper atmosphere		

The substances in the table below are specifically derogated from the requirements set out in Criterion 10(a) and in accordance with the derogation conditions set out below. For each substance all derogation conditions shall be met for the specified hazard classifications.

Substances/Groups of substances	Derogated classification	Derogation conditions
Antimony Trioxide — ATO	Н351	ATO shall be used as catalyst in polyester or as flame retardant synergist in textiles for backcoatings. Emissions to air in the workplace where ATO is applied shall meet an eight hour occupational exposure limit value of 0,5 mg/m3.
Nickel	H317, H351, H372	Nickel shall be contained in stainless steel.
Dyestuff for dyeing and non-pigment printing in textiles	H301, H311, H331, H317, H334	Dust free dye formulations or automatic dosing and dispensing of dyes shall be used by dye houses and printers to minimise worker exposure.
	H411, H412, H413	The use of reactive, direct, vat, sulphur dyes with these classifications shall meet at least one of the following

	1		
		conditions:	
		a) High affinity dyes are used;	
		b) Colour matching instrumentation is used;	
		c) Standard Operating Procedures for the	
		dyeing process are used;	
		d) Colour removal is used in wastewater	
		treatment (see Criterion 5.8).	
		e) Solution dyeing processes are used;	
		f) Digital inkjet printing processes are used;	
		The use of solution dyeing and/or digital printing are	
		exempted from these conditions.	
Flames materials into coord in	11247 (40) 11272 11444	·	
	H317 (1B), H373, H411,	=	
textiles	H412, H413	protection requirements in ISO, EN, EU or public sector	
		procurement standards and regulations.	
		The product shall meet the requirements for durability	
		of function (see Criterion 5.10)	
Optical brighteners	H411, H412, H413	Optical brighteners shall only be applied as additives	
		during the production of acrylic, polyamide and	
		polyester fibres.	
Water, dirt and stain	H413	The repellent and its degradation products shall be	
repellents		readily biodegradable and non-bioaccumulative in the	
		aquatic environment, including aquatic sediment.	
Auxiliaries used in textiles	H301, H371, H373, H334,		
(comprising:	H411, H412, H413, EUH070		
Carriers, Levelling agents,	, , ,	Procedures.	
Dispersing			
agents, Surfactants,			
Thickeners,			
Binders)			
Dilideraj	H311, H331, H317 (1B)	Residual auxiliaries classified accordingly shall not be	
	 	present at concentrations of greater than 1,0 % w/w	
		·   -	
Character death as the	11204 11244 11262 11274	on the final product.	
Glues and adhesives		Glue and adhesives shall respect conditions	
	H373, H400, H410, H411,	set in Criterion 6.	
	H412, H413, EUH059,		
	EUH029, EUH031, EUH032,		
	EUH070, H317, H334		

**Assessment and Verification:** The applicant shall provide the bill of materials of the product, including a list with all articles and homogeneous part of it.

The applicant shall screen the presence of substances and mixtures that may be classified with the hazard statements or risk phrases reported above in the criterion. The applicant shall provide a declaration of compliance with requirement Criterion 10(a) for the product, any article of it or any homogenous part of it.

Applicants shall select the appropriate forms of verification. The main forms of verification are foreseen as follows:

- Articles manufactured according to a specific chemical formulation (e.g. latex and PUR foams): SDSs shall be provided for the final article or for the substances and mixtures composing the final article above a cut-off limit of 0,10 % w/w.
- Homogenous parts and any associated treatments or impurities (e.g. plastic and metal parts): SDSs shall be provided for the materials composing that part of the product and for substances and mixtures used in the formulation and treatment of the materials remaining in the final part above a cut-off limit of 0,10 % w/w.
- Chemical recipes used to impart a specific function to the product or to textile components of the product (e.g. glues and adhesives, flame retardants, biocides, plasticizers, dyes): SDSs shall be provided for substances and mixtures used in the assembly of the final product or substances and mixtures applied to textile components during production, dyeing, printing and finishing processes and remaining in the textile components.

The declaration shall include at least those that can be determined from the information that meets the requirements listed in Annex-2 of KKDIK to the classification of substances, mixtures or materials with any of the hazard classes associated with the hazard statements or risk phrases referred to in the table above.

The information provided shall relate to the forms or physical states of the substances or mixtures as used in the final product.

The following technical information shall be provided to support the declaration of classification or non-classification for each substance and mixture:

- (i) For substances that have not been registered under the KKDIK Regulation or which do not yet have a harmonized SEA classification within the scope of the SEA Regulation (Regulation on Classification, Labeling and Packaging of Substances and Mixtures): Information meeting the requirements listed in Annex-7 of the KKDIK Regulation (Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals);
- (ii) For substances that have been registered under the KKDIK Regulation and which do not meet the requirements for SEA classification: information confirming the unclassified status of the substance based on the KKDIK registration dossier;
- (iii) For substances that have a harmonised classification or are self-classified: SDSs where available. If these are not available or the substance is self-classified then information shall be provided relevant to the substances hazard classification according to Annex -2 to KKDIK Regulation;
- (iv) In the case of mixtures: SDSs where available. If these are not available then calculation of the mixture classification shall be provided according to the rules under SEA Regulation together with information relevant to the mixtures hazard classification according to Annex II to KKDIK Regulation.

The SDS shall be filled in accordance with the guide in Annex-2 of the KKDIK Regulation (requirements for compiling the SDS) or the Regulation on Safety Data Sheets Concerning Hazardous Substances and Mixtures. Incomplete SDS shall require supplementing with information from declarations by chemical suppliers.

Where substances used are derogated, then the declaration shall specifically identify those derogated substances and provide supporting evidence showing how the derogation conditions are met.

# (b) Substances listed in accordance with Article 49 of the Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals

No derogation apply for substances that are substances of high concern and are present in a bed matress product or in any homogeneous part of the product in a concentration higher than 0.10% by weight.

Assessment and Verification: Reference to the latest list of substances of very high concern shall be made on the date of application. The applicant shall provide a declaration of compliance with Criterion 10(b), together with related documentation, including declarations of compliance signed by the material suppliers and copies of relevant SDSs for substances or mixtures in accordance with Annex -2 to KKDIK Regulation. The concentration limits shall be specified in the SDSs in accordance with Article 49 of Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals.

# CRITERION 11. Emission of Specified Volatile Organic Compounds (VOCs, SVOCs) from the Mattress

The contribution of mattresses to the VOC content of the indoor air shall not exceed the final values reported below, for a period of 7 days or, alternatively, 28 days.

Pollutant	Limit Value (7th day) mg/m³	Limit Value (28th day) mg/m³
Total VOC	<0,3	< 0,15
Formaldehyde	< 0,02	< 0,02
Other aldehydes	< 0,01	< 0,01
Semi-volatile organic compounds (SVOC)	< 0,05	< 0,025

**Assessment and Verification:** The applicant shall perform a test chamber analysis in accordance with the standard TS EN ISO 16000-9 (or equivalent). The analysis of formaldehyde and other aldehydes shall comply with the standard TS EN ISO 16000-3 (any equivalent); the analysis of VOCs and SVOCs shall comply with the standard TS EN ISO 16000-6 (any equivalent). Test results shall be calculated for an area-specific ventilation rate 'q' =  $0.5 \text{ m}^3/\text{m}^2\text{h}$ , corresponding to a

loading factor 'L' of 1 m<sup>2</sup>/m<sup>3</sup> and an air change rate 'n' of 0,5 per hour. In all these cases, the total surface of all surfaces (upside, downside and edges) of the mattress determines the area used for the calculation of the loading factor. The test shall be performed on an entire mattress.

Should this not be possible for any reason, any of the following alternative procedures of testing may be applied:

1. Performing the test on a representative sample of the mattress (i.e. one half, one quarter or one-eighth); cut edges shall be closed airtight by appropriate means.

In order to provide a conservative estimation of the concentration values expected from the entire mattress, concentrations registered with the sample shall be scaled up by volume (i.e. emissions shall be multiplied by a factor 2, 4 or 8);

2. Performing the test for each separate element forming part of the mattress. In order to provide a conservative estimation of the concentration values expected from the entire mattress, contributions registered with single components shall be combined using this formula

 $C_M = \Sigma \omega i \cdot Ci$ 

where:

 $C_M$ : the overall contribution from the entire mattress ( $\mu g/m^3$ );

 $C_i$ : the contribution per unit of mass given by each element 'i' forming part of the mattress ( $\mu g/m^3$ .  $kg_i$ )

 $\omega_i$ : the weight of the element 'i' in the entire mattress.

#### **CRITERION 12. Technical Performance**

### **Criterion 12.1 Quality**

The product shall be produced in accordance with TS 9364,TS 7167, TS 13810 or equivalent national or international standards.

**Assessment and Verification:** The applicant shall provide the document obtained from the national or international institution/organization regarding its compliance with the relevant standard.

#### **Criterion 12.2 Warranty**

A list of recommendations on how to use, maintain and dispose of the mattress shall be reported in the warranty documentation. The warranty for the mattress shall be valid for a period of at least 3 years. This prescription shall not be required for cot mattresses.

**Assessment and Verification:** The applicant shall provide the guarantee certificate.

## **CRITERION 13. Design for Disassembly and Recovery of Materials**

The manufacturer shall demonstrate that the mattress can be dismantled for the following purposes:

- undertaking repairs and replacements of worn-out parts,
- upgrading older or obsolete parts,
- collecting and separating parts and materials for the potential recycling of them.

Assessment and Verification: Information about the maintenance, repair and replacement centers of the bearing will be given, information will be given about the collection infrastructure of bearings that have expired, a report shall be submitted with the application detailing the dismantling of the mattress and the possible disposal and recycling of each part. For instance, the following actions could facilitate the dismantling of the mattress: preferring sewing to the application of glue; using removable covers; using single and recyclable materials for each homogeneous part (non-composite) or using recycled materials, giving information about the recycling infrastructure of the materials used.

### **CRITERION 14. Information Appearing on the Turkish Environmental Label**

The following information shall be placed on the product along with the environmental label.

The environmental label shall be placed on the product packaging in dimensions of 3×3 cm. Under the label, document number in 6 points and "The use of the environmental label in this product has been approved by the Ministry of Environment, Urbanization and Climate Change in accordance with the Environmental Label Regulation published in the Official Gazette dated 19.10.2018 and numbered 30570 due to its environmental performance." statement shall be legible and clearly visible.

If the product is approved during the application process, it can be included in the following statements.

- 'High-quality long-lasting product'
- 'Hazardous substances restricted'
- 'Indoor air pollution reduced'
- '....the part is recyclable'

**Assessment and Verification:** The applicant shall provide a copy of the product packaging showing the label along with the declaration of conformity to this criterion.

# **CRITERION 15. Additional Information to Consumers**

The applicant shall provide the consumers with a list of recommendations, in written or visual form, on how to use the mattress, how to maintain it, and how the separate collection system at the end of its life is, where it will be delivered, how it will be recycled, how it will be disposed of.

**Assessment and Verification:** The applicant shall provide a declaration of compliance and visual evidence.