



GLOBAL ORGANIC TEXTILE STANDARD
ECOLOGY & SOCIAL RESPONSIBILITY

GLOBAL ORGANIC TEXTILE STANDARD (GOTS)

VERSION 6.0

01 MARCH 2020
(EFFECTIVE DATE: 01 MARCH 2021)

Global Standard gemeinnützige GmbH
Rotebühlstr. 102 · 70178 Stuttgart · Germany

www.global-standard.org

TABLE OF CONTENTS

TABLE OF CONTENTS	2
1 PRINCIPLES	3
1.1 AIM OF THE STANDARD	3
1.2 SCOPE AND STRUCTURE	3
1.3 SCOPE CERTIFICATE	3
1.4 LABEL GRADES AND LABELLING	3
1.5 REFERENCE DOCUMENTS	4
2 CRITERIA	5
2.1 REQUIREMENTS FOR ORGANIC FIBRE PRODUCTION	5
2.2 REQUIREMENTS FOR FIBRE MATERIAL COMPOSITION	5
2.3 GENERAL REQUIREMENTS FOR CHEMICAL INPUTS IN ALL PROCESSING STAGES	5
2.4 SPECIFIC REQUIREMENTS AND TEST PARAMETERS	10
3 SOCIAL CRITERIA	21
3.1 SCOPE	21
3.2 EMPLOYMENT IS FREELY CHOSEN	22
3.3 FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING	22
3.4 CHILD LABOUR SHALL NOT BE USED	22
3.5 NO DISCRIMINATION IS PRACTISED	23
3.6 OCCUPATIONAL HEALTH AND SAFETY (OHS)	23
3.7 NO HARASSMENT AND VIOLENCE	24
3.8 REMUNERATION AND ASSESSMENT OF LIVING WAGE GAP	24
3.9 WORKING TIME	25
3.10 NO PRECARIOUS EMPLOYMENT IS PROVIDED	25
3.11 MIGRANT WORKERS	25
3.12 SOCIAL COMPLIANCE MANAGEMENT	26
4 QUALITY ASSURANCE SYSTEM	26
4.1 AUDITING OF PROCESSING, MANUFACTURING AND TRADING STAGES	26
4.2 TESTING OF TECHNICAL QUALITY PARAMETERS AND RESIDUES	27
5 ETHICAL BUSINESS BEHAVIOUR	27
6 ANNEX	28
6.1 SPECIFIC REQUIREMENTS FOR TEXTILE PERSONAL CARE PRODUCTS	28
6.2 SPECIFIC REQUIREMENTS FOR FOOD CONTACT TEXTILES	29
7 DEFINITIONS	30
8 LIST OF ABBREVIATIONS	31

1 PRINCIPLES

1.1 AIM OF THE STANDARD

The aim of this Standard is to define requirements to ensure organic status of textiles, from harvesting of the raw materials, through environmentally and socially responsible manufacturing up to labelling in order to provide a credible assurance to the end consumer.

1.2 SCOPE AND STRUCTURE

This Standard covers the processing, manufacturing, packaging, labelling, trading and distribution of all textiles made from at least 70% certified organic natural fibres. The final products may include, but are not limited to fibre products, yarns, fabrics, garments, fashion textile accessories (carried or worn), textile toys, home textiles, mattresses and bedding products as well as textile personal care products.

The Standard focuses on compulsory criteria only except where an exception from this rule is expressly stated. Some of the criteria are compliance requirements for the entire facility where GOTS products are processed (2.4.10. Environmental management, 2.4.11. Wastewater treatment, 3. Minimum social criteria, 4.1. Auditing of processing, manufacturing and trading stages and 5. Ethical Business Behaviour), whereas the others are criteria relevant for the specific products subject to certification (all other criteria of Section 2 and Section 4.2. of this Standard). GOTS criteria or the local legal requirements, whichever are higher, shall be followed.

As it is to date technically nearly impossible to produce any textiles in an industrial way without the use of chemical inputs, the approach is to define criteria for low impact and low residual natural and synthetic chemical inputs (such as dyestuffs, auxiliaries and finishes) accepted for textiles produced and labelled according to this Standard.

The Standard sets requirements on working and social conditions that are equivalent to those of leading social sustainability standards.

As the Standard is also applied and monitored for entities in countries with developed and effectively applied social and labour legislation and collective agreements between employers and trade unions that conform with the universal standards of the International Labour Organisation (ILO), exceptions to monitoring, verification and audit requirements may be made. Conditions for making exceptions are defined in the Implementation Manual of this Standard.

1.3 SCOPE CERTIFICATE

Processors, manufacturers, traders and retailers that have demonstrated their ability to comply with the relevant GOTS criteria in the corresponding certification procedure to an *Approved Certifier* receive a GOTS Scope Certificate issued in accordance with the 'Policy and Template for issuing Scope Certificates' (SCs). Accordingly, they are considered *Certified Entities*. Scope Certificates list the products/product categories that the *Certified Entities* can offer in compliance with the Standard as well as the processing, manufacturing and trading activities that are qualified under the scope of certification. *Subcontractors* and their relevant processing and manufacturing steps become listed on the Scope Certificate of the *Certified Entity* assigning the certification.

1.4 LABEL GRADES AND LABELLING

The Standard provides for a subdivision into two label-grades. The only differentiation for subdivision is the minimum percentage of 'organic' / 'organic - *in conversion*' material in the certified product. Labelling of products as '*in conversion*' is only possible, if the Standard, on which the certification of the fibre production is based, permits such labelling for the fibre in question.

Only textile goods (finished or intermediate) produced in compliance with this Standard by a *Certified Entity* and certified by an *Approved Certifier* (= GOTS Goods) may be sold, labelled or represented as:



(a) **"organic" or "organic - in conversion"**

or

(b) **"made with (x %) organic materials" or "made with (x %) organic - in conversion materials"**

and the GOTS logo (or the immediate reference "Global Organic Textile Standard" or the short form "GOTS").

Labelling shall be completed by a reference to the *Approved Certifier* who has certified the *GOTS Goods* (e.g. certifier's name and/or logo) and the license number of the *Certified Entity* (as provided by the *Approved Certifier*).

In all cases the GOTS labelling can only be applied to the product/packaging by a *Certified Entity* and shall have been approved by the *Certified Entity's Approved Certifier* in advance of its application.

Labelling of *GOTS Goods* sold in retail is mandatory.

Application of GOTS labelling shall be in compliance with the 'Licensing and Labelling Guide'.

1.5 REFERENCE DOCUMENTS

Beside this Standard the Global Standard gGmbH has released the following official reference documents that provide for binding provisions and requirements for *Approved Certifiers* and users of the GOTS:

1.5.1 Manual for the Implementation of the Global Organic Textile Standard:

provides interpretations and clarifications for specific criteria of GOTS. Its purpose is to prevent any inconsistent, inappropriate or incorrect interpretation of the Standard. It further contains requirements and detailed specifications for the application of the GOTS and the implementation of the related quality assurance system for certifiers.

1.5.2 Licensing and Labelling Guide:

specifies the licensing conditions for companies participating in the GOTS certification system and defines the corresponding license fees. It further sets the requirements for the use of the GOTS registered trademarks.

1.5.3 Labelling Release for GOTS Goods:

provides a release form for labelling of GOTS Goods

1.5.4 Labelling Release for GOTS Additives:

provides a release form for labelling of GOTS Additives

1.5.5 Policy and Template for issuing Scope Certificates (SCs):

provides detailed instructions with regard to policies, layout, format and text for issuing Certificates of Compliance

1.5.6 Policy and Template for issuing Transaction Certificates (TCs):

provides detailed instructions with regard to policies, layout, format and text for issuing Transaction Certificates

1.5.7 Policy and Template for issuing Letters of Approval:

provides detailed instructions with regard to policies, layout, format and text for issuing Letters of Approval for colourants and textile auxiliaries which are approved as inputs for application in the processing of GOTS certified textile products

1.5.8 Approval Procedure and Requirements for Certification Bodies:

specifies the approval and monitoring procedures and sets out the related requirements for Certification Bodies to implement the GOTS certification and quality assurance system

1.5.9 Policy for Change or Migration of Certifier:

specifies the steps to be undertaken by *Approved Certifier* and *Certified Entity* in case of change or migration of certifier.

2 CRITERIA

2.1 REQUIREMENTS FOR ORGANIC FIBRE PRODUCTION

Approved are natural fibres that are certified 'organic' or 'organic - in conversion' according to any standard approved in the IFOAM Family of Standards for the relevant scope of production (crop or animal production), such as Regulation (EC) 834/2007, USDA National Organic Program (NOP), APEDA's National Programme for Organic Production (NPOP), China Organic Standard GB/ T19630. The certification body shall have a valid and recognised accreditation for the standard it certifies against. Recognised accreditations are ISO 17065 accreditation, NOP accreditation and IFOAM accreditation.

Certifying of products as 'organic - in conversion' is only possible, if the standard on which the certification of the fibre production is based, permits such a certification for the fibre in question. Conversion status of fibres shall be stated as specified in Section 1.4. of this Standard.

2.2 REQUIREMENTS FOR FIBRE MATERIAL COMPOSITION

2.2.1 Products sold, labelled or represented as "organic" or "organic-in conversion"

No less than 95% ($\geq 95\%$) of the fibre content of the products - excluding *accessories* - shall be of certified organic origin or from '*in conversion*' period (identified and labelled as specified in Sections 1.4 and 2.1 of this Standard). Up to 5% ($\leq 5\%$) of the fibre content of the products may be made of non-organic fibres that are listed under 'additional fibre materials' in Section 2.4.9. The percentage figures refer to the weight of the fibre content of the products at normal conditions. No fibres shall be used which originate from production projects with regard to which there is evidence of a persistent pattern of gross violations of the ILO core labour norms (as far as these are relevant for agriculture) and/or of animal welfare principles (including Mulesing) or irrefutable evidence of a persistent pattern of land grabbing methods.

2.2.2 Products sold, labelled or represented as "made with x % organic materials" or "made with x % organic-in conversion materials"

No less than 70% ($\geq 70\%$) of the fibre content of the products - excluding *accessories* - shall be of certified organic origin or from '*in conversion*' period (identified and labelled as specified in Sections 1.4 and 2.1 of this Standard). Up to 30% ($\leq 30\%$) of the fibre content of the products may be made of non-organic fibres that are listed under 'additional fibre materials' in Section 2.4.9. The percentage figures refer to the weight of the fibre content of the products at normal conditions. No fibres shall be used which originate from production projects with regard to which there is evidence of a persistent pattern of gross violations of the ILO core labour norms (as far as these are relevant for agriculture) and/or of animal welfare principles (including Mulesing) or irrefutable evidence of a persistent pattern of land grabbing methods.

2.3 GENERAL REQUIREMENTS FOR CHEMICAL INPUTS IN ALL PROCESSING STAGES

2.3.1 Prohibited and restricted inputs

The following table lists chemical *inputs* that may (potentially) be used in conventional textile processing but that are explicitly banned or restricted for environmental and/or toxicological reasons in all processing stages of *GOTS Goods*. It is not to be seen as a comprehensive and inclusive list of all chemical *inputs* that are prohibited or restricted under GOTS. Prohibition or restriction of substance groups or individual *substances* that are not explicitly listed in this Section may further result from Section 2.3.2 'Requirements related to hazards and toxicity' or from other criteria of this Standard.

Substance group	Criteria
Aromatic and/or halogenated solvents	Prohibited
Flame retardants	Prohibited are <ul style="list-style-type: none"> - Chlorinated flame retardants - Brominated flame retardants - Phosphate based flame retardants, listed in Manual - Flame retardants containing Antimony or Antimony Trioxide - Disodium octaborate
Chlorinated benzenes and toluenes	Prohibited
Chlorophenols (including their salts and esters)	Prohibited (such as mono, di, tri, tetra and penta- chlorophenols)
Complexing agents and surfactants	Prohibited are: <ul style="list-style-type: none"> • all APs and APEOs (i.e. NP, OP, NPEO, OPEO, APEOs terminated with functional groups, APEO-polymers) • EDTA, DTPA, NTA • LAS, α-MES
Endocrine disruptors	Prohibited
Formaldehyde and other short-chain aldehydes	Prohibited are <i>inputs</i> that contain or generate formaldehyde or other short-chain aldehydes (like glyoxal) during designated application
Glycol Derivatives	Prohibited are the glycol derivatives listed in the Manual
Genetically modified organisms (GMO)	Prohibited are all <i>inputs</i> that: <ul style="list-style-type: none"> • contain GMO • contain enzymes derived from GMO • are made from GMO raw materials (e.g. starch, surfactants or oils from GM plants) • GMO based traceability markers
Heavy metals	Prohibited, <i>inputs</i> shall be ' <i>heavy metal free</i> '. Impurities shall not exceed the limit values as defined in annex B. Exceptions valid for dyes and pigments are set in Sections 2.4.6. and 2.4.7.
<i>Inputs</i> (e.g. azo dyes and pigments) releasing carcinogenic arylamine compounds (MAK III, category 1,2,3,4)	Prohibited
<i>Inputs</i> containing functional nanoparticles (= particles with a size < 100 nm)	Prohibited
<i>Inputs</i> with halogen containing compounds	Prohibited are <i>inputs</i> that contain > 1% <i>permanent AOX</i> . Exceptions valid for pigments are set in Section 2.4.7.
Organotin compounds	Prohibited (such as DBT, DMT, DOT, DPhT, DPT, MBT, MMT, MOT, MPhT, TBT, TCyHT, TeBT, TeET, TMT, TOT, TPhT, TPT)
Plasticizers	Prohibited are: <p>PAH, phthalates and esters of phthalic acid, Bisphenol A and all other plasticizers with endocrine disrupting potential</p>
Per- and Polyfluorinated compounds (PFC)	Prohibited. (such as PFCA (incl. PFOA), PFSA (incl. PFOS) FTOH, PFNA, PFHpA, PFDA)
Quaternary ammonium compounds	Prohibited are: <p>DTDMAC, DSDMAC and DHTDMAC</p>

Substance group	Criteria
Chlorinated Paraffins Short-chain chlorinated paraffins (SCCPs, C₁₀₋₁₃) Medium-chain chlorinated paraffins (MCCPs, C₁₄₋₁₇)	Prohibited Prohibited
Cyclic Siloxanes (D4, D5, D6)	Prohibited are inputs that shall lead to ≥ 1000 ppm of cyclic siloxanes in processed GOTS Goods.
Substances and preparations that are prohibited for application in textiles with a recognised internationally or a nationally valid legal character	Prohibited
Substances and preparations having restrictions in usage for application in textiles with a recognised internationally or nationally legal character	The same restrictions apply, provided the <i>substances</i> and <i>preparations</i> are not already prohibited or have stricter restrictions criteria according to this Standard. <i>Substances</i> and <i>preparations</i> listed in regulation EC 552/2009 (amending regulation EC 1907/2006 (REACH), annex XVII), and the 'candidate list of substances of very high concern for authorisation' of the European Chemicals Agency (ECHA) are prohibited.
Microplastics	Prohibited are: Intentionally added synthetic <i>microplastics</i> .
In-can preservatives in chemical inputs	Prohibited are: In-can preservatives which do not meet the requirements of Sections 2.3.1 and 2.3.2 Except, allowed are: Biocidal active substance(s) that comply with European biocidal products regulation (BPR 528/2012) and listed on the Union list of BPR for product type PT06 (preservatives for products during storage): https://echa.europa.eu/en/information-on-chemicals/biocidal-active-substances

2.3.2 Requirements related to hazards and toxicity

Substance group	Criteria
Inputs which are classified with specific hazard statements (risk phrases) related to health hazards	Prohibited are: <ul style="list-style-type: none"> - <i>substances</i> which are classified with any of the following hazard statements, if applied as direct input - <i>preparations</i> which are classified with any of the following hazard statements - <i>preparations</i> which contain at least one substance which is classified with any of the following hazard statements in accordance with the codification system of the Global Harmonized System (GHS) as published by the United Nations, annex 3: H300 Fatal if swallowed H310 Fatal in contact with skin H330 Fatal if inhaled H340 May cause genetic defects

	<p>H341 Suspected of causing genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child H361 Suspected of damaging fertility or the unborn child H370 Causes damage to organs H371 May cause damage to organs H372 Causes damage to organs through prolonged or repeated exposure</p> <p>For <i>inputs</i> assessed on basis of GHS, where the implementation system does not provide for the codified H-statements, the corresponding hazard classes and categories of GHS, annex 3 apply. For <i>inputs</i> assessed according to the 'risk phrase' classification (Directive 67/548EEC amended and repealed by Regulation EC 1272/2008) the equivalent risk phrases apply.</p>
<p>Inputs which are classified with specific hazard statements / risk phrases related to environmental hazards</p>	<p>Prohibited are:</p> <ul style="list-style-type: none"> - substances which are classified with any of the following hazard statements / risk phrases, if applied as direct input - preparations which are classified with any of the following hazard statements / risk phrases <ul style="list-style-type: none"> a) in accordance with the codification system of the Global Harmonized System (GHS) as published by the United Nations, annex 3: <ul style="list-style-type: none"> H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects H411: Toxic to aquatic life with long lasting effects H420: Harms public health and the environment by destroying ozone in the upper atmosphere H433: Harmful to terrestrial vertebrates
<p>Inputs which are bio-accumulative and not rapidly degradable</p>	<p>Prohibited are substances, if applied as direct input, and preparations classified with H413: 'May cause long-lasting effects to aquatic life' (respective R53) that are both, 'bio-accumulative'¹⁾ and not rapidly degradable^{2), 3)}</p>

- 1) All *substances* or *preparations* are considered as (potentially) bio-accumulative, if BCF (= bio-concentration factor) ≥ 500 or, if absent, $\log K_{ow}$ (= logarithm of the n-octanol-water partition coefficient) ≥ 4
- 2) Testing requirement: $>70\%$ OECD 301A [28d] or equivalent testing method according to footnote 4 of the table below, except test methods related to eliminability (OECD 302). In those cases where only BOD and COD data are available the input is considered 'rapidly degradable' when the ratio of BOD5/COD is $\geq 0,5$.
- 3) This criterion is not applicable to preparations whose very low solubility in water prevents their bioaccumulation (e.g. pigment preparations)

All *preparations* applied shall further comply with the following requirements:

Parameter	Criteria
Oral Toxicity ¹⁾	LD ₅₀ > 2000 mg/kg ²⁾
Aquatic Toxicity ³⁾	LC ₅₀ , EC ₅₀ , IC ₅₀ > 1 mg/l
Relation of biodegradability / eliminability ⁴⁾ to aquatic toxicity ³⁾	Only allowed, if: < 70% and > 100 mg/l > 70% and > 10 mg/l > 95% and > 1 mg/l

- 1) Performing new animal tests to determine unknown LD₅₀ values in the course of the GOTS assessment procedure for inputs (refer to Section 2.3.3) is prohibited. Instead, alternative methods (e.g. Acute Toxicity Estimates (ATE); conclusions on analogy from similar products; validated structure-activity relationships; calculation from available data of substances contained; expert judgment; in vitro tests) shall be used to determine unknown values.
- 2) *Substances* and *preparations*, such as alkalis and acids that fail to meet this requirement because of their pH value only, are exempt from this requirement.
- 3) Performing new fish and daphnia tests to determine unknown LC₅₀ / EC₅₀ values in the course of the GOTS assessment procedure for inputs is prohibited. Instead, alternative methods such as Acute Toxicity Estimates (ATE); validated structure-activity relationships; conclusion on analogy from similar products; calculation from available data of substances contained; fish egg test (embryo toxicity test (FET)); in vitro test; IC50 algae; OECD 201 [72hr] shall be used to determine unknown values.
- 4) Accepted test methods: OECD 301A, OECD 301E, ISO 7827, OECD 302A, ISO 9887, OECD 302B, ISO 9888 or OECD 303A; alternatively, to meet the 70% level a *preparation* tested with one of the methods OECD 303A or ISO 11733 a percentage degradation of at least 80% shall be shown - or if tested with one of the methods OECD 301B, ISO 9439, OECD 301C, OECD 302C, OECD 301D, ISO 10707, OECD 301F, ISO 9408, ISO 10708 or ISO 14593, a percentage degradation of at least 60% shall be shown. To meet the 95% level, if tested with any of the mentioned methods, a percentage degradation of 95% shall be shown. Testing duration with each method is 28 days.

2.3.3 Assessment of chemical inputs

All chemical *inputs* intended to be used to process *GOTS Goods* are subject to approval by a *GOTS Approved Certifier* prior to their usage. *Preparations* shall have been evaluated and their trade names registered on approved lists prior to their usage by a *GOTS Approved Certifier* who is authorised by the Global Standard gGmbH for the specific accreditation scope: "Approval of textile auxiliary agents (chemical inputs) on positive lists" (Scope 4).

Approval shall be applied by the applicable chemical producer or supplier of the *preparations* who receive conformity documents (Letters of Approval) issued by the authorised certifiers and containing the trade names of applied *preparations* that have been found to be compliant with the criteria of this Standard.

For all chemical *inputs* (*substances* and *preparations*), a Material Safety Data Sheet (SDS), prepared according to an applicable recognised norm or directive shall be available. The *Approved Certifiers* are requested, where appropriate and felt necessary, to include further sources of information (such as additional toxicological and environmental data on specific components of the auxiliary agents, test reports, independent lab analysis and traceability checks of ingredients, no intentional use declarations, sources of data for hazard & toxicity, etc.) in the assessment.

Certified Entities shall have copies of valid Letters of Approval on hand listing all *preparations* they are using in processing and manufacturing *GOTS Goods* as verification proof that all colourants and textile auxiliaries used for *GOTS Goods* are actually approved.

2.3.4 Product Stewardship of chemical inputs

Chemical *formulators* shall implement appropriate and effective product stewardship practices. Adequate systems for product testing and quality assurance shall be in place.

2.3.5 Environment, Health and Safety for Chemical Suppliers

Chemical *formulators* shall undergo environmental management system and safety audit of their premises. On-site inspection shall be performed for the first year and every 3rd year of granted Letter of Approval or Standard Revision, whichever is earlier.

Following GOTS criteria shall be included in the audit of a chemical supplier:

- Section 2.4.10
- Section 2.4.11, (see Manual for COD requirements).
- Section 3.6

Above criteria is applicable to whole facility for the whole year.

At all stages through the chemical manufacturing and distribution, adequate measures for Separation and Identification shall be established. It shall be ensured that GOTS Approved *inputs* and other chemicals are not commingled and GOTS Approved *inputs* are not contaminated by contact with prohibited substances.

2.4 SPECIFIC REQUIREMENTS AND TEST PARAMETERS

2.4.1 Separation and Identification

All stages through the supply chain shall be established so as to ensure that organic and conventional fibres are not commingled and that organic fibres and *GOTS Goods* are not contaminated by contact with prohibited substances.

All organic raw materials and GOTS goods shall be clearly labelled and identified as such at all stages of the supply chain.

2.4.2 Spinning

Allowed are additives which meet the basic requirements as set in Sections 2.3.1. and 2.3.2. only. Any paraffin products used shall be fully refined with a limited value for residual oil of 0.5%. *Machine oils* that may come in contact with GOTS goods shall be *heavy metal-free*.

Synthetic fibres, which are to be dissolved at a later processing stage, are not allowed to be used.

2.4.3 Sizing and weaving / knitting

Allowed sizing agents include starch, starch derivatives, other natural *substances* and CMC (carboxymethylcellulose).

Synthetic sizes which meet the basic requirements as set in Sections 2.3.1. and 2.3.2. may be used for no more than 25% of the total sizing in combination with natural *substances* only, calculated for the chemical without water. In case such synthetic sizes are recycled/recovered in the wastewater from desizing process with a ratio >80% they may be used without limitation in the total sizing but shall still meet the requirements as set in Sections 2.3.1 and 2.3.2.

Machine oils that may come in contact with GOTS goods shall be *heavy metal-free*. Other *inputs* shall be derived from *natural materials* only.

2.4.4 Non-woven manufacture

Allowed non-woven manufacturing processing includes only mechanical compaction, webbing and entangling such as hydro entanglement.

2.4.5 Pre-treatment and other wet processing stages

Treatment / process	Criteria
Ammonia treatment	Prohibited - Exception: allowed for after-treatment of wool, if performed in closed system.

Treatment / process	Criteria
Bleaches	On basis of oxygen only (peroxides, ozone, etc.). <i>Approved Certifiers</i> may grant exceptions for non-cotton fibre products where oxygen bleaches are not sufficiently functional, provided they meet the basic requirements as set in Sections 2.3.1. and 2.3.2.
Boiling, kiering, washing	Allowed are auxiliaries that meet the basic requirements as set in Sections 2.3.1. and 2.3.2. only. Washing detergents shall not contain phosphates.
Chlorination of wools	Prohibited
Desizing	Allowed are GMO free enzymatic desizing and other auxiliaries that meet the basic requirements as set in Sections 2.3.1. and 2.3.2. only
Mechanical/thermal treatments	Allowed
Mercerization	Allowed with auxiliaries that meet the basic requirements as set in Sections 2.3.1. and 2.3.2. only. Alkali shall be recycled.
Optical brightening	Allowed are optical brightening agents (OBAs) that meet all criteria for the selection of dyes and auxiliaries as set in Section 2.4.6. Dyeing only.
Other, not explicitly listed pre-treatment methods	Allowed are mechanical / thermal pre-treatment methods and such with the use of <i>substances</i> on basis of <i>natural materials</i> .

2.4.6 Dyeing

Parameter	Criteria
Selection of dyes and auxiliaries	<p>Allowed are natural dyes, synthetic dyes, pigments and auxiliaries that meet the requirements as set in Sections 2.3.1 and 2.3.2. only.</p> <p>Prohibited are (disperse) dyes classified as sensitizing / allergenic.</p> <p>Prohibited are colourants classified as carcinogenic or suspected carcinogenic (H350 / H351).</p> <p>Prohibited are dyes containing heavy metals as an integral part of the dye molecule (e.g. heavy metal dyes, certain reactive dyes) under consideration of the following exceptions:</p> <ul style="list-style-type: none"> - General exception for Iron - Specific exception for copper: permitted up to 5% by weight in blue, green and turquoise dyestuffs. <p>The use of natural dyes and auxiliaries that are derived from a threatened species listed on the Red List of the IUCN is prohibited.</p>

2.4.7 Printing

Parameter	Criteria
Selection of dyes, pigments and auxiliaries	<p>Allowed are dyes, pigments and auxiliaries that meet the requirements as set in Sections 2.3.1 and 2.3.2 only.</p> <p>Prohibited are (disperse) dyes classified as sensitizing / allergenic.</p> <p>Prohibited are colourants classified as carcinogenic or suspected carcinogenic (H350 / H351).</p> <p>Flock printing is allowed with non-GMO natural and regenerated fibres if the fibres used meet the limit values for residues as listed in Section 2.4.16.</p>

	<p>Ammonia is allowed as a required buffer in pigment printing pastes. Prohibited are dyes and pigments containing heavy metals as an integral part of the dye molecule (e.g. heavy metal dyes, certain reactive dyes) under consideration of the following exceptions:</p> <ul style="list-style-type: none"> - General exception for Iron - Specific exception for copper: permitted up to 5% per weight in blue, green and turquoise dyestuffs and pigments only. <p>While in general <i>inputs</i> that contain > 1% <i>permanent</i> AOX are prohibited, exceptionally for yellow, green and violet pigments the limit is 5%.</p> <p>Prohibited are printing methods using aromatic solvents, phthalates or chlorinated plastics (e.g. PVC).</p> <p>The use of natural dyes and auxiliaries that are derived from a threatened species listed on the Red List of the IUCN is prohibited.</p>
--	--

2.4.8 Finishing and Manufacturing

Parameter	Criteria
Selection of finishing methods and auxiliaries	<p>Allowed are mechanical, thermal and other physical finishing methods.</p> <p>Allowed are natural and synthetic <i>inputs</i> that meet the basic requirements as set in Sections 2.3.1 and 2.3.2 only.</p> <p>Prohibited in general is the use of synthetic <i>inputs</i> for anti-microbial finishing (including biocides), coating, filling and stiffening, lustring and matting as well as weighting.</p> <p>Prohibited are garment finishing methods that are considered to be harmful to the workers (such as sand blasting of denim).</p>
Machine oils	In Finishing and Manufacturing, <i>Machine oils</i> that may come in contact with GOTS goods shall be <i>heavy metal-free</i> .

2.4.9 Requirements for additional fibre materials and accessories

2.4.9.1 Requirements for additional fibre materials

Additional Fibre Materials	Criteria
Fibre materials accepted for the remaining non-organic balance of the product's material composition (max. 5% according to Section 2.2.1. and max. 30% according to Section 2.2.2.)	<p>The additional fibre materials may be mixed with the organic fibres to the fabric or used in certain details of the product.</p> <p>Blending organic and conventional fibres of the same type in the same product is not permitted.</p> <p>All additional materials shall meet the limit values for residues as listed in Section 2.4.16.</p> <p>Allowed are: Individually or in combination as a sum total up to 30% (≤30%)</p> <ol style="list-style-type: none"> a) non-GMO conventional natural vegetable fibres b) non-GMO conventional animal fibres. c) Lyocell or protein-based fibres derived from non-GMO sources and from certified organic raw materials or pre- or post-consumer waste or from raw materials certified according to a programme that verifies compliance with sustainable management principles d) recycled synthetic (polymer) fibres from <i>pre- or post-consumer waste</i>: only polyester, polyamide, polypropylene, elastomultiester (elasterell-p) and polyurethane (elastane) e) PLA (polylactic acid) fibre produced from non-GMO bio-mass sources

Additional Fibre Materials	Criteria
	<p>Individually or in combination as a sum total up to 10% (≤10%)</p> <ul style="list-style-type: none"> a) regenerated fibres like lyocell, viscose or modal: raw materials used shall be non-GMO b) virgin synthetic (polymer) fibres: only polyamide, polypropylene, elastomultiester (elasterell-p) and polyurethane (elastane) c) stainless steel fibres and mineral fibres <p>Prohibited are:</p> <ul style="list-style-type: none"> a) conventional cotton b) conventional angora hair fibre c) virgin polyester d) acrylic e) asbestos, carbon and silver fibres f) any other not explicitly permitted fibres g) mulesed wool

2.4.9.2 Requirements for Accessories

Accessories	Criteria
<p>Material in general (valid for appliqué, borders, buckles, buttons and press-studs, cords, edgings, elastic bands and yarns, embroidery yarns, fasteners and closing systems, adhesive tapes used for fusing, hatbands, laces, linings, inlays, interface, labels (heat-transfer/ adhesive/ care/ GOTS), interlinings, pockets, seam bindings, sewing threads, shoulder pads, padding for undergarments, trims, zippers and any other, not below explicitly listed <i>accessories</i>)</p>	<p>Allowed are:</p> <ul style="list-style-type: none"> a) <i>natural materials</i> including biotic material (such as (organic or conventional) natural fibre, wood, leather, horn, bone, shell) and non-biotic material (such as minerals, metals, stone) b) regenerated and synthetic materials <p>Prohibited is the use of:</p> <ul style="list-style-type: none"> a) asbestos b) carbon fibres c) silver (filament, treated) fibres d) chromium (e.g. as component of a metal or in leather tanning, except that stainless steel is permitted) e) nickel (e.g. as component of a metal, except that stainless steel is permitted) f) material from threatened animals, plant and timber g) Chlorinated plastics (e.g. PVC) <p>All materials used for <i>accessories</i> shall meet the applicable limit values for residues as listed in Section 2.4.16.</p>
<p>Fillings, stuffing</p>	<p>If textile fibres are used, the material requirements of Sections 2.2.1 respective 2.2.2 apply (since fillings with fibres are not considered <i>accessories</i>).</p> <p>If non-textile material is used only <i>natural materials</i> are permitted. <i>Natural materials</i> shall be from certified organic (in conversion) production in case such certification is applicable for the kind of material used (e.g. for plant-based materials such as grain spelt or animal based-materials such as feathers).</p> <p>Latex foam used as filling or stuffing shall be made from certified organic (in conversion) latex or from latex certified according to a program that verifies compliance with sustainable forestry management principles.</p>
<p>Supports and frames</p>	<p>The requirements as specified in the row 'material in general' apply. Latex foam used in mattresses shall be made from certified organic (in conversion) latex or from latex certified according to a program that verifies compliance with sustainable forestry management principles.</p>



Accessories	Criteria
	Polyurethane foams are not permitted in mattresses or other textile bedding products.
Non-Slip Floor Covering	Backing materials used shall be of certified natural origin and satisfy requirements of Section 2.3 of the GOTS Standard. Inorganic materials (such as dolomite) may be used in conjunction with this backing material, if they are of natural origin and satisfy Section 2.3 of the GOTS Standard.

2.4.10 Environmental management

In addition to GOTS criteria, all companies shall assure compliance with the applicable national and local legal environmental requirements applicable to their processing/manufacturing stages (including those referring to emissions to air, wastewater discharge as well as disposal of waste and sludge).

They shall have a written environmental policy and procedures in place to allow monitoring and improving relevant environmental performances in their facilities. The environmental policy shall be shared with all employees. Depending on the processing/manufacturing stages, the available data and procedures need to include:

- a) person responsible
- b) data on energy and water resources and their consumption per kg of textile output
- c) target goals and procedures to reduce energy and water consumption per kg of textile output
- d) monitoring of waste and discharges
- e) procedures to minimise waste and discharges
- f) procedures to follow in case of waste and pollution incidents
- g) documentation of staff training in the conservation of water and energy, proper handling and minimal use of chemicals and their correct disposal
- h) programme for improvement

Adequate inventory of GOTS approved chemical inputs should be maintained for processing *GOTS Goods*. Wet processing units shall keep full records of the use of chemicals, energy, water consumption and wastewater treatment, including the disposal of sludge. In particular, they shall continuously measure and monitor wastewater temperature, wastewater pH and sediment quantities. On-site waste burning or uncontrolled waste landfilling shall not be undertaken.

Certified Entities are required to collect information on sources of greenhouse gas emissions (GHG) within their own operations and identify means for reduction for each source.

2.4.11 Wastewater treatment

Wastewater from all wet processing units shall be treated in an internal or external functional wastewater treatment plant before discharged to environment. The applicable national and local legal requirements for wastewater treatment - including limit values with regard to pH, temperature, TOC, BOD, COD, colour removal, residues of (chemical) pollutants and discharge routes - shall be fulfilled. Minimum criteria is local / national law if GOTS requirements are lower.

Wastewater discharges to the environment shall not exceed 20 g COD/kg of processed textile (output). For scouring greasy wool an exceptional limit of 45 g COD/kg applies.

Treatment of wastewater from water retting of bast fibres shall achieve a reduction of COD (or TOC) of at least 95% for hemp fibres and 75% for all other bast fibres.

Where legal limits for pH and temperature are not defined for wastewater discharges to surface waters, discharge shall have a pH between 6 and 9 (unless the pH of the receiving water is outside this range) and a temperature of less than 35 °C (unless the temperature of the receiving water is above this value).

Wastewater analyses shall be performed and documented periodically at normal operating capacity.

2.4.12 Storage, packaging and transport

2.4.12.1 B2B trade of GOTS Goods

Organic textile products shall be stored and transported in such a manner as to prevent contamination by prohibited *substances* and commingling with conventional products or substitution of the contents.

Transport means and routes shall be documented.

In cases where pesticides/biocides are mandated for use due to national or regional rules or law, they may be used in Storerooms / Transport, but they shall comply with the applicable international or national organic production standard. Wooden pallets used in storage and transport activities are exempt from this requirement.

2.4.12.2 Retail (B2C) trade of GOTS Goods

Single use virgin plastic hangers are prohibited in retail packaging of *GOTS Goods*. Recycled plastic hangers may be used.

Final products with complete GOTS labelling can be stored / transported together with conventional products of similar type with positive assurance that there can be no substitution of products.

Synthetic packaging material shall not contain chlorinated plastics (e.g. PVC). The use of plastic packaging materials should be minimized.

Paper or cardboard used in packaging material for the retail trade of *GOTS Goods* (incl. labelling items such as hang tags or swing tags) shall be recycled from *pre-* or *post-consumer waste* or certified according to a program that verifies compliance with sustainable forestry management principles.

Textile fibre materials used for packaging, shall follow one of these three conditions:

- a) are certified organic (as explained in Section 2.2.1) and meet RSL criteria as in Section 2.4.15
- b) are certified organic - in- conversion (as explained in Section 2.2.2) and meet RSL criteria as in Section 2.4.15
- c) meet criteria for accepted additional fibres (Section 2.4.9.1) without limitation on percentages and meet criteria as in Section 2.4.16.

2.4.13 Record keeping & internal quality assurance

All operational procedures and practices shall be supported by effective documented control systems and records that enable to trace:

- a) the origin, nature and quantities of organic and additional (raw) materials, *accessories* as well as *inputs* which have been delivered to the unit
- b) the flow of goods within the unit (processing/manufacturing steps performed, recipes used and stock quantities)
- c) the composition of manufactured products
- d) the nature, quantities and consignees of *GOTS Goods* which have left the unit
- e) any other information that may be required for the purposes of proper inspection of the operation

Records relevant to the inspection shall be kept for at least five years.

Certified Entities purchasing organic fibres shall receive and maintain transaction certificates (=TCs, certificates of inspection), issued by a recognised certifier and certified in accordance with the criteria of Section 2.1 for the whole quantity purchased.

Certified Entities purchasing *GOTS Goods* shall receive and maintain GOTS transaction certificates, issued by an *Approved Certifier* for the whole quantity of *GOTS Goods* purchased, in accordance with the current Policy and Template for issuing Transaction Certificates (TCs). *Certified Entities* purchasing organic fibres shall receive and maintain Scope Certificates and / or Transaction Certificates (where applicable) of the producer and trader(s) (if applicable) for the Organic Production Standard for the whole quantity purchased. All further conditions as prescribed in the latest version of the 'Policy and Template for issuing Transaction Certificates (TCs)' shall be followed.



The consignee of any organic fibres and *GOTS Goods* shall check the integrity of the packaging or container and verify the origin and nature of the certified products from the information contained in the product marking and corresponding documentation (e.g. invoice, bill of lading, transaction certificate) upon receipt of the certified products.

A product whose GOTS compliant status is in doubt may only be put into processing or packaging after elimination of that doubt.

Organic fibres and *GOTS Goods* shall clearly be identified as such on all corresponding invoices.

Certified Entities shall have invoices, delivery notes as well as copies of valid Letters of Approval at hand listing all *preparations* they are using in processing and manufacturing *GOTS Goods* as verification proof that all colourants and textile auxiliaries used for *GOTS Goods* are actually approved.

The *Certified Entity* shall have concluded a contract with each *subcontractor* stipulating the conditions of the relevant job work assigned and remains finally responsible for compliance with all criteria of this Standard.

Certified Entities shall collect, collate and share non-commercial information related to impact measurement if and as required by GOTS.

2.4.14 Technical quality parameters

Any final product labelled according to this Standard shall comply with the following technical quality parameters.

Parameter	Criteria	Test method
Rubbing fastness , dry for fibre blends	3-4 3	ISO 105 X12
Rubbing fastness , wet	2	ISO 105 X12
Perspiration fastness , alkaline and acidic Shade Change Staining on Multi-fibre	3-4 3-4	ISO 105 E04
Perspiration fastness for fibre blends Shade Change Staining on Multi-fibre	3 3	ISO 105 E04
Light fastness	3-4	ISO 105 B02
Dimensional change after washing at 40 °C (30 °C for animal fibre material and blends thereof). Knitted/hosiery: Woven: This criterion is only valid for the garment sector.	max. ±8% max. ±3%	ISO 6330
Saliva fastness (only for <i>textiles for babies</i>)	5	BVL B 82.92.3 DIN 53160-1
Washing fastness when washed at 40 °C Shade Change Staining on Multi-fibre	3-4 3-4	ISO 105 C06 A1M
Washing fastness of animal fibre material and blends thereof when washed at 30 °C Shade Change Staining on Multi-fibre	3-4 3-4	ISO 105 C06 A1S without use of steel balls

2.4.15 Limit values for residues in GOTS Goods

Even if produced in compliance with this Standard, textiles may carry traces of residues (e.g. due to unavoidable contamination). The following table lists the corresponding limit values for GOTS Goods:

Parameter	Criteria	Test method
Alkylphenol (ethoxylates) NP, OP, HpP, PeP, NPEO, OPEO sum parameter NP, OP, HpP, PeP Sum parameter	< 20 mg/kg < 10 mg/kg	For NP, OP: Extraction, derivatisation, GC/MS or HPLC/MS For NPEO, OPEO: Extraction in methanol, derivatisation, HPLC/MS : EN ISO 18254-1 or NPLC : EN ISO 18254-2 (test range for NPEO and OPEO: 3-15 moles)
AOX	< 5 mg/kg	Extraction with boiling water, adsorption on charcoal; AOX analyser based on ISO 9562 Alternatively: HJ/T 83-2001
Arylamines with carcinogenic properties (amine-releasing azo dyes MAK III, category 1,2,3)	< 20 mg/kg	EN 14362-1 and -3; (HPLC/GCMS)
Aniline, free (MAK III category 4)	<100 mg/kg	EN 14362-1; (HPLC/GCMS) without reductive cleavage
Disperse dyes classified as allergenic ¹	< 30 mg/kg	DIN 54231; (LC/MS)
Formaldehyde	< 16 mg/kg	Japanese Law 112; or based on ISO 14184-1
Glyoxal and other short-chain aldehydes (mono- and dialdehydes up to C6)	<20 mg/kg	Extraction (acc. to ISO 14184-1), ISO 17226-1 (HPLC)
pH value	4.5–9.0 (no skin contact) 4.5-7.5 (all others)	ISO 3071
Chlorophenols		LFGB 82-02-08; (GC/MS)
PCP	< 0.01 mg/kg	
TeCP	< 0.01 mg/kg	
TrCP	< 0.2 mg/kg	
DCP	< 0.5 mg/kg	
MCP	< 0.5 mg/kg	
O-Phenyl phenol (OPP)	< 1.0 mg/kg	
Pesticides , sum parameter		§ 64 LFGB L 00.00-34 (GC/MS); § 64 LFGB L 00.00-114 (LC/MS/MS)
All natural fibres (except shorn wool)	<0.1 mg/kg	
Shorn wool	<0.5 mg/kg	
Extractable Heavy metals	In eluate. Figures in mg/kg refer to textile	Elution DIN EN ISO 105-E04, ISO 17294-2 (ICP/MS), EN 16711-2
Antimony (Sb)	< 0.2 mg/kg	
Arsenic (As)	<0.2 mg/kg	
Cadmium (Cd)	< 0.1 mg/kg	
Chromium (Cr)	< 1.0 mg/kg	
Cobalt (Co)	< 1.0 mg/kg	
Copper (Cu)	< 25.0 mg/kg	
Lead (Pb)	< 0.2 mg/kg	
Nickel (Ni)	< 1.0 mg/kg	
Mercury (Hg)	< 0.02 mg/kg	
Selenium (Se)	< 0.2 mg/kg	
Tin (Sn)	< 2.0 mg/kg	

¹ See List in Manual, Section 2.4.6



Parameter	Criteria	Test method
Manganese (Mn)	< 90 mg/kg	
Zinc (Zn)	< 750 mg/kg	
Barium (Ba)	< 1000 mg/kg	
Chromium VI (Cr-VI)	< 0.5 mg/kg	Elution DIN EN ISO 105-E04, ISO 11083
Total Heavy metals (in digested sample)		
Cadmium (Cd)	< 45 mg/kg	EPA 3050 B, ICP/MS, EPA 3051 or EN 16711-1
Lead (Pb)	< 50 mg/kg	EPA 3050 B, ICP/MS, EPA 3051 or EN 16711-1
Organotin compounds		Extraction in solvent, ISO 17353 (GC/MS) or ISO/TS 16179
TBT	< 0.05 mg/kg	
TphT	< 0.05 mg/kg	
DBT	< 0.05 mg/kg	
DOT	< 0.05 mg/kg	
MBT	< 0.1 mg/kg	
DMT, DPT, MoT, MMT, MPhT, TeBT, TCyHT, TMT, TOT, TPT, DphT, TeET	< 0.1 mg/kg	
Per- and Polyfluorinated compounds (PFC) individually: PFOA, PFOS FTOH	absent < 1.0 µg/m ² < 0.01 mg/kg	Extraction in solvent, LC/MS Extraction in solvent, GC/MS
Phthalates (such as BBP, DBP, DCHP, DEHP, DEP, DHNUP, DHP, DHxP, DIBP, DIDP, DIHP, DIHxP, DINP, DMEP, DMP, DMP, DNOP, DNP, DPP, DPrP)		DIN EN 15777: 2009-12 (GC/MS) or ISO 14389
sum parameter	< 100 mg/kg	
Polycyclic Aromatic Hydrocarbons (PAH):		ISO 18287 (GC/MS) or AfPS GS 2014:01
sum parameter	< 5.0 mg/kg	
Chrysene	< 0.5 mg/kg	
Benzo[a]anthracene	< 0.5 mg/kg	
Benzo[b]fluoranthene	< 0.5 mg/kg	
Benzo[j]fluoranthene	< 0.5 mg/kg	
Benzo[k]fluoranthene	< 0.5 mg/kg	
Benzo[a]pyrene	< 0.5 mg/kg	
Benzo(e)pyrene	< 0.5 mg/kg	
Dibenzo[a,h]anthracene	< 0.5 mg/kg	
Naphthalene	< 1.0 mg/kg	
Acenaphthylene	< 1.0 mg/kg	
Acenaphthene	< 1.0 mg/kg	
Fluorene	< 1.0 mg/kg	
Phenanthrene	< 1.0 mg/kg	
Anthracene	< 1.0 mg/kg	
Fluoranthene	< 1.0 mg/kg	
Pyrene	< 1.0 mg/kg	
Indeno[1,2,3-cd]pyrene	< 1.0 mg/kg	
Benzo[g,h,i]perylene	< 1.0 mg/kg	
Cyclopenta (c,d)pyrene	< 1.0 mg/kg	
Dibenzo [a,e] pyrene	< 1.0 mg/kg	
Dibenzo [a,h] pyrene	< 1.0 mg/kg	



Parameter	Criteria	Test method
Dibenzo [a,i] pyrene	< 1.0 mg/kg	
Dibenzo [a,i] pyrene	< 1.0 mg/kg	
1-Methylpyrene	< 1.0 mg/kg	
Chlorinated Paraffins		
Short Chain Chlorinated Paraffins (C ₁₀₋₁₃) & Medium Chain Chlorinated Paraffins (C ₁₄₋₁₇)		
Sum parameter	<50 mg/kg	
Cyclic Siloxanes (D4, D5, D6)	<1000 mg/kg	Extraction in Solvent, GC/MS
Other Chemical Residues		
Azodicarboxamide/ Azodicarbonamide/ Diazene-1,2-dicarboxamide (ADCA)	<1000 mg/kg	
Chlorinated Benzenes & Toluenes	< 1.0 mg/kg	

2.4.16 Limit values for residues in additional fibre materials and accessories

Additional materials and *accessories* (in accordance with the criteria of Section 2.4.9) used for *GOTS Goods* need to comply with the following limit values for residues:

Criteria	Limit Values		Test Method
	For use in textiles for babies and textile personal care products	For use in all other GOTS Goods	
Arylamines with carcinogenic properties (amine-releasing azo dyes MAK III, category 1,2,3)	< 20 mg/kg	< 20 mg/kg	EN 14362-1 and -3; (HPLC/GCMS)
Aniline (MAK III category 4) (free)	<20 mg/kg	<50 mg/kg	EN 14362-1 (HPLC/GCMS), without reductive cleavage
Disperse dyes (classified as allergenic or carcinogenic)	< 30 mg/kg	< 30 mg/kg	DIN 54231; (LC/MS)
Formaldehyde	< 16 mg/kg	< 75 mg/kg (Skin Contact) <150 mg/kg (no skin contact)	Japanese Law 112; or based on ISO 14184-1
Glyoxal and other short-chain aldehydes (mono- and dialdehydes up to C6)	<20 mg/kg	<75 mg/kg (skin contact) <300 mg/kg (no skin contact)	Extraction (acc. to ISO 14184-1), ISO 17226-1 (HPLC)
pH value	4.0-7.5	4.0-7.5	ISO 3071
Chlorophenols			
PCP	<0.05 mg/kg	<0.5 mg/kg	LFGB 82-02-08; (GC/MS)
TeCP	<0.05 mg/kg	<0.5 mg/kg	
TrCP	<0.2 mg/kg	<2.0 mg/kg	
DCP	<0.5 mg/kg	<3.0 mg/kg	
MCP	<0.5 mg/kg	<3.0 mg/kg	
Pesticides, sum parameter			
All natural fibres (except shorn wool)	<0.5 mg/kg	<1 mg/kg	§ 64 LFGB L 00.00-34 (GC/MS); § 64 LFGB L 00.00-114 (LC/MS/MS)
Shorn wool	<1.0 mg/kg	<1 mg/kg	
Extractable Heavy metals			
Arsenic (As)	<0.2 mg/kg	<1.0 mg/kg	



Criteria	Limit Values		Test Method
	For use in textiles for babies and textile personal care products	For use in all other GOTS Goods	
Cadmium (Cd)	<0.1 mg/kg	<0.1 mg/kg	Elution DIN EN ISO 105-E04, ISO 17294-2 (ICP/MS)
Chromium (Cr)	<1.0 mg/kg	<2.0 mg/kg	
Cobalt (Co)	<1.0 mg/kg	<4.0 mg/kg	
Copper (Cu)	<25.0 mg/kg ¹	<50.0 mg/kg ¹	
Lead (Pb)	<0.2 mg/kg	<1.0 mg/kg (not for Glass)	
Nickel (Ni)	<1.0 mg/kg	<4.0 mg/kg	
Mercury (Hg)	<0.02 mg/kg	<0.02 mg/kg	
Chromium VI (Cr-VI)	<0.5 mg/kg	<0.5 mg/kg	Elution DIN EN ISO 105-E04, ISO 11083
Total Heavy metals (in digested sample)			
Cadmium (Cd)	<40 mg/kg	<40 mg/kg	EPA 3050 B, ICP/MS, EN16711-1
Lead (Pb)	<90 mg/kg	<90 mg/kg	
Nickel release	< 0.28 µg/cm ² /week	< 0.28 µg/cm ² /week	EN 12472, EN 1811
Organotin compounds			
TBT	<0.5 mg/kg	<1.0 mg/kg	Extraction in solvent, ISO 17353 (GC/MS) or ISO/TS 16179
TphT	<0.5 mg/kg	<1.0 mg/kg	
DBT	<1.0 mg/kg	<2.0 mg/kg	
DOT	<1.0 mg/kg	<2.0 mg/kg	
MBT	<1.0 mg/kg	<2.0 mg/kg	
DMT, DPT, MoT, MMT, MPhT, TeBT, TCyHT, TMT, TOT, TPT, DphT, TeET	<1.0 mg/kg	<2.0 mg/kg	
Phthalates (such as DINP, DMEP, DNOP, DEHP, DIDP, BBP, DBP, DIBP, DEP, DIHP, DHNUP, DCHP, DHxP, DIHxP, DPrP, DHP, DNP, DPP, DMP)			ISO 14389
sum parameter	<0.05%	<0.05%	
Polycyclic Aromatic Hydrocarbons (PAH):			
sum parameter	<5.0 mg/kg	<10.0 mg/kg	ISO 18287 or ZEK 1.2-08; (GC/MS) or AFPS GS 2014:01
1-Methylpyrene	<0.5 mg/kg	<1.0 mg/kg	
Acenaphthene	<0.5 mg/kg	<1.0 mg/kg	
Acenaphthylene	<0.5 mg/kg	<1.0 mg/kg	
Anthracene	<0.5 mg/kg	<1.0 mg/kg	
Benzo(e)pyrene	<0.5 mg/kg	<1.0 mg/kg	
Benzo(j)fluoranthene	<0.5 mg/kg	<1.0 mg/kg	
Benzo[a]anthracene	<0.5 mg/kg	<1.0 mg/kg	
Benzo[a]pyrene	<0.5 mg/kg	<1.0 mg/kg	
Benzo[b]fluoranthene	<0.5 mg/kg	<1.0 mg/kg	
Benzo[g,h,i]perylene	<0.5 mg/kg	<1.0 mg/kg	
Benzo[k]fluoranthene	<0.5 mg/kg	<1.0 mg/kg	
Chrysene	<0.5 mg/kg	<1.0 mg/kg	
Cyclopenta (c,d)pyrene	<0.5 mg/kg	<1.0 mg/kg	
Dibenzo [a,e] pyrene	<0.5 mg/kg	<1.0 mg/kg	
Dibenzo [a,h] pyrene	<0.5 mg/kg	<1.0 mg/kg	
Dibenzo [a,i] pyrene	<0.5 mg/kg	<1.0 mg/kg	

Criteria	Limit Values		Test Method
	For use in textiles for babies and textile personal care products	For use in all other GOTS Goods	
Dibenzo [a,l] pyrene	<0.5 mg/kg	<1.0 mg/kg	
Dibenzo[a,h]anthracene	<0.5 mg/kg	<1.0 mg/kg	
Fluoranthene	<0.5 mg/kg	<1.0 mg/kg	
Fluorene	<0.5 mg/kg	<1.0 mg/kg	
Indeno[1,2,3-cd]pyrene	<0.5 mg/kg	<1.0 mg/kg	
Naphthalene	<0.5 mg/kg	<1.0 mg/kg	
Phenanthrene	<0.5 mg/kg	<1.0 mg/kg	
Pyrene	<0.5 mg/kg	<1.0 mg/kg	
Chlorinated Paraffins			
Short Chain Chlorinated Paraffins (C ₁₀₋₁₃) & Medium Chain Chlorinated Paraffins (C ₁₄₋₁₇)			
Sum parameter	<50 mg/kg	<50 mg/kg	
Cyclic Siloxanes (D4, D5, D6)	<1000 mg/kg	<1000 mg/kg	
Other Chemical Residues			
Azodicarboxamide/ Azodicarbonamide/ Diazene-1,2-dicarboxamide (ADCA)	<1000 mg/kg	<1000 mg/kg	
Solvent Residues			
NMP, DMAc, DMF	0.05 % by weight	0.05 % by weight	
Formamide	0.02% by weight	0.02% by weight	
Chlorinated Benzenes & Toluenes	1.0 mg/kg	1.0 mg/kg	
Nonylphenol Ethoxylates	100 mg/kg	100 mg/kg	

1) Criterion not applicable to inorganic / non-biological materials (such as metals)

Further parameters relevant for specific materials used in accessories	Criteria	Test method
Polyester fibres: Antimony (Sb)	< 30 mg/kg	Elution DIN EN ISO 105-E04, ISO 17294-2 (ICP/MS)
Natural latex foam: Butadiene Chlorophenols (incl. salts and esters) Carbon disulphide Nitrosamines	< 1.0 mg/kg < 1.0 mg/kg < 0.02 mg/m ³ < 0.001 mg/m ³	GC- FID LFGB 82-02-08 (GC/MS) Chamber test, DIN ISO 16000-6 Chamber test; ZH 1/120-23 or BGI 505-23 for air sampling and analysis

3 SOCIAL CRITERIA

3.1 SCOPE

The following social criteria apply to all textile processing, manufacturing and trading stages which are employing workers. The same principles and requirements apply also to the farm level, taking account

of its specific nature and recognizing the limited direct monitoring and assurance possibilities with this Standard.

For adequate implementation and assessment of the following specific criteria adherence to the corresponding International Labour Conventions of the International Labour Organisation (ILO), United Nations Guiding Principles on Business and Human Rights (UNGPs) and OECD shall be assured. Certifiers are expected to study, assimilate and consider local and national conditions in their Risk Assessment while conducting inspections and audits.

Certified Entities shall create awareness on GOTS social criteria within their workforce by appropriate means.

3.2 EMPLOYMENT IS FREELY CHOSEN

- 3.2.1 There is no servitude, forced, bonded, trafficked or indentured labour.
- 3.2.2 Forced labour shall not be used.
- 3.2.3 Workers are not required to lodge "deposits" or their identity papers with their employer. Workers are free to leave their employer after mutually agreed notice period, as stated in employment contract.
- 3.2.4 Workers are not required to pay for entering employment.
- 3.2.5 Workers are not forced to use factory provided lodging or transportation.

3.3 FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

- 3.3.1 Freedom of association and the right to collective bargaining are respected.
- 3.3.2 Workers, without distinction, have the right to join or form trade unions of their own choosing and to bargain collectively.
- 3.3.3 The employer adopts an open and supportive attitude towards the activities of trade unions and their organisational activities and does not hinder or prevent or interfere with activities or engage in surveillance of those activities.
- 3.3.4 Workers representatives have access to carry out their representative functions in the workplace free of intimidation, discrimination or fear of reprisal. Employers do not intimidate or discriminate against workers for their union membership or activities.
- 3.3.5 Collective bargaining agreements shall be respected.
- 3.3.6 Display (for example, on a notice board) and communicate (for example, in employment contracts) about workers' right to collective bargaining.
- 3.3.7 If there is no trade union on site, the employer shall not deny time and resources for workers to elect representatives. Elected representatives shall have access to workers and employer's representative on a regular basis.
- 3.3.8 Each category of employees can be represented by elected representative(s) of the corresponding category of employees.
- 3.3.9 Where the right to freedom of association and collective bargaining is restricted under law, the employer facilitates, and does not hinder, the development of parallel means for independent and free association and bargaining and allows their workers to freely elect their own representatives with whom the company can enter into dialogue about related issues.

3.4 CHILD LABOUR SHALL NOT BE USED

- 3.4.1 Child labour, regardless of gender shall not be used.
- 3.4.2 Young workers (age between minimum age up to 18 years old) under 18 shall not be employed at night or in hazardous conditions.

- 3.4.3 A young worker cannot work for more than 8 hours in a day or the legal limit for young workers, whichever is lower. Overtime is prohibited and a minimum consecutive period of 12 hours' rest as well as customary weekly rest days shall be provided.
- 3.4.4 These policies and procedures including the interpretation of the terms "child" and "child labour" shall conform at the very minimum of to the provisions of the relevant ILO conventions C138 and C182, or national / local laws, which ever affords greater protection.

3.5 NO DISCRIMINATION IS PRACTISED

- 3.5.1 There is no kind of discrimination e.g. in hiring, compensation, access to training, promotion, termination, retirement or right to overtime hours based on race, caste, ethnic or national origin, nationality, religion, age, disability, gender, marital status, pregnancy, sexual orientation, union membership, political affiliation, social background or any other condition that could give rise to discrimination. In particular, workers shall not be harassed or disciplined on any of the grounds listed above.

3.6 OCCUPATIONAL HEALTH AND SAFETY (OHS)

- 3.6.1 Working conditions are safe and hygienic.
- 3.6.2 A safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of the industry and of any specific hazards. Vulnerable individuals such as - but not limited to - young workers, new and expecting mothers and persons with disabilities, shall receive special protection.
- 3.6.3 Appropriate personal protective equipment shall be provided to the workers (including homeworkers) at no cost to such workers and it shall be assured that these are being used whenever necessary. Adequate steps shall be taken to prevent accidents and injury to health arising from, associated with, or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment.
- 3.6.4 Companies shall ensure adequate occupational medical assistance and related facilities.
- 3.6.5 Systems shall be in place to detect, assess, avoid and respond to potential threats to the health and safety of workers. Effective measures shall be taken to prevent workers from having accidents, injuries or illnesses, arising from, associated with, or occurring during work.
- 3.6.6 For all chemical substances and preparations used the corresponding Material Safety Data Sheet (SDS) shall be maintained and it shall be assured that the applicable health and safety measures for handling and storing these chemicals are implemented.
- 3.6.7 Companies shall take all appropriate measures within their sphere of influence, to see to the stability and safety of the equipment and buildings they use, including accommodation to workers, where provided, as well as to protect against any foreseeable emergency. Workers shall be able to exit the premises in case of imminent danger without seeking permission.
- 3.6.8 A safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of the industry, any specific hazards, and context/country specific risks.
- 3.6.9 Workers shall receive regular and recorded health and safety training incl. fire prevention training and evacuation drills, and such training shall be repeated for new or reassigned workers.
- 3.6.10 Employers shall provide training and make safety signs available in the local language and the language(s) spoken by their workforce.

- 3.6.11 Workers (including homeworkers) and staff shall receive regular and recorded health and safety training including fire prevention training and evacuation drills (as relevant), and such training shall be repeated for new or reassigned workers.
- 3.6.12 If the facility employs homeworkers, it shall take effective actions to ensure that such homeworkers are given a level of protection equivalent to that given to the workers working at the facility.
- 3.6.13 Access to functional clean toilet facilities and to free of charge potable water, and, if appropriate, to rest areas, food consuming areas and sanitary facilities for food storage shall be provided and not unreasonably restricted.
- 3.6.14 Accommodation, where provided, shall be clean, safe, and meet the basic needs of the workers.
- 3.6.15 Employer shall assign responsibility for health and safety to a senior management representative.

3.7 NO HARASSMENT AND VIOLENCE

- 3.7.1 Employers shall make a commitment within their social compliance policy (see section 3.12) to foster an environment at work free from harassment, bullying and violence.
- 3.7.2 Sexual harassment, sexual violence and gender-based violence is not permitted in the workplace, irrespective of gender.
- 3.7.3 Prohibited is any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life.
- 3.7.4 Physical abuse or discipline, the threat of physical abuse, sexual or other harassment and verbal abuse or other forms of intimidation shall be prohibited.
- 3.7.5 Workers shall be treated with respect and dignity.
- 3.7.6 Human Rights shall be respected and protected. Employer shall have a policy commitment for the same.
- 3.7.7 Confidential reporting of abuse or harsh treatment shall be encouraged by the management. Each facility shall display contact details for the local point of contact at the workplace for grievance redressal, in a way that all workers have access to it. This information shall be provided before signing an employment contract.
- 3.7.8 All disciplinary measures shall be recorded.

3.8 REMUNERATION AND ASSESSMENT OF LIVING WAGE GAP

- 3.8.1 Wages and benefits paid for a standard working week meet, at a minimum, national legal standards or industry benchmark standards, whichever is higher. In any event wages should always be enough to meet basic needs and to provide some discretionary income.
- 3.8.2 All workers shall be provided with written and understandable information about their employment conditions compliant with national legal requirements and including wages and social benefits legally granted before they enter employment.
- 3.8.3 Wages shall be paid regularly (at least monthly) and promptly. Workers shall be informed about the particulars of their wages for the pay period concerned each time that they are paid.
- 3.8.4 Withholding of wages for payment as a lump-sum at the end of a term of employment or training is prohibited.
- 3.8.5 For specified work (being done at home or at facility) paid by the 'piece rate', the rate of remuneration shall be comparable to that received by a worker in the facility of the employer, doing similar work on an hourly basis. If there is no such worker, then the

remuneration in another facility in the same field of activity and region concerned can be used as a benchmark by the Approved Certifier.

- 3.8.6 Deductions from wages as a disciplinary measure are not permitted. Other deductions are permitted only under the conditions and to the extent prescribed by law or fixed by collective agreement.
- 3.8.7 Overtime shall be paid at a premium rate established by law or through collective bargaining, whichever is higher. Premium rate shall not be less than one and one-quarter times the regular rate. Equivalent leisure time may also be provided as compensation for overtime, if permitted by local regulations.
- 3.8.8 Workers shall receive wages directly in their hand / bank account or in a manner convenient to workers.
- 3.8.9 Certified Entities shall calculate 'Living Wages' for their respective operations. Furthermore, they shall compare Living Wages data with their remuneration data and calculate the 'Wage Gap' for their workers.

3.9 WORKING TIME

- 3.9.1 Working hours shall comply with national laws, collective bargaining agreements and benchmark industry standards, whichever affords greater protection.
- 3.9.2 In any event, workers shall not be required to work in excess of 48 hours per week on a regular basis, shall have the right to have rest breaks in every working day and shall be provided with at least one day off for every 7-day period on average.
- 3.9.3 Overtime shall be voluntary, shall not exceed 12 hours per week, shall not be demanded on a regular basis and shall not represent a significantly higher likelihood of occupational hazards.

3.10 NO PRECARIOUS EMPLOYMENT IS PROVIDED

- 3.10.1 To every extent possible work performed shall be on the basis of recognised employment relationship established through national law and practice.
- 3.10.2 Obligations to employees under labour or social security laws and regulations arising from the regular employment relationship shall not be avoided through the use of labour-only contracting, subcontracting, or home-working arrangements, or through apprenticeship schemes where there is no real intent to impart skills or provide regular employment, nor shall any such obligations be avoided through the excessive use of fixed-term contracts of employment.

3.11 MIGRANT WORKERS

- 3.11.1 Equality in treatment shall be provided as compared to local workers who work at employer's facilities. This includes remunerations, social security, access to training and other provisions of GOTS Social Criteria.
- 3.11.2 Migrant workers shall have access to their travel documents
- 3.11.3 Besides other standard requirements, written employment contract shall include - in a language that the worker understands- clear information about provisions of terms, duration and hours of employment, deductions, benefits (such as leave and insurance), housing, food, transportation, and other applicable provisions.
- 3.11.4 If food, accommodation, transportation or other services are provided, they shall be provided at a rate not higher than the market rate.

3.12 SOCIAL COMPLIANCE MANAGEMENT

Companies shall have a policy for social accountability to ensure that the social criteria can be met. They shall support the implementation and monitoring of the social criteria by:

- 3.12.1 Nominating a person responsible for social accountability.
- 3.12.2 Monitoring compliance with the social criteria and implementing necessary improvements at its facilities, also keeping in mind potential adverse impacts.
- 3.12.3 Informing its workers about the contents of their employment contract, minimum social criteria and any other related information provided by GOTS in the applicable local language(s).
- 3.12.4 Maintaining records of the name, age, working hours and the wages paid for each worker.
- 3.12.5 Allowing the workers to nominate a representative for social accountability that can provide feedback to the management regarding implementation status of and compliance with social criteria.
- 3.12.6 Providing time and space to workers to organise and engage in collective bargaining.
- 3.12.7 Recording and investigating complaints from workers or third parties related to the adherence to the social criteria and maintaining records about any necessary corrective measures arising from them.
- 3.12.8 A functional and effective complaint mechanism shall be established. Anonymous complaint mechanism shall be followed to the maximum possible extent.
- 3.12.9 Upon request, Certified Entities shall provide information about complaint records to their Certified Buyers should complaints possibly be related to the business practises of such Certified Buyers.
- 3.12.10 Refraining from disciplinary measures, dismissals or other forms of discrimination against workers for providing information concerning observance of the social criteria.
- 3.12.11 For home-workers, data on the nature, extent and characteristics of home-work shall be compiled by the employer and made available to Certification Bodies. Appropriate access to private home-working premises shall be arranged by employers for the purposes of inspection and audit.

4 QUALITY ASSURANCE SYSTEM

4.1 AUDITING OF PROCESSING, MANUFACTURING AND TRADING STAGES

Processors, manufacturers and traders of GOTS Goods shall participate in the GOTS certification procedure which is based on an on-site annual inspection cycle (including possible additional unannounced inspections based on a risk assessment of the operations). They shall hold a valid certificate of compliance listing the certified products/product categories and the processing, manufacturing and trading activities that are qualified under the scope of certification (including names of *subcontractors* assigned and their relevant processing and manufacturing steps).

Exceptions for Traders and Retailers are defined in corresponding Implementation Manual.

Exceptions to annual onsite inspection for small scale *subcontractors* with a low risk potential are possible under certain conditions, as defined in corresponding Implementation Manual.

On-site inspection shall however be performed to such units at least for the first year and every 3rd year of granted certification.

The entity under whose name or brand the labelled *GOTS Goods* are sold to the end consumer is responsible for exercising due care in ensuring compliance of the products with this Standard, the Licensing and Labelling Guide and further provisions as released by the Global Standard gGmbH.

Certifiers shall be authorised by the Global Standard gGmbH for the specific scope(s) in which they offer certification services:

- a) Certification of mechanical textile processing and manufacturing operations and their products

- b) Certification of wet processing and finishing operations and their products
- c) Certification of trading operations and related products

Basis for authorisation by the Global Standard gGmbH is an accreditation of the certifier in accordance with the document 'Approval Procedure and Requirements for Certification Bodies' by the main co-operation partner of the Global Standard gGmbH for this process, IOAS, or another recognised accreditation body.

4.2 TESTING OF TECHNICAL QUALITY PARAMETERS AND RESIDUES

Certified Entities are expected to undertake testing in accordance with a risk assessment in order to assure compliance with this Standard and in specific with the criteria of Section 2.4.14 (Technical Quality Parameters) as well as 2.4.15 and 2.4.16 (Limit Values for Residues in *GOTS Goods*, additional materials and *accessories*). All *GOTS Goods*, the components of these products and the *inputs* used are to be included in this risk assessment and therefore potentially subject to testing. The testing frequency, the type and number of samples are to be established according to this risk assessment.

Samples for residue testing may also be taken by the inspector during the required on-site inspection, either as back-up to the inspection process or in case of suspicion of contamination or non-compliance. Additional samples of goods may be taken from the supply chain at any time without advance notice.

Laboratories that are accredited according to ISO/IEC 17025 or qualified to GLP and that have appropriate experience in residue testing for textiles respective chemical *inputs* are approved to perform residue testing for those tests that are under the scope of their accreditation.

5 ETHICAL BUSINESS BEHAVIOUR

Ethical Business Behaviour is a crosscutting prerequisite at all stages of the supply chain and applies to all stakeholders of the supply chain. It is critically important for maintaining confidence among stakeholders of the certification process (workers, business partners, customers, certification body and scheme) and towards consumers. To assure Ethical Business Behaviour, the following criteria shall be met:

- a) Companies have a Code of Conduct (CoC) in place which prescribes ethical behaviour, honesty, fair dealings and prevention of corruption.
- b) Adherence to relevant OECD guidelines shall be assured.
- c) Companies are not involved in any act of corruption, extortion or embezzlement, nor in any form of bribery - including but not limited to - the promising, offering, giving or accepting of any improper monetary or other incentive.
- d) Companies keep accurate information regarding their activities, structure and performance, and disclose these in accordance with applicable regulations and industry benchmark practices.
- e) Companies shall neither participate in falsifying such information, nor in any act of misrepresentation in the supply chain. They are expected to collect, use and otherwise process any personal information (including that from workers, business partners, customers and consumers in their sphere of influence) with reasonable care.
- f) The collection, use and other processing of personal information shall comply with privacy and information security laws and regulatory requirements.
- g) Companies have established an anonymous non-discriminatory whistle-blower mechanism, assuring easy access and effective measures to protect whistle-blowers and ensuring that any information received regarding corruption or non-compliance is followed up and necessary actions taken.
- h) Companies provide training on integrity regulations and inform about sanctions for non-compliance

6 ANNEX

6.1 SPECIFIC REQUIREMENTS FOR TEXTILE PERSONAL CARE PRODUCTS

This Annex lists criteria for Textile Personal Care Products that deviate from or are set in addition to the general criteria of this Standard. Where no deviating requirements are set in this Annex, the applicable general GOTS criteria apply.

Important note: Any entity selling personal care products shall be aware of and meet the specific legal (hygienic) requirements applicable for its products and in the country / region where they are sold. It may well be that some of these legal requirements for specific personal care products conflict with environmental criteria set by GOTS. Accordingly, except where specified below, these products cannot be certified and labelled to GOTS.

6.1.1 Scope

For the purpose of this Standard, Textile Personal Care Products are grouped as following:

- Group I: *Topical products* – such as cotton wool, sanitary towels, bandages, nappies, gauze cotton tissue (Gamgee), island dressings, wound strips, sticking plasters and gauze dressings.
- Group II: *Physically invasive products* – such as tampons, ear buds and dental rolls, and *Clinically invasive products* – such as surgical swabs and gauze swabs.

6.1.2 Specific criteria for materials and inputs (for Group I and Group II)

Fibre material components

All fibres used shall be Totally Chlorine Free (TCF).

Non-woven and absorbent materials shall be composed of 100% certified organic fibres.

Synthetic fibre components are not permitted for group II products unless the use of other fibre materials is required to meet legal medical regulations and does not exceed 5% of the content (if labelled as organic) or 30% (if labelled as 'made with x% organic materials').

Super Absorbing Polymers (SAPs)

SAPs shall be made from non-GMO renewable raw materials (ADM-type).

SAPs may as a maximum contain 5% by weight of water-soluble extracts.

Barrier films

Except for wound contact layers, barrier films shall be composed of biodegradable polymers. All raw materials used shall be non-GMO.

Specific Criteria for Tampons

Only paper or cardboard tampon applicators are permitted. Additionally, applicator materials shall satisfy chemical residue requirements of Section 2.4.16.

Synthetic security veils are not permitted.

6.1.3 Specific criteria for Inputs

Sizing

No sizing shall be used for group II products.

Colourants

The use of colourants is only allowed if their use is required to meet a mandatory legal regulation.

All used colourants shall be GOTS approved. Approved Certifiers may further grant exceptions where a clear functional purpose exists (e.g. to identify wound dressing orientation).

Optical Brightening Agents

Optical brightening agents (OBAs) shall not be used.

Fragrances, lotions and lubricants

Any fragrances, lotions and lubricants used shall comply – beside the input criteria of GOTS – also with the input criteria of the COSMOS-Standard (Cosmetics Organic and Natural Standard).

6.2 SPECIFIC REQUIREMENTS FOR FOOD CONTACT TEXTILES

This Annex lists criteria for Food Contact Textiles (FCT) that are set in addition to the general criteria of this Standard. Where no requirements are set in this Annex, the applicable general GOTS criteria apply.

Important note: Any entity selling FCT shall be aware of and meet the specific legal (hygienic and GMP) requirements applicable for its products and in the country / region where they are sold. It may well be that some of these legal requirements for specific FCTs conflict with environmental criteria set by GOTS. Accordingly, except where specified below, these products cannot be certified and labelled to GOTS.

6.2.1 Scope

FCTs can potentially contaminate food or water by transferring substance into it. All FCTs are covered under the scope of this Annex. It applies to all sectors and to all stages of manufacturing, processing and distribution of FCTs.

6.2.2 Specific criteria for FCTs

All textiles used shall be Totally Chlorine Free (TCF).

FCTs shall be composed of 100% certified organic fibres.

Printing is prohibited on the food contact side of the textiles. GMP should, in particular, ensure that chemical substances are not transferred through the substrate.

7 DEFINITIONS

For the purpose of this Standard, the following terms are defined:

Term	Definition for the purpose of this Standard
<i>Accessories</i>	Items that are added to supplement <i>GOTS Goods</i> for required functional or for fashionable reasons. Most commonly used <i>accessories</i> are listed in Section 2.4.9. The processing of those accessories is not under direct scope of the GOTS on-site certification system. The GOTS criteria applicable to accessories are listed in Section 2.4.9 and 2.4.16.
<i>Approved Certifier</i>	Certification body which is approved by the Global Standard gGmbH to perform inspections and certifications according to GOTS in the relevant scope. An updated list of Approved Certifiers and their scopes is available at: http://www.global-standard.org/certification/approved-certification-bodies.html
<i>Certified Entity</i>	<i>Processor, manufacturer, trader</i> or retailer of <i>GOTS Goods</i> certified by an <i>Approved Certifier</i> .
<i>Endocrine disruptor</i>	An exogenous substance or mixture that alters function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub)populations
<i>Food Contact Textiles</i>	Any textile articles that are intended to come into prolonged contact with, or are already in contact with, or can reasonably be expected to be brought into contact with or to transfer their constituents to food or water intended for human consumption under normal or foreseeable conditions of use.
<i>Formulator</i>	An organisation involved in manufacturing, producing or creating a mixture of chemical substances blended together (formulation) to be used for textile processing. A formulation is the finished chemical product sold or distributed ready for use.
<i>GOTS Goods</i>	Textile goods (finished or intermediate) produced in compliance with GOTS by a <i>Certified Entity</i> and certified by an <i>Approved Certifier</i> .
<i>'Heavy Metal Free'</i>	An <i>input</i> is considered as 'heavy metal free' if it does not contain heavy metals as a functional constituent and any impurities contained do not exceed the following limit values (as set by ETAD for dyes): Antimony: 50 mg/kg, Arsenic: 50 mg/kg, Barium: 100 mg/kg, Cadmium: 20 mg/kg, Cobalt: 500 mg/kg, Copper: 250 mg/kg, Chromium: 100 mg/kg, Iron: 2500 mg/kg, Lead: 100 mg/kg, Manganese: 1000 mg/kg, Nickel: 200 mg/kg, Mercury: 4 mg/kg, Selenium: 20 mg/kg, Silver: 100 mg/kg, Zinc: 1500 mg/kg, Tin: 250 mg/kg Special Limits for Pigments : Cadmium : 50 mg/kg; Mercury : 25 mg/kg.
<i>'In conversion'</i>	A product from an operation or portion thereof, which has completed at least 12 months under organic management and is under the supervision of a certification body.
<i>Input</i>	General term for all <i>substances</i> and <i>preparations</i> directly applied as textile auxiliary agents, inks, dyes or pigments.
<i>Invasive products</i>	<i>Clinically invasive products</i> : Any device that penetrates the body through the skin, with the aid of or in the context of a surgical operation. <i>Physically invasive products</i> : Any device that, in whole or part, penetrates inside the body through a natural or artificial orifice.
<i>Manufacturer</i>	Entity in the manufacturing chain (sewing industry or so called CMT (cutting, making, trimming) industry up to labelling and final packing) of <i>GOTS Goods</i> .
<i>Natural materials</i>	A <i>natural material</i> is any product or physical matter that comes from plants, animals, or the ground. Minerals and the metals that can be extracted from them are also considered to belong into this category. <i>Natural materials</i> include biotic materials (materials that originates from living organisms such as (organic) natural fibre, wood, leather, horn, bone, shell, seed and plant oils etc.) and non-biotic material (such as minerals, metals, stone).
<i>'Permanent AOX'</i>	AOX is permanent, if the halogen is permanently bound to the molecule (e.g. in the chromophore of a dyestuff or pigment) and cannot get hydrolysed or released during fibre processing.
<i>Preparations</i>	Mixtures or solutions composed of two or more <i>substances</i> .



<i>Pre-consumer waste</i>	Material diverted from the waste stream during the manufacturing process. Excluded is the reutilization of materials such as rework, regrind or scrap generated in a process and capable to being reclaimed within the same process.
<i>Post-consumer waste</i>	Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of materials from the distribution chain.
<i>Processor</i>	Entity in the processing chain (post-harvest handling up to finishing) of <i>GOTS Goods</i> .
<i>Subcontractor</i>	Entity in the supply chain of <i>GOTS Goods</i> performing job work (in the field of processing or manufacturing) for a <i>Certified Entity</i> without becoming proprietor of the <i>GOTS Goods</i> and not assigning an own (independent) GOTS certification.
<i>Substances</i>	Chemical elements and their compounds as they occur in the natural state or as produced by industry.
<i>Textiles for babies</i>	Textiles products used for babies and small children up to the age of 36 months
<i>Topical Products</i>	Any device that does not penetrate inside the body, either through a body orifice or through the skin
<i>Trader</i>	Entity trading with (=buying and selling) <i>GOTS Goods</i> in the supply chain between the producer of the fibre and the retail merchant of the final product regardless whether the goods are physically received or not (e.g. an import, export or wholesale trading entity). Agents that do not become proprietor of the goods and retailers only selling to the end consumer are not considered as traders.
<i>Wage Gap</i>	The difference between average Living Wage and Average Wages Paid to workers in a Certified Entity.
<i>Worker</i>	Any individual engaged in work who is not a senior manager or owner.
<i>Migrant Worker</i>	Individual who migrates from one geographical region to another with a view to being employed and includes any person regularly admitted as a migrant for employment.
<i>Home-worker</i>	Individual carrying out work for remuneration in his or her home or at other premises mutually agreed with the employer, other than the regular workplace of the employer.
<i>Facility</i>	An individual establishment or site where processing, manufacturing, trading or retailing of <i>GOTS Goods</i> is done. It is operated by a <i>Certified Entity</i> and inspected by an <i>Approved Certifier</i> .
<i>Machine Oil</i>	Oil intended essentially for lubrication of machines and machine parts used for processing of <i>GOTS Goods</i> including but not limited to spinning, weaving, knitting etc. and which may come in contact with <i>GOTS Goods</i> .
<i>Microplastics</i>	Based on working definition of ECHA: A material consisting of solid polymer containing particles where $\geq 1\%$ w/w of particles have all dimensions $1\text{nm} \leq x \leq 5\text{mm}$. Note: This definition is under public consultation and the final outcome will be deemed applicable.
<i>Young Worker</i>	A worker who older than the minimum age but less than 18 years old.

8 LIST OF ABBREVIATIONS

AOX	Absorbable halogenated hydrocarbons and substances that can cause their formation.	IFOAM	International Federation of Organic Agriculture Movements
APEDA	Agricultural & Processed Food Products Export Development Authority, India	ILO	International Labour Organisation
APEO	Alkylphenoethoxylates	IOAS	International Organic Accreditation Service
B2B	Business to Business	ISO	International Organization for Standardization
B2C	Business to Consumer	IUCN	International Union for Conservation of Nature
BBP	Benzylbutyl phthalate	IVN	International Association Natural Textile Industry, Germany

BOD	Biological Oxygen Demand	JOCA	Japan Organic Cotton Association, Japan
COD	Chemical Oxygen Demand	LAS	Linear alkyl benzene sulphonate
DBP	Dibutyl phthalate	LC50	Lethal concentration (50% mortality)
DBT	Dibutyltin	MAK	Maximum Allowable Concentration (of a substance at the working place). The parameter refers to findings and categorisation of a German research commission
DCHP	Di cyclohexylphthalate	MBT	Monobutyltin
DEHP	Diethylhexyl phthalate	MMT	Monomethyltin
DEP	Diethyl phthalate	MOT	Monooctyltin
DHNUP	Di-C ₇₋₁₁ branched and linear alkylphthalates	MPhT	Monophenyltin
DHP	Di-n-hexylphthalate	NP	Nonylphenol
DHTDMAC	Dihydrogenated tallow dimethylammonium chloride	NPEO	Nonylphenol ethoxylates
DHxP	Di hexyl phthalates	NTA	Nitrilotriacetic acid
DIBP	Di-isobutyl phthalate	OECD	Organisation of Economic Cooperation and Development
DIDP	Diisodecyl phthalate	OP	Octylphenol
DIHP	Di-C ₆₋₈ branched alkylphthalates	OPEO	Octylphenol ethoxylates
DIHxP	Di-iso hexylphthalate	OTA	Organic Trade Association, USA
DINP	Diisononyl phthalate	PAH	Polycyclic aromatic hydrocarbons
DMEP	Bis(2-methoxyethyl) phthalate	PCB	Polychlorinated Biphenyls
DNOP	Di-n-octyl phthalate	PCP	Pentachlorophenol
DNP	Di-n-nonylphthalate	PeP	Pentylphenol
DPhT	Diphenyltin	PFCA	Perfluorinated carboxylic acids
DPP	Dipentylphthalate	PFOA	Perfluorooctanoic acid
DPrP	Di-n-propyl phthalate	PFOS	Perfluorooctane sulfonate
DPT	Dipropyltin	PFSA	Perfluorosulfonic acids
DSDMAC	Distearyldimethylammonium chloride	PPE	Personal Protective Equipment
DTDMAC	Ditallowdimethylammonium chloride	PVC	Polyvinyl chloride
DTPA	Diethylenetriamine penta-acetate	REACH	EC Regulation regarding Registration, Evaluation, Authorisation and Restriction of Chemicals
EC	European Commission	SA	Soil Association, UK
EC50	Effect concentration (50%)	TBT	Tributyltin
ECHA	European Chemicals Agency	TCyHT	Tricyclohexyltin
EDTA	Ethylendiamine tetra-acetate	TeBT	Tetrabutyltin
ETAD	Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers	TeCP	Tetrachlorophenol
FCT	Food Contact Textiles	TeET	Tetraethyltin
FTOH	Fluorotelomer alcohol	TMT	Trimethyltin
GHS	Global Harmonized System	TOC	Total Organic Carbon
GLP	Good Laboratory Practice	TOT	Trioctyltin

GMO	Genetically modified organisms	TPhT	Triphenyltin
GMP	Good Manufacturing Practices	TPT	Tripropyltin
GOTS	Global Organic Textile Standard	USDA	United States Department of Agriculture
HpP	Heptylphenol	α-MES	α-methyl ester sulphonate (C16/18)
IC50	Inhibition concentration (50% inhibition)		

» » » » » » » »

Availability of documents:

This Standard, the Interpretation Manual, reference documents and any further relevant public information as released by Global Standard gGmbH are available for download on the website www.global-standard.org

* * * * *

Important:

The following verbal forms are used to indicate requirements, recommendations, permissions, or capabilities in this policy:

- “**shall**” indicates a mandatory requirement
- “**should**” indicates a recommendation
- “**may**” indicates a permission
- “**can**” indicates a possibility or capability

**Copyright: © 2020 by
Global Standard gGmbH**