## Global Organic Textile Standard International Working Group - Technical Committee -

# Manual for the implementation of the Global Organic Textile Standard

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## **Principles**

This document provides interpretations and clarifications for specific criteria of the Global Organic Textile Standard (GOTS) and related official reference documents (e.g. the Licensing and Labelling Guide) approved by the Technical Committee (TC) of the International Working Group (IWG) where the current wording of the specific criteria could lead to (or already led to) inconsistent, inappropriate or even incorrect interpretation. It may further contain requirements for the application of the GOTS and the implementation of the related quality assurance system for certifiers.

This manual is to be seen as a flexible quality assurance tool of the TC to give advice and clarification to the GOTS *Approved Certifiers* and users of the GOTS where felt necessary as it can be up-dated short-term, however it does not deal with revision questions of the current standard version or even set any revised criteria.

The interpretations, corrections and further clarifications as provided with this document are binding for all GOTS *Approved Certifiers* and users of the GOTS. Any products already assessed and certified on basis of other interpretations which were also plausible with regard to the current wording of the GOTS retain their assessed / certified status.

The general implementation deadline to comply with a new version of the standard, this manual or another official reference document published by the IWG is 12 months after its release unless other / specific advice is given.

#### Preliminary remarks:

In the following the (relevant section of a) chapter of the GOTS is quoted where the interpretations, and further clarifications refer to.

In case not the whole wording of one chapter is quoted, the symbol '...' is used.

## Official interpretations for specific criteria of the GOTS, Version 4.0

## 1.2 Scope and structure

... "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." ...

#### **Interpretation:**

In principle any product that can be considered as a textile fibre product is covered under the scope of this standard. Textile fibre products containing electronic components are excluded.

Furniture is not covered under this scope. Also, the standard does not cover products made from non-fibre materials such as leather, skin or hide.

A product can only be certified and labelled ('organic' or 'made with organic') as a whole. It is not possible to certify and label only a part or component of a product.

## 1.3 Certificate of Compliance

"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 Certificate of Compliance issued in accordance with the 'Policy and Template for issuing Certificates of Compliance (Scope Certificates, SCs)'. Accordingly they are considered Certified Entities. Certificates of Compliance 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."

#### Interpretation:

Detailed mandatory instructions with regard to policies, layout, format and text for issuing Certificates of Compliance are provided for in the 'Policy and Template for issuing Certificates of Compliance (Scope Certificates, SCs)' as available on the website:

http://www.global-standard.org/certification/certificatetemplates.html

The applicable *Approved Certifiers* enter all *Certified Entities*, the products/product categories that they can offer in compliance with the standard as well as the processing steps/activities that are qualified under the scope of certification into the GOTS public data base:

http://www.global-standard.org/public-database/search.html

#### 2.1 Requirements for organic fibre production

"Approved are natural fibres that are certified 'organic' or 'organic - in conversion' according to Regulation (EC) 834/2007, USDA National Organic Program (NOP), or any (other) standard approved in the IFOAM Family of Standards for the relevant scope of production (crop or animal production). The certification body must have a valid and recognised accreditation for the standard it certifies against. Recognised accreditations are ISO 65 / 17065 accreditation, NOP accreditation, IFOAM accreditation and IFOAM Global Organic System accreditation." ...

#### **Interpretation:**

ISO 65 accredited certifiers are expected to have transferred their accreditation to ISO 17065 until 15 September 2015 (which is three years from its release).

#### References:

**USDA NOP (USA Organic Regulation)** 

<u>List of NOP accredited certifiers</u>

EC 834/2007 (EU Organic Regulation)

<u>EC 889/2008</u> (providing implementation rules for EC 834/2007 regarding organic production, labelling and control)

EC 1235/2008 (providing implementation rules for EC 834/2007 regarding imports of organic products from third countries)

List of standards approved in the IFOAM Family of Standards

List of IFOAM accredited certifiers

List of IFOAM Organic System Accreditation accredited certifiers

#### **Further clarifications:**

Organic fibre certification according to JAS is not possible. (-> per definition of JAS)

Certification of 'in conversion' (resp. 'in transition') status is not possible according to USDA NOP. (-> per definition of NOP)

The USDA policy memorandum "Labeling of Textiles That Contain Organic Ingredients" clarifies that textile products that are produced in accordance with GOTS may be sold as organic in the U.S. A valid requirement in this context is that all of the fibres identified as organic in these textiles must be produced and certified to the USDA NOP regulations.

Legal requirements (e.g. with regard to organic fibre certification) may also apply in other countries and must be respected.

#### Reference:

USDA policy memorandum "Labeling of Textiles That Contain Organic Ingredients"

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

and

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

... "The percentage figures refer to the weight of the fibre content of the products at normal conditions."

#### **Interpretation:**

Normal conditions are 65 % relative humidity ± 4 % and 20 °C ± 2 °C as specified in ISO 139 Textiles — standard atmospheres for conditioning and testing.

#### Reference:

ISO 139 Textiles - standard atmospheres for conditioning and testing

## 2.3 General Requirements for chemical inputs in all processing stages

## 2.3.1 Prohibited and restricted inputs

Substance group	Criteria
Aromatic and/or halogenated solvents	Prohibited
Brominated and chlorinated flame retardants	Prohibited
Chlorinated benzenes	Prohibited
Chlorophenols (including their salts and esters)	Prohibited (such as TeCP, PCP)
Complexing agents and surfactants	Prohibited are: - 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 during designated application
Genetically modified organisms (GMO)	Prohibited are all inputs that: - contain GMO - contain enzymes derived from GMO - are made from GMO raw materials (e.g. starch, surfactants or oils from GM plants)
Heavy metals	Prohibited, <i>inputs</i> must be 'heavy metal free'. Impurities must not exceed the limit values as defined in annex B. Exceptions valid for dyes and pigments are set in chapter 2.4.6. and 2.4.7.
Inputs (e.g. azo dyes and pigments) releasing carcinogenic arylamine compounds (MAK III, category 1,2,3,4)	Prohibited
Inputs containing functional nano-particles (= particles with a size < 100 nm)	Prohibited
Organotin compounds	Prohibited (such as DBT, MBT, TBT, DOT, TPhT)
Plasticizers	Prohibited are: PAH, phthalates, Bisphenol A and all other plasticizers with endocrine disrupting potential
Per- and Polyfluorinated compounds (PFC)	Prohibited (such as PFCA (incl. PFOA), PFSA (incl. PFOS) and FTOH)
Quaternary ammonium compounds	Prohibited are: DTDMAC, DSDMAC and DHTDMAC
Short-chain chlorinated	Prohibited

Substance group	Criteria
paraffins (SCCPs, C <sub>10-13</sub> )	
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, provide the <i>substances</i> and <i>preparations</i> are not already prohibited or have stricter restrictions criteria according to this standard. <i>Substances</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.

#### Interpretation:

Most of the inputs listed in this sector as prohibited are banned under GOTS anyway as they do not meet the requirements related to hazards and toxicity of chapter 2.3.2. Reasons for explicitly listing them in this chapter include their specific relevance in the textile sector and/or the public attention to these substances.

The substances listed above are prohibited regardless if applied as pure substance or as part of a preparation.

Preparations are prohibited if one or more of the prohibited substances of this section are intentionally added/present as a functional component at any level. Any unavoidable contaminations and impurities of such substances must not exceed the limit, above which the substance needs to be declared in the MSDS (prepared according to one of the equivalent norms / directives as listed in chapter 2.3.3.). In a given case of doubt about the applicable limit, the respective GHS (Global Harmonised System) criterion is to be taken as decisive requirement. Deviating limits for the criterion 'heavy metal free' are defined in annex B of GOTS.

For functional nano particles as well as GMO containing or derived inputs the applicable norms / directives do not provide for a duty of declaration in the MSDS. Any unavoidable contaminations and impurities of these substances must not exceed 0.1%.

Inputs are also not permitted if there is validation that their designated use leads to any exceeding residue limits in textiles of the parameters listed in chapter 2.4.15.

#### References:

Regulation EC 552/2009

European Chemicals Agency (ECHA), candidate list

Substance group	Criteria
Endocrine Disruptors	Prohibited

## **Specification:**

In specific a substance is prohibited under this category:

- if listed in the candidate list in annex 1 of the EU report towards the establishment of a priority list of substances for further evaluation of their role in endocrine disruption in:
  - category 1: substances for which evidence of endocrine disrupting activity in at least one species using intact animals is available or
  - category 2: substances for which at least some in vitro evidence of biological activity related to endocrine disruption is available or
- if other scientific evidence is available that identifies the substance as endocrine disruptor as per definition provided in annex B of GOTS.

The EU Commission is currently working on a new concept for assessment of substances in view of their endocrine disrupting properties and the EU Joint Research Center on a corresponding database of substances. As soon as these documents are published this specification will be reviewed and may be updated accordingly.

#### Reference:

Annex 1 of the EU report towards the establishment of a priority list of substances for further evaluation of their role in endocrine disruption:

http://ec.europa.eu/environment/archives/docum/pdf/bkh\_annex\_01.pdf

Substance group	Criteria
Inputs (e.g. azo dyes and pigments) releasing carcinogenic arylamine compounds (MAK III, category 1,2,3,4)	Prohibited

opcomodion.		
Azo dye compounds MAK III, category 1 (with CAS no):		
4-Aminobiphenyl (92-67-1)	2-Naphthylamine (91-59-8)	
Benzidine (92-87-5)	o-Toluidine (95-53-4)	
4-Chloro-o-toluidine (95-69-2)		
Azo dye compounds MAK III, category 2 (with CAS no):		
o-Aminoazotoluene ( 97-56-3)	4,4'-Methylene-bis-(2-chloroaniline)	
	(101-14-4)	
2-Amino-4-nitrotoluene (99-55-8)	4,4'-Oxydianiline (101-80-4)	
p-Chloroaniline (106-47-8)	4,4'-Thiodianiline (139-65-1)	
2,4-Diaminoanisole (615-05-4)	2,4-Toluylendiamine (95-80-7)	
4,4'-Diaminobiphenylmethane (101-77-9)	2,4,5-Trimethylaniline (137-17-7)	

o-Anisidine (90-04-0)

2,4-Xylidine (95-68-1)

2,6-Xylidine (87-62-7)

4-Aminoazobenzene (60-09-3)

p-Cresidine (120-71-8)

Azo dve compounds MAK III. category 3 (with CAS no):

3.3'-Dichlorobenzidine (91-94-1)

3,3'-Dimethoxybenzidine (119-90-4)

3.3'-Dimethyl-4.4'-diaminobiphenylmethane

3,3'-Dimethylbenzidine (119-93-7)

7120 dye compounds with the til, category of with orto hoj.		
5-Chloro-2-methylaniline (95-79-4)	p-phenylenediamine (106-50-3)	
N,N-Dimethylaniline (121-69-7)		

Azo dye compounds MAK III, category 4 (with CAS no):

rest dy's compounds with the sategory in (with or to he).		
Aniline (95-79-4)		

Prohibited azo pigments that may release carcinogenic amine compounds (\*or generate the same in a chemical follow-up reaction) include:

C.I. Pigment Red 8, C.I. Pigment Red 22, C.I. Pigment Red 23\* and C.I. Pigment Red 38 C.I. (Colour Index) as published by Society of Dyers and Colorists (SDC) / American Association of Textile Chemists and Colorists (AATCC) (4<sup>th</sup> edition online)

Substance group	Criteria
Inputs with halogen containing compounds	Prohibited are <i>input</i> s that contain > 1% <i>permanent AOX</i>

. . .

#### and

Annex B) Definition: "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." ...

#### Interpretation:

Specification:

(838-88-0)

Inputs with a total content of organically bound halogens > 1% can only be approved if it is plausible that the permanent AOX content (as per definition of GOTS, annex B) is < 1%.

## 2.3.2 Requirements related to hazards and toxicity

Substance group	Criteria
Inputs which are classified	Prohibited are:
with specific hazard statements (risk phrases) related to health hazards	preparations which contain at least one substance which is classified with any of the following hazard statements

#### **Interpretation:**

In specific a *preparation* is prohibited if any of the contained *substances*, which are classified with any hazard statement listed in this section, is present above the concentration limit, above which the *substance* needs to be declared in the MSDS (prepared according to one of the equivalent norms / directives as listed in chapter 2.3.3.).

In a given case of doubt about the classifications and applicable concentration limits, the GHS provisions are decisive.

Substance group	Criteria
Inputs which are classified	
with specific hazard	For inputs assessed according to the 'risk phrase'
statements (risk phrases)	classification (Directive 67/548EEC, amended and appealed
related to health hazards	by Regulation EC 1272/2008) the equivalent risk phrases
	apply.

#### and

Substance group	Criteria
Inputs which are classified with specific hazard statements / risk phrases related to environmental hazards	For <i>inputs</i> assessed according to the 'risk phrase' classification (Directive 67/548EEC, amended and appealed by Regulation EC 1272/2008) the equivalent risk phrases apply.

#### **Specification:**

Risk phrases equivalent to the hazard statements related to health hazards listed in the standard:

Hazard Statement	Equivalent Risk Phrase	
H300	R28: Very toxic if swallowed	
H310	R27: Very toxic in contact with skin	
H330	R26: Very toxic by inhalation	
H340	R46: May cause heritable genetic damage	
H341	R68: Possible risk of irreversible effects	
H350	R45: May cause cancer	
	R49: May cause cancer by inhalation	
H351	R40: Limited evidence of a carcinogenic effect	
H360	R60: May impair fertility	
	1: May cause harm to the unborn child	
H361	R62: Possible risk of impaired fertility	
	R63: Possible risk of harm to the unborn child	
H370	R39: Danger of very serious irreversible effects	

	(in combinations R39/23, R39/24, R39/25, R39/26, R39/27, R39/28)
H371	R68: Possible risk of irreversible effects
	(in combinations R68/20, R68/21, R68/22)
H372	R48: Danger of serious damage to health by prolonged exposure
	(in combinations R48/23, R48/24, R48/25)

Risk phrases equivalent to the hazard statements related to environmental hazards listed in the standard:

Hazard Statement	Equivalent Risk Phrase		
H400	R50: Very toxic to aquatic organisms		
	R50/53: Very toxic to aquatic organisms, may cause long-term		
	adverse effects in the aquatic environment (not exactly equivalent)		
H410	R50/53: Very toxic to aquatic organisms, may cause long-term		
	adverse effects in the aquatic environment (not exactly equivalent)		
H411	R51/53: Toxic to aquatic organisms, may cause long-term adverse		
	effects in the aquatic environment		
EUH059	R59: Dangerous for the ozone layer		

#### References:

Global Harmonized System (GHS) as published by the United Nations, 3<sup>rd</sup> revision 2009 (tables containing hazard statements with H-codes as well as corresponding hazard classes and categories are provided for in annex 3)

Directive 67/548/EEC

Regulation EC 1272/2008

Further relevant Directives for classification and assessment of *preparations*:

Directive 1999/45/EC

Directive 2006/8/EC

Classification & Labelling Inventory for substances registered or notified in the EU

Footnote 1): "Performing new animal tests to determine unknown  $LD_{50}$  values in the course of the GOTS assessment procedure for inputs (compare chapter 2.3.3) is prohibited." ...

and

Footnote 3): ... "Performing new fish and daphnia tests to determine unknown  $LC_{50}$  /  $EC_{50}$  values in the course of the GOTS assessment procedure for inputs is prohibited." ...

#### Interpretation:

In case new animal/fish tests for an input would have been carried out in a legally binding registration procedure (such as REACH), it must be demonstrated that these tests were mandatory and no alternative method would have been accepted. Other ways and in all other cases of new animal/fish tests performed, the corresponding input must not be approved for GOTS.

#### 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* must 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 IWG for the specific accreditation scope:

- Approval of textile auxiliary agents (chemical inputs) on positive lists

Approval must 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 (MSDS), prepared according to an applicable recognised norm or directive must 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) in the assessment."

#### Interpretation:

"Applicable recognised norms or directives" according to which a MSDS of a chemical input (substance or preparation) has to be prepared in this context are:

- ANSI Z400.1-2004
- ISO 11014-1
- EC 1907/2006 (Reach)
- EC 2001/58
- GHS (Global Harmonised System)
- JIS Z 7250:2005, Part 1

In specific, valid reasons for inclusion of further sources of information in the assessment include:

- the MSDS does not represent a legally binding basis in the country/region where the input is marketed
- the input potentially contains restricted or prohibited substances for which a declaration in the MSDS is not binding (e.g. AOX, endocrine disruptors, GMO (derived) material or enzyme, nano particles) the MSDS does not contain certain ecological or toxicological information required to assess compliance with related GOTS criteria
- tests / methods used to determine certain ecological or toxicological values are not specified or do not correspond to those listed in the GOTS criteria
- spot checking on the accuracy of certain ecological or toxicological information provided on the MSDS
- surveillance of impurities

Certifiers with approval for the scope "Approval of textile auxiliary agents (chemical inputs) on positive lists" (= scope 4 of the 'Approval Procedure and Requirements for Certification Bodies', chapter 4.2) are listed on the website:

http://www.global-standard.org/certification/how-to-get-chemical-inputs-approved.html

Certifiers with approval for this scope are obliged to make their lists of approved chemical inputs available to all *Approved Certifiers*. The lists are to be taken as applicable tool for input assessment in the GOTS certification scheme by all *Approved Certifiers*. In case of conflicting decisions (product approved by one that is declined by another certifier), certifiers are requested to achieve consistent assessment by sharing their proofs of assessment. If this fails in last instance the Technical Director / Technical Committee of the IWG decides after screening the provided technical information on the chemicals in question.

## 2.4.6 Dyeing

Parameter	Criteria
Selection of dyes and	Prohibited are (disperse) dyes classified as allergenic
auxiliaries	

Specification:				
The following disperse dyes are prohibited (because of their allergenic potential):				
C.I. Disperse Blue 1 C.I. Disperse Orange 1 C.I. Disperse Violet 93				
C.I. Disperse Blue 3	C.I. Disperse Orange 3	C.I. Disperse Yellow 1		
C.I. Disperse Blue 7	C.I. Disperse Orange 37	C.I. Disperse Yellow 3		
C.I. Disperse Blue 26	C.I. Disperse Orange 76	C.I. Disperse Yellow 9		
C.I. Disperse Blue 35 C.I. Disperse Orange 149 C.I. Disperse Yellow 23				
C.I. Disperse Blue 102 C.I. Disperse Red 1 C.I. Disperse Yellow 39				
C.I. Disperse Blue 106	C.I. Disperse Red 11	C.I. Disperse Yellow 49		
C.I. Disperse Blue 124	C.I. Disperse Red 15	C.I. Disperse Yellow 54		
C.I. Disperse Blue 291 C.I. Disperse Red 17 C.I. Disperse Yellow 64				
C.I. Disperse Brown 1 C.I. Disperse Violet 1				

## 2.4.6 Dyeing and 2.4.7 Printing

Parameter	Criteria
Selection of dyes and	The use of natural dyes and auxiliaries that are derived
auxiliaries	from a threatened species listed on the Red List of the IUCN
	is prohibited.

Reference:		
Red List of the IUCN		

## 2.4.9 Requirements for additional fibre materials and accessories

Additional Fibre Materials	Criteria
	Allowed are:  - conventional natural fibres:  • all non-GMO vegetable fibres - except conventional cotton - and all animal fibres except conventional angora wool  - regenerated fibres from certified organic raw materials, from pre- or post-consumer waste or from raw materials certified according to a program that verifies compliance with sustainable forestry management principles:  • raw materials used must be non-GMO; cellulosic based (such as viscose, modal, lyocell or acetate) and protein based fibres  - recycled synthetic (polymer) fibres from pre- or post-consumer waste:  • only polyester, polyamide, polypropylene and polyurethane (elastane)  - regenerated fibres (from non-organic raw materials):  • raw materials used must be non-GMO; the use is limited to a maximum of 10% resp. 25% for socks, leggings and

Additional Fibre Materials	Criteria	
	<ul> <li>sportswear</li> <li>virgin synthetic (polymer) fibres:</li> <li>only polyamide, polypropylene and polyurethane (elastane);</li> <li>the use is limited to a maximum of 10% resp. 25% for socks,</li> <li>leggings and sportswear</li> </ul>	
	<ul> <li>stainless steel fibres and mineral fibres, with exception of asbestos, carbon and silver fibres:</li> <li>the use is limited to a maximum of 10%</li> </ul>	
	The additional fibre materials may be mixed with the organic fibres to the fabric or used in certain details of the product. Blending organic and conventional fibres of the same type in the same product is not permitted.  All additional materials must meet the limit values for residues as listed in chapter 2.4.16.	

#### Interpretation:

Conventional cotton is not permitted as additional fibre material, this means that all cotton used relevant for material composition under chapter 2.2.1 and 2.2.2 must be organic resp. organic in conversion.

Virgin polyester is not permitted as additional fibre material, this means that all polyester used relevant for material composition under chapter 2.2.1 and 2.2.2 must be (pre- or post-consumer) recycled.

Adequate verification proof for the use of regenerated fibres from certified organic raw materials is certification of the fibre supplier/manufacturer and the fibre material to the Organic Content Standard (OCS from Textile Exchange).

Recognised certification programs verifying compliance with sustainable forestry management principles are Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification Schemes (PEFC).

Adequate verification proof for the use of recycled synthetic fibres is certification of the fibre supplier/manufacturer and the fibre material to the Recycled Claim Standard (RCS from Textile Exchange), the Global Recycle Standard (GRS from Textile Exchange), Recycled Content Standard (from Scientific Certification Systems).

Further relevant certification programs / verification proofs may be recognised as equivalent in future. In such case the decision will be published by the IWG (through an up-dated issue of this manual or first on the corresponding website <a href="http://www.global-standard.org/the-standard/manual-for-implementation.html">http://www.global-standard.org/the-standard/manual-for-implementation.html</a>).

Samples for newly possible material compositions on basis of GOTS 4.0 include:

70% organic cotton, 30% recycled polyester

70% organic cotton, 30% rayon made from organic bamboo

Samples for material compositions no longer possible on basis of GOTS 4.0 include:

70% organic wool, 30% conventional cotton (as all cotton used in the fabric must be organic) 90% organic cotton, 10% virgin polyester (as all polyester used in the fabric must be recycled)

#### References:

Content Claim Standard (CCS, Textile Exchange)

Organic Content Standard (OCS, Textile Exchange)

Global Recycle Standard (GRS, Textile Exchange)

Recycled Claim Standard (RCS, Textile Exchange)

Recycled Content Standard (Scientific Certification Systems)

Forest Stewardship Council (FSC)

Programme for the Endorsement of Forest Certification Schemes (PEFC)

## 2.4.11 Waste Water Treatment

"Wastewater from all wet processing units must be treated in an internal or external functional wastewater treatment plant before discharged to environment." ...

#### Interpretation:

The question whether a treatment plant is functional or not mainly depends on the inputs used in wet processing. For a unit only performing dyeing with natural dyes and auxiliaries, a simple biological treatment system may be appropriate whereas for an industrial unit working with chemical dyes and auxiliaries at least a 2-stage treatment plant is requested. Units using auxiliaries that are approved because of its adequate eliminability (e.g. acc. to OECD 302B) must in addition have a functioning treatment of the sludge.

... "The applicable national and local legal requirements for waste water treatment - including limit values with regard to pH, temperature, TOC, BOD, COD, colour removal, residues of (chemical) pollutants and discharge routes - must be fulfilled." ...

#### Interpretation:

It is expected that within the GOTS certification procedures compliance with the national and local legal requirements is checked on basis of the corresponding official environmental permit and through appropriate verification means. In specific it must be assured that:

- the quality of discharged wastewater continuously complies with all requirements and limits defined in the environmental permit.
- if the waste water is treated (partly) in an external plant, that the wet processor has a valid delivery contract with the operator of the external treatment plant while
  - the contract indicates the parameters and the related limits which must be respected before discharging the wastewater to the receiving treatment plant
  - the operator of the external plant is legally authorised for this operation and continuously complies with the national and local legal requirements and limits
- the quantity of waste water to be treated does not exceed the capacity of the on-site treatment plant and/or the maximum quantity indicated in the delivery contract
- the indicated quantity to be treated matches with the actual processing water quantity used and discharged

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

#### Interpretation:

The requirement shall be measured downstream of internal (on-site) wastewater treatment plant and/or external (off-site, e.g. municipal) wastewater treatment plant receiving wastewater from these wet processing sites.

The applicable test method for COD determination is ISO 6060.

The applicable calculation method in this context is as following:

 $(C/1000) \times (V \times 1000) / (W \times 1000) = \dots g COD/kg$ 

with:

C (in mg/l) = COD concentration in water discharged to environment after treatment

V (in m<sup>3</sup>) = Volume of water discharged in the calculation period

W (in ton) = Weight of textile output in tonnage in the calculation period

#### Reference:

ISO 6060 Water quality - Determination of the chemical oxygen demand

## 2.4.12 Storage, packaging and transport

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

#### **Interpretation:**

As there is currently no widespread and globally applicable certification system for recycled paper/cardboard, for the time being a certification is currently not mandatory to proof the use of recycled paper/cardboard (from *pre*- or *post-consumer waste*). As a minimum a declaration issued by the producer/trader of the paper/cardboard that it is recycled from *pre*- or *post-consumer waste* must be available. The need for a mandatory certification to prove this requirement will be reviewed within two years after release of GOTS Version 4.0.

Recognised certification programs verifying compliance with sustainable forestry management principles are Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification Schemes (PEFC).

Further relevant certification programs / verification proofs may be recognised as equivalent in future. In such case the decision will be published by the IWG (through an up-dated issue of this manual or first on the corresponding website <a href="http://www.global-standard.org/the-standard/manual-for-implementation.html">http://www.global-standard.org/the-standard/manual-for-implementation.html</a>).

#### 2.4.13 Record keeping & internal quality assurance

... "Certified Entities purchasing organic fibres must receive and maintain transaction certificates (=TCs, certificates of inspection), issued by a recognised certifier and certified in accordance with the criteria of chapter 1.4 for the whole quantity purchased.

Certified Entities purchasing GOTS Goods must receive and maintain GOTS transaction certificates, issued by an Approved Certifier for the whole quantity of GOTS Goods purchased. In accordance with the corresponding policy issuing TCs that cover multiple shipments is possible under certain conditions. The maximum time period that a single TC can cover is 3 months." ...

#### **Interpretation:**

Transaction Certificates (TCs) for organic (or organic 'in conversion') fibres should reflect the interpretation and clarifications as provided for chapter 2.1 of GOTS in this document. TCs for GOTS Goods issued on basis of an organic production standard or another processing standard cannot be accepted in the GOTS supply chain.

Detailed mandatory instructions with regard to policies, layout, format and text for issuing GOTS Transaction Certificates (TCs) in the processing/trading chain are provided for in the 'Policy and Template for issuing Transaction Certificates (TCs)' as available on the website:

http://www.global-standard.org/certification/certificatetemplates.html

## 2.4.14 Technical quality parameters

## **Interpretation:**

The following table provides for alternate acceptable test methods to the methods as provided for in GOTS. The criteria (fastness resp. dimensional change levels) are the same as for the respective main test method:

Parameters	Main test method	Alternate acceptable test methods
Rubbing fastness, dry	ISO 105x12	AATCC 8, DIN 54021, JIS L0849
for fibre blends		
Rubbing fastness, wet	ISO 105x12	AATCC 8, DIN 54021, JIS L0849
Perspiration fastness, alkaline	ISO 105 E04	AATCC 15, DIN 54020, JIS L0848
and acid		
for fibre blends		
Light fastness	ISO 105 B02	AATCC 16 option 3, DIN 54004, JIS
		L0843
Dimensional changes after	ISO 6330	AATCC 135 (fabrics) and 150
washing at 40°C resp. at 30°C for	•	(garments), DIN 53920, JIS L1018
animal fibre material and blends		
thereof.		
This criterion is only valid for the		
garment sector		
Washing fastness when washed	ISO 105 C06 C1M	AATCC 61 option 3A (at 140°F), DIN
at 60°C		EN 20105-C03, JIS L0844

#### 2.4.15 Limit values for residues in GOTS Goods

and

#### 2.4.16 Limit values for residues in additional fibre materials and accessories

Parameter	Criteria	Test method
Pesticides, sum		
parameter		
All natural fibres (except shorn wool), cert. organic	< 0.1 mg/kg	§ 64 LFGB L 00.00-34 (GC/MS); § 64 LFGB L 00.00-114 (LC/MS/MS)
Shorn wool, cert. organic	< 0.5 mg/kg	

#### [respective]

All natural fibres	< 0.5 mg/kg	§ 64 LFGB L 00.00-34 (GC/MS);
(except shorn wool)		§ 64 LFGB L 00.00-114 (LC/MS/MS)
Shorn wool	< 1.0 mg/kg	

## **Interpretation:**

Pesticides relevant for testing in vegetable and animal fibres are listed below:

Name of pesticide	CAS No.	Applicable for Vegetable fib.	r testing in Animal fib.
2,3,5,6-Tetrachlorophenol	935-95-5	X	
2,4,6-Trichlorophenol	88-06-2	X	
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	X	
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	X	
Acetameprid	135410-20-7	X	
Aldrin	309-00-2	X	X
Atrazine	1912-24-9	X	
Azinphos	2642-71-9	X	
Azinphos-methyl	86-50-0	X	
Alpha- and beta-Endosulfan	959-98-8	x	x
D.( 4	33213-65-9		
Bifenthrin	82657-04-3	X	
Bendiocarb	22781-23-3	X	
Bioresmethrin	28434-01-7		X
Bromophos-ethyl	4824-78-6	X	X
Buprofezin	69327-76-0	Х	
Captafol	2425-06-1	X	
Carbaryl	63-25-2	X	X
Carbosulfan	55285-14-8	X	
Clethodim	99129-21-2	X	
Chlordane	57-74-9		X
Chlordimeform	6164-98-3	X	
Chlorpyrifos-ethyl	2921-88-2	Х	X
Chlorpyrifos-methyl	5598-13-0	X	X
Chlorfenapyr	122453-73-0	Х	
Chlorfenvinphos	470-90-6	Х	X
Chlorfluazuron	71422-67-8	Х	
Coumaphos	56-72-4	X	X
Cyfluthrin	68359-37-5	X	X
Cyhalothrin	91465-08-6	X	X
Cyclanilide	113136-77-9	X	
Cypermethrin	52315-07-8	X	X
DDD (op- and pp-)	53-19-0, 72-54-8	X	X
DDE (op- and pp-)	3424-82-6, 72-55-9	X	X
DDT, o,p-	789-02-6	X	X
DDT, p,p-	50-29-3	X	X
DEF/ 2,4 Dichlorodiphenyldichloroethane	78-48-8	X	
Deltamethrin	52918-63-5	X	X
Diafenthiuron	80060-09-9	X	
Diazinon	333-41-5	X	X
Dichlofenthion District Income and the second secon	97-17-6		X
Dichlorprop	120-36-2	X	
Dichlorvos	62-73-7	X	X
Dicrotophos I	141-66-2	X	
Dieldrin	60-57-1	X	X
Diflubenzuron	35367-38-5		X
Dimethoate	60-51-5	X	X
Dinoseb and salts	88-85-7	X	
Diuron	330-54-1	X	
Empenthrin Endeautionaution	54406-48-3		X
Endosulfansulfate  Endosulfansulfate	1031-07-8	X	X
Endrin	72-20-8	X	X
Esfenvalerate Esternate	66230-04-4	X	X
Ethion	563-12-2	X	X
Fenchlorphos	299-84-3	X	X
Fenitrothion	122-14-5	X	X
Fenthion	55-38-9		X
Fenpropathrin	39515-41-8	X	

Fignois	Fenvalerate	51630-58-1	Х	Х
Flumethrin				
Heptachlor				Х
Heptachlor epoxide				
Hexachlorobenzen (HCB)				
Hexachlorocyclohexane - a-Lindane				
Hexachlorocyclohexane - b-Lindane   319-85-7				
Hexachlorocyclohexane - d-Lindane   319-86-8				
Imidacloprid				
Lindane         58-89-9         X         X           Lufenuron         103055-07-8         X           Malathion         121-75-5         X         X           MCPA         94-74-6         X           MCPB         94-81-5         X         M           Mecoprop         93-65-2         X         M           Metolachlor         51218-45-2         X         M           Methomyl         16752-77-5         X         M           Methomyl         16752-77-5         X         M           Methomylos         7786-34-7         X         X           Methamidophos         10265-92-6         X         X           Methoxychlor         72-43-5         X         X           Mirex         2385-85-5         X         X           Monocrotophos         6923-22-4         X         X           Parathion-ethyl         56-38-2         X         X           Parathion-methyl         298-00-0         X         X           Perdimethalin         40487-42-1         X         X           Perdimethalin         40487-42-1         X         X           Permethrin         52645-53-1         <			Y	X
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Malathion         121-75-5         x         x           MCPA         94-74-6         x         x           MCPB         94-81-5         x         x           Mecoprop         93-65-2         x         x           Metolachlor         51218-45-2         x         x           Methomyl         16752-77-5         x         x         x           Methomyl         16752-78-3         x         x         x           Mirex         238-85-5         x         x         x         x           Parathion-nethyl         56-38-2         x         x         x         x         x         x         x <td< td=""><td></td><td></td><td></td><td>X</td></td<>				X
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Parathion-methyl         298-00-0         x         x           Pendimethalin         40487-42-1         x           PCP/ Pentachlorophenol         87-86-5         x         x           Permethrin         52645-53-1         x         x           Perthane         72-56-0         x         x           Phosmet         732-11-6         x         x           Phoxim / Baythion         14816-18-3         x         x           Pirimiphos-ethyl         23505-41-1         x         x           Pirimiphos-methyl         29232-93-7         x         x           Profenophos         41198-08-7         x         x           Prometryn         7287-19-6         x         x           Pymetrozine         123312-89-0         x         x           Propetamphos         31218-83-4         x         x           Pyrethrum         8003-34-7         x         x           Quinalphos         13593-03-8         x         x           Quintozine         82-68-8         x         x           Teflubenzuron         83121-18-0         x         x           Tetrachlorvinphos         22350-76-1         x				
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Tetrachlorvinphos 22350-76-1 x			X	
			X	
	Tetrachlorvinphos			X
Toxaphene 8001-35-2 x	Toxaphene	8001-35-2	X	
Telodrin 297-78-9 X			X	
Strobane 8001-50-1 x	Strobane	8001-50-1	X	
Transfluthrin 118712-89-3 X	Transfluthrin	118712-89-3		X
Trifluralin 1582-09-8 X			Х	
Triflumuron 64628-44-0 X				X
Thiodicarb 59669-26-0 X			Х	
Thidiazuron 51707-55-2 X				
Tolclofos-methyl 57018-04-9 X				
Trifloxysulfuron-sodium 199119-58-9 X				

## 3. Minimum social criteria

## 3.1 Scope

... "For adequate implementation and assessment of the following specific criteria adherence to the corresponding key conventions of the International Labour Organization (ILO) must be assured."

## Interpretation:

The following ILO conventions 'correspond' to the specific GOTS minimum criteria:

- 3.2. Employment is freely chosen:
  - C29 Forced Labour Convention
  - C105 Abolition of Forced Labour Convention
- 3.3. Freedom of association and the right to collective bargaining are respected:
  - C87 Freedom of Association and Protection of the Right to Organise Convention
  - C98 Right to Organise and Collective Bargaining Convention
  - C135 Workers' Representatives Convention
  - C154 Collective Bargaining Convention
- 3.4. Working conditions are safe and hygienic:
  - C155 Occupational Safety and Health Convention
- 3.5. Child labour must not be used:
  - C138 Minimum Age Convention
  - C182 Worst Forms of Child Labour Convention
- 3.6. Living wages:
  - C95 Protection of Wages Convention
  - C131 Minimum Wage Fixing Convention
- 3.7. Working hours are not excessive:
  - C1 Hours of Work (Industry) Convention
  - C14 Weekly Rest (Industry) Convention
  - C30 Hours of Work (Commerce and Offices) Convention
  - C106 Weekly Rest (Commerce and Offices) Convention
- 3.8. No discrimination is practised:
  - C100 Equal Remuneration Convention
  - C111 Discrimination (Employment and Occupation) Convention
- 3.9. Regular employment is provided
  - C158: Termination of Employment Convention
  - C175: Part-time Work Convention
  - C177: Homework Convention
  - C181 Private Employment Agencies Convention
- 3.10. Harsh or inhumane treatment is prohibited:
  - C29 Forced Labour Convention
  - C105 Abolition of Forced Labour Convention

#### Reference:

The mentioned conventions are published on the official ILO website:

http://www.ilo.org/ilolex/english/convdisp1.htm

## 4.1 Auditing of processing, manufacturing and trading stages

"Processors, manufacturers and traders of GOTS Goods must 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 must 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).

The responsible certifier may decide to perform remote-inspections instead of on-site inspections for *traders* which do not have or subcontract any *processing* or *manufacturing* activities. On-site inspection must however be performed at least for the first year and every 3<sup>rd</sup> year of granted certification. *Traders* having an annual turnover with *GOTS Goods* less than 5000 € and retailers only selling to end consumers are exempt from the certification obligation; provide they do not (re-)pack or (re-)label *GOTS Goods*. *Traders* with less than 5000€ annual turnover with *GOTS Goods* must register with an *Approved Certifier* and must inform the same immediately after their annual turnover exceeds 5000€.

The responsible *Approved Certifier* may further decide on exceptions from the annual inspection cycle for small-scale *subcontractors* with a low risk potential regarding environmental and social criteria. On-site inspection must however be performed to such units at least for the first year and every 3<sup>rd</sup> year of granted certification." ...

#### **Interpretation:**

Depending on the kind of the organic fibre processed the following stages are considered as the first processing stages that must be GOTS certified:

- Ginning for cotton
- Retting for bast fibres
- Boiling and washing cocoons for silk
- Scouring for wools and other animal fibres (respective grading if this step is undertaken before scouring and not already covered by the organic farming certification)

The inspection and certification obligation for the different stages in the supply chain of GOTS Goods can be summarised as following:

#### Processors and manufacturers:

Certification based on annual on-site inspection is obligatory.

#### Subcontractors (in the field of processing and manufacturing):

Certification based on on-site inspection is obligatory;

interpretation advice for possible exemptions from the annual on-site inspection cycle under the provision for 'small-scale subcontractors with a low risk potential' is provided as following:

Operators employing not more than 10 production workers can be considered as 'small-scale' in this context. Units performing wet processing can generally not be considered as having a 'low risk potential' regarding environmental criteria whereas processors and manufacturers employing workers in developing countries can generally not be considered as having a 'low risk potential' regarding social criteria.

Accordingly *Approved Certifiers* may decide on exceptions from the annual onsite inspection cycle for units with no more than 10 production workers performing job work for a certified entity such as home based working units and mechanical processing and manufacturing units in developed countries but need to assure that on-site visit takes place at least every 3<sup>rd</sup> year. *Approved Certifiers* shall document the risk assessment on which the decision to make use of exceptional rule is based on.

<u>Traders</u> (any B2B activities; such as import, export and wholesale entities):
Certification based on annual on-site respective remote inspection (as specified in the

standard) is obligatory, if at least one of the following conditions are valid:

- they become proprietor of *GOTS Goods* (= buy and sell them) with an annual turnover with these products of at least 5000€
- they are engaged with packing or re-packing of GOTS Goods
- they are engaged with labelling or re-labelling of GOTS Goods.

Remote inspections shall only be carried out for *traders* which do not have or subcontract any *processing* or *manufacturing* activities if the *Approved Certifier* is able to cover all applicable aspects of the below minimum inspections protocol without being on-site. On-site visits need to takes place at least every 3<sup>rd</sup> year.

Traders that are not obliged to become certified, because their annual turnover with GOTS Goods is less than 5000€, must register with an *Approved Certifier*. In this context the certified status of their supplier and the correct labelling of the GOTS Goods (with license number and certifier's reference of the supplier) should be verified. As soon as their turnover exceeds 5000€ they must inform the *Approved Certifier* and are under obligation of certification.

#### **Retailers:**

certification is obligatory, only if:

- they have beside their retail activity also a trade activity with GOTS Goods with an annual turnover of at least 5000€
- they are engaged with packing or re-packing of GOTS Goods
- they are engaged with labelling or re-labelling of GOTS Goods.

Approved Certifiers that have contracted more than 10 GOTS Certified Entities must conduct a minimum of 2% unannounced on-site inspections (or 1 inspection; whichever is greater) of certified facilities per year, chosen randomly and/or chosen taking into account the risk or threat to the organic integrity of the production or products and the risk for non-compliances related to social criteria in the facilities.

The on-site inspection protocol with regard to environmental criteria shall at the very minimum undertake the following, as applicable to the inspected facility:

- a. Assessment of the processing system by means of visits to processing and storage units (which may also include visits to non-organic areas if there is reason for doing so);
- b. Review of records and accounts in order to verify flow of goods (input/output reconciliation and the tracing back);
- c. Inspection of the chemical inputs (dyes and auxiliaries) and accessories used and assessment of their compliance with the applicable criteria of the GOTS;
- d. Identification of areas of risk to organic integrity;
- e. Inspection of the waste water (pre-)treatment system of wet processors;
- f. Verification of the operator's risk assessment of contamination and residue testing policy potentially including sample drawing for residue testing either as random sampling or in case of suspicion of contamination or non-compliance;
- g. Verification that changes to the standards and to related requirements have been effectively implemented and
- h. Verification that corrective actions have been taken.

The on-site inspection protocol with regard to minimum social criteria shall at the very minimum undertake the following, as applicable to the inspected facility:

- a. Inspection to processing and storage units, toilet facilities, rest areas and other sites of the company with access for workers
- b. Interview with management and confidential interviews with workers and worker's representatives
- c. Review of personnel files, such as list of workers employed, workers contracts, pay rolls,

shift and working time protocols, age verification, social insurance documents

d. Verification that corrective actions have been taken

Where verifiable results (audit reports) from the following internationally recognised social compliance schemes are available for the inspected facility, these should be screened and considered to the widest extend possible for the GOTS verification procedures:

- Fair Wear Foundation (FWF)
- Social Accountability 8000 (SA 8000)
- Worldwide Responsible Accredited Production (WRAP)
- Business Social Compliance Initiative (BSCI)

Audit reports available need to be checked on their scope and quality in order to decide to which extend they can be used:

- Is all relevant site data given (name, address, contact person, ownership, workforce, production process, production capacity, subcontractors included)?
- Does it refer to all social criteria included in GOTS?
- Is it based on sources of information that correspond to those covered by the above minimum on-site inspection protocol?

Where such verifiable audit reports are available based on on-site inspection in the period of one year before the GOTS inspection takes place and indicating compliance with the applicable GOTS social criteria, a significant reduction of the audit time in these areas is considered reasonable.

In general *Approved Certifiers* need to assure that sufficient audit time to verify compliance with both, environmental and social criteria, is planned for the on-site inspection considering size, number of workers, location, processing steps and related risk potential for non-compliance of the applicable criteria. While it is reasonable that e.g. in a complex wet processing unit in a developed country considerable more audit time is spent verifying compliance with the environmental criteria it is expected in a large garment manufacturing unit located in a developing country and not recently verified by another recognised social compliance scheme that considerable more audit time is spent verifying compliance with the minimum social criteria.

In specific the Sedex Members Ethical Trade Audit (SMETA) Best Practice Guidance, Appendix 5, should be used as a framework to establish audit length and number of individual interviews performed for inspections in developing countries where no verifiable results from any of the mentioned internationally recognised social compliance schemes are available.

#### Reference:

SMETA Best Practice Guidance document

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

#### Interpretation:

A general precondition for accepting application as GOTS *Approved Certifier* is an existing ISO 65 accreditation (from 15 September 2015 onwards: ISO 17065 accreditation) of the applicant (according to chapter '2. Principles' of the 'Approval Procedure and Requirements for Certification Bodies'). Beside IOAS authorised national or international accreditation

bodies (such as IAF member) that have the necessary competence and confirm to the IWG that they follow the given procedures to accredit to the GOTS scope(s) are considered as 'recognised accreditation bodies'.

## 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 chapter 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." ...

#### **Interpretation:**

Factors that should be considered – if applicable – in an appropriate risk assessment analysis:

- Kind of organic fibres used <-> pesticides and potential GM varieties commonly used if the same type of fibre would have been sourced conventional.
- Kind of additional conventional fibres, accessories and inputs used <-> pesticides and potential GM varieties commonly used for the corresponding crop; prohibited additives commonly used for regenerated and synthetic fibres as well as accessories

GM testing on (cotton) fibre material is more appropriate/reliable at an early stage of the processing chain as still sufficient DNA from the plant can be found in the fibre material (e.g. at ginning or spinning stage). The more fibres are processed the more difficult it becomes to detect remaining DNA from the plant and to get solid and repeatable quantified results as prerequisite for a root cause analysis if fibres from GM crops have been (intentionally) used/added or if contamination is based on the adventitious and technically unavoidable presence of GMO traces (due to the coexistence of GM and non–GM / organic crops in many production areas). The following relevant tests are offered by specified labs:

- Qualitative screening: This analysis detects known GM sequences in the DNA, especially the 'CaMV 35S-Promotor' and 'Nos-Terminator'. However the qualitative screening does not determine what kind of crop the detected GM-DNA is derived from. Not only cotton but also other GM-modified crops such as maize, potato (both relevant for starch sizing) or soya can contain these sequences.
- Event-specific identification: Can be assigned subsequently to determine crop and the precise variety (selected based on the growing area, if known, e.g. Bollgard™ (1776, 757, MON 531) and Bollgard II™ (MON15985) as samples of common GM cotton varieties grown in India).
- Direct quantification: This subsequent method will give (more or less) exact quantitative data on the total portion of GM material detected.

Testing if an enzyme in a textile auxiliary is derived from GM bacteria to date is still hardly possible for independent labs. Certifiers need to relay on other verification and inspection tools such as the GM declaration of the supplier of the enzyme (such declarations are e.g. also requirement for enzymes used in the organic food supply chain under EC 834/2007) or traceability checks of ingredients / raw materials used to determine if the declared enzyme indeed is used for the applied auxiliary.

- (Organic) natural fibre claims <-> non-natural substitutes used (e.g. natural bamboo fibre <-> rayon made from bamboo; linen and hemp <-> synthetic imitation fibres)
- Type and amount of approved chemical inputs used for GOTS Goods <-> any fastness problems known, problematic restricted inputs contained (e.g. AOX, copper) as well as prohibited substances commonly used in the same conventional process

- Separation measures in processing <-> sources of potential contamination from the parallel conventional processing stages performed in the unit
- Transport and storage conditions of GOTS goods <-> prohibited substances commonly used in transport and storage of comparable conventional products

## **Annex**

## A) Specific requirements for textile personal care products

## A3.4) Fragrances and lubricants

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

#### Reference:

COSMOS-Standard (Cosmetics Organic and Natural Standard)