Global Responsible Textile Standard (GRTS)

Version 1.0

GLOBAL STANDARDS

Release Date:
June 2026

The **Global Responsible Textile Standard (GRTS)** Version 1.0 was officially released in June 2026 and is effective for all Certified Entities and approved chemical inputs immediately thereafter.

The **Manual for the Implementation of GRTS** constitutes an integral and binding part of GRTS.

English[1] is the official language of GRTS. GRTS may release translations of the Standard and Manual into other languages on its website. However, in any case of inconsistencies between translations of GRTS into other languages, the original English version shall always be referred to.

Disclaimer

GRTS is a voluntary standard and does not intend to replace any legal or regulatory requirements of any country.

Revision Procedure

GRTS is envisaged to be revised every three years. Upon the publication of a new version, the transition period to meet the entire set of criteria is defined to be one (1) year unless an exceptional deadline is given for a specific section. Respective changes are also published as Changelog documents.

The next scheduled revision of GRTS shall take place in 2030. More information about the GRTS revision shall be made available on the GRTS website in due course. GRTS revision procedure is designed to adhere to the ISEAL Code of Good Practice for Sustainability Systems.

Feedback and suggestions may be submitted to revision@global-standard.org

Document Revision History

No previous version has been released before this one.

How to Read This Document

The following verbs are used to indicate requirements, recommendations, permissions, or capabilities in this document:

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

Availability of Documents:

GRTS and the Manual for the Implementation of GRTS, reference documents, and any further relevant public information as released by Global Standards gGmbH are available for public download on the Global Standards website

ABOUT Global Standards

Global Standards gemeinnützige GmbH is a not-for-profit organisation incorporated in Germany in 2002 for the purpose of administering the Global Organic Textile Standard and the Global Responsible Textile Standard.

Vision

Our vision is a world where all textiles are produced in accordance with the principles of health, ecology, fairness and care to enhance people's lives and the environment. Organic textiles are an integral part of this holistic approach.

Further information is available at: www.global-standard.org.

[1] British English is the language utilised in GRTS official documents.

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1. INTRODUCTION

1.1 Aim of GRTS

1.1.1 The aim of the GRTS (Global Responsible Textile Standard) is to define requirements to ensure the sustainable processing of textiles made with specific responsible fibres, from the production of the raw materials, through environmentally and socially responsible manufacturing, and up to labelling, in order to provide a credible assurance to brands and the end consumer.

1.1.2 GRTS draws primary requirements from the Global Organic Textile Standard (GOTS), and this document has numerous references to GOTS and GOTS Section numbers. While this document confines itself to references of GOTS version 8.0, it shall be understood that should there be changes in that version, the references in this document shall be taken in context by the users of GRTS.

1.2 Scope and Structure[2]

1.2.1 GRTS covers the processing, manufacturing, packaging, labelling, trading, and distribution of all textiles made from responsible textile fibres. The final product categories may include, but are not limited to, fibres, yarns, fabrics, garments, textile accessories (carried or worn), textile toys, home textiles, mattresses and beddings.

1.2.2 GRTS defines criteria for textile producers, manufacturers, B2B operators, as well as textile chemicals used in the processing of GRTS goods.

1.2.3 GRTS requires that all processing, manufacturing, packaging, labelling, and trading of goods shall be carried out only by entities that hold a GRTS Scope Certificate and are certified to the Global Responsible Textile Standard (GRTS).

1.2.4 GRTS entails mandatory requirements and indicates recommendations and permissions. While certain Sections (e.g. 4.3 Environmental Criteria, 4.3.14 Human Rights and Social Criteria, 2.2 Certification and Auditing, 4.5 Governance Criteria) cover compliance requirements for the entire Certified Facility, some sections (e.g. 3 Material Input Requirements, 5 Product Technical Quality Criteria) contain product-specific criteria that are subject to certification. All GRTS criteria which are applicable to Certified Facilities shall be equally implemented at Subcontractors of the Certified Entities unless otherwise stated.

1.2.5 The Certified Entity shall comply with local laws and regulations to ensure the legality of its business. The Certified Entity shall follow GRTS criteria or the local legal requirements, whichever affords higher protection to people and the environment.

1.2.6 The Manual for the Implementation of GRTS provides further implementation-related details of GRTS criteria; therefore, it constitutes an integral part of GRTS.

1.2.7 As it is to date, it is 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 GRTS.

[2] This section is derived from Section 1.2 of GOTS and has essentially the same fundamental requirements

1.2.8 GRTS Environmental, Social and Governance criteria reflect sector-specific risks of textile supply chains and are designed to enable effective due diligence for GRTS Certified Entities. GRTS requires Certified Entities to implement six steps due diligence process, as outlined in Section 4.1. Due Diligence Management Process.

1.2.9 Certified Entities shall implement due diligence according to Section 4.1 and the relevant OECD guidance documents specified in the Manual for the Implementation of GRTS. Due diligence shall be preventative, dynamic, commensurate with risk (risk-based), informed by meaningful engagement with stakeholders, appropriate to the Certified Entity's circumstances, shall involve multiple processes and objectives, ensure ongoing communication, can involve risk-based prioritisation and shall not cause a shift of responsibilities.

1.2.10 GRTS sets criteria for working and social conditions that are equivalent to those of leading social sustainability standards.

1.2.11 Since GRTS 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 Manual for the Implementation of GRTS.

1.3 Reference Documents

1.3.1 Certified Entities, Approved Certification Bodies and other GRTS users, when implementing GRTS, shall follow the reference documents listed in this section. A number of these documents are common and shared with GOTS.

1.3.2 Manual for the Implementation of GRTS

Provides interpretations and clarifications for specific criteria of GRTS. Its purpose is to prevent any inconsistent, inappropriate or incorrect interpretation of GRTS. The Manual further contains requirements and detailed specifications for the application of the GRTS and the implementation of the related quality assurance system for Approved Certification Bodies (referred to as the Implementation Manual).

1.3.3 Conditions for the Use of Signs - GRTS

Specifies the labelling conditions for companies participating in the GRTS certification system and defines the corresponding fees. It further sets the requirements to ensure the correct and consistent application of registered GRTS Signs on products as well as advertisements.

1.3.4 Labelling Release for GRTS Goods

Provides a release form for the labelling of GRTS Goods.

1.3.5 Policy for the Issuance of GRTS Scope Certificates and Template

Provides detailed instructions with regard to policies, layout, format and text for issuing Scope Certificates (SCs).

1.3.6 Policy for the Issuance of GRTS Transaction Certificates and Template

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

1.3.7 Materials, Processes & Products Classification

Standardises the classification of "raw materials," "process categories," "product categories," and "product details" for the use of GRTS scope and transaction certificates. This is a document shared with GOTS.

1.3.8 GOTS Geographic Classification

Standardises the country/area, state/province for the use of GRTS scope and transaction certificates. This is a document shared with GOTS.

1.3.9 Approval Procedure and Requirements for Certification Bodies

Specifies the approval and monitoring procedures and sets out the related requirements for Approved Certification Bodies to implement the GRTS certification and quality assurance system. This is a document shared with GOTS.

1.3.10 Policy for Change or Migration of Certification Body

Specifies the steps to be undertaken by an Approved Certification Body and Certified Entity in case of a change or migration of the certifier. This is a document shared with GOTS.

1.3.11 GOTS Due Diligence Handbook for Certified Entities

Provides GRTS Certified Entities with detailed guidance on integrating due diligence in line with the GRTS Due Diligence criteria. This is a document shared with GOTS.

1.3.12 Procedure for the Certification of Small-Scale Operators in Low-Risk Countries

This is a document shared with GOTS.

2. GRTS SUPPLY CHAIN, TRACEABILITY AND QUALITY ASSURANCE

2.1 Responsible Textile Fibres

2.1.1 The key requirement of responsible fibres allowed in GRTS shall be that they are certified to standards[3] that adhere to the following principles and criteria:

- 2.1.1.1 Chain of custody with identity preservation
- 2.1.1.2 Third-party certification scheme
- 2.1.1.3 No Genetically Modified Organisms (non-GMO)
- 2.1.1.4 No Highly Hazardous Pesticides used in production (HHPs)
- 2.1.1.5 Respect for animal welfare (e.g. no live lamb cutting/mulesing)
- 2.1.1.6 Non-toxic, closed-loop manufacturing for manmade fibres
- 2.1.1.7 Cellulose feedstock to be non-GMO & from responsible forestry
- 2.1.1.8 Biopolymers shall be biodegradable and responsibly sourced
- 2.1.1.9 Inclusion of social norms in manufactured fibre production

2.1.2 Responsible fibres shall also be produced with due consideration for:

- 2.1.2.1 Reduction of GHG emissions
- 2.1.2.2 Reduced water use and contamination
- 2.1.2.3 Protection of soil health and biodiversity

2.1.3 The following fibre types are permitted within GRTS:

[3] Where standards are available.

2.1.3.1 Certified[4] organic or organic-in-conversion fibres <70% of the total fibre content
2.1.3.2 Natural fibres (plant and animal)
2.1.3.3 Man-Made Cellulosic Fibres (MMCF)
2.1.3.4 Recycled natural and synthetic fibres
2.1.3.5 Biopolymers

2.1.4 A limited content of Virgin synthetic (polymer) fibres: only polyamide, polypropylene, elastomultiester (elasterell-p) and polyurethane (elastane), so long as these are essential for the functionality of the final consumer product.

2.1.5 Section 3 of this document gives more details of the allowed and prohibited fibres in GRTS.

2.1.6 The Implementation Manual of GRTS includes elaborations on responsible fibre selection criteria, a list of fibre standards that have been assessed as meeting the minimum criteria, and how this list shall be reviewed and updated.

2.1.7 No fibres shall be used which originate from production systems 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 the production system) and/or irrefutable evidence of a persistent pattern of land grabbing methods.

2.1.8 The use of fibres originating from producers located in high human rights risk areas may require additional mitigation measures (e.g. on-site social audits) to ensure that these producers comply with GRTS Human Rights and Social Criteria.

2.1.9 Fibres entering GRTS supply chains shall be produced with respect to animal welfare (e.g. no mulesing/live lamb cutting) and shall not be from production systems that erode ecosystem functioning, contribute to deforestation, and/or threaten biodiversity and habitat conservation.

2.1.10 Responsible fibres shall enter GRTS supply chains (i.e. sourced by First Processors) exclusively from fibre producers that are registered in the Global Fibre Registry[5] and provide the required documentation to substantiate production claims.

2.2 Certification and Auditing[6]

2.2.1 GRTS Certification is required from the acceptance of raw fibres and throughout the entire manufacturing, processing, and trading of GRTS Goods.

2.2.2 GRTS First Processors, Certified Entities receiving raw fibres from responsible producers, shall perform the processing step immediately subsequent to that which is declared on the Scope Certificate of the raw fibre producer.

2.2.3 Certification shall be conducted by an Approved Certification Body based on an annual on-site inspection cycle, including possible additional unannounced inspections based on a risk assessment of the operations.

2.2.4 Certified Entities shall hold a valid GRTS Scope Certificate that lists the certifiable product categories, product details, and processing categories that the Certified Entity is qualified to perform under their scope.

[4] Certification to one of the IFOAM Family of Standards, as permitted within the Global Organic Textile Standard.

[5] The Global Fibre Registry is operated by Global Standard gGmbH.

[6] This section is derived from Section 2.2 of GOTS and has largely the same requirements.

2.2.5 Certified Entities shall list any assigned Subcontractor involved in the processing of GRTS Goods on their Scope Certificate, including relevant details such as processing and product categories assigned to the Subcontractor.

2.2.6 Global Standards provides specific exemptions that apply exclusively to certain types of entity structures and are limited to defined aspects of the certification process:

2.2.6.1 The Controlled Supply Chain Certification Scheme (CSCS) is designed to support small-scale operations[7] in low-risk countries, by customising the certification process and reducing associated burdens. CSCS addresses the challenges faced by small operators, making the Standard accessible without compromising its criteria. *The Procedure for the Certification of Small-Scale Operators in Low-Risk Countries Controlled Supply-Chain Certification Scheme (CSCS)* shall be followed in these cases. This document is shared with GOTS.

2.2.6.2 Exemptions related to the certification of Traders, the annual on-site inspection cycle, and small-scale Subcontractors with low-risk potential are defined in the Manual for the Implementation of GRTS.

2.2.6.3 Certification exceptions and conditions for retailers are defined in the Manual for the Implementation of GRTS.

2.2.7 The entity under whose name or brand the labelled GRTS Goods are sold to the end consumer is responsible for exercising due diligence in ensuring compliance of the products with GOTS. See Section 1.3.3 for the Conditions for the Use of Signs – GRTS.

2.2.8 Authorisation by Global Standards gGmbH shall be based on the accreditation of the Certification Body in accordance with the Approval Procedure and Requirements for Certification Bodies. Such accreditation shall be granted by a recognised Accreditation Body.

2.2.9 Note: IOAS Inc. serves as the main cooperation partner of Global Standards gGmbH in support of this accreditation process. Accreditation by other recognised Accreditation Bodies remains acceptable, provided the applicable approval procedures and requirements are fulfilled.

2.3 Scope Certificate

2.3.1 Processors, manufacturers, traders, and retailers that have demonstrated their ability to comply with the relevant GRTS criteria in the corresponding certification procedure to an Approved Certification Body receive a GRTS Scope Certificate (SC) issued in accordance with the Policy for the Issuance of Scope Certificates. Accordingly, they are considered Certified Entities.

2.3.2 Scope Certificates list the product categories and related details that the Certified Entities can offer in compliance with GRTS, as well as the processing, manufacturing, and trading activities that are qualified under the scope of certification.

2.3.3 Subcontractors and their relevant processing and manufacturing steps are listed on the Scope Certificate of the Certified Entity assigning the certification.

[7] A supply chain consisting of a minimum of 8 and a maximum of 30 small-scale facilities with 20 or fewer workers each.

2.4 Transaction Certificate

2.4.1 Transaction Certificates (TCs) are the key enablers of traceability and transparency of the GRTS supply chain. TCs are issued by an Approved Certification Body in accordance with the Policy for the Issuance of Transaction Certificates after due verification when GRTS-certified goods move along the certified GRTS supply chain.

2.4.2 Volume Reconciliation shall be a complementary mechanism to verify claims of GRTS Goods.

2.5 Record Keeping, Internal Quality Assurance[8],[9]

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

2.5.1.1 The origin, nature, and quantities of responsible fibres and additional (raw) materials, accessories, and inputs which have been received by the unit

2.5.1.2 The flow of goods within the unit (stock quantities, processing/manufacturing steps performed, chemical recipes used)

2.5.1.3 Nature, quantities and consignees of GRTS Goods which have left the unit

2.5.1.4 Fibre composition of manufactured products

2.5.1.5 Any other information that may be required for the proper inspection of the operation

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

2.5.3 Certified Entities purchasing responsible fibres shall receive and maintain scope certificates and transaction certificates (if applicable) from the originating producer, issued by a recognised certifier and certified in accordance with the criteria of Section 2.1 for the whole quantity purchased.

2.5.4 Certified Entities purchasing GRTS Goods (intermediate and finished) shall receive and maintain GRTS Scope and Transaction Certificates, issued by an Approved Certification Body for the whole quantity of GRTS Goods purchased, in accordance with the Policy for the Issuance of GRTS Scope Certificates and the Policy for the Issuance of GRTS Transaction Certificates.

2.5.5 Certified Entities purchasing GRTS Goods shall receive and maintain invoices and delivery notes.

2.5.6 The consignee of any responsible fibres and/or GRTS 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, lorry receipt, shipping bill, transaction certificate) upon receipt of the certified products.

2.5.7 A product whose GRTS-compliant status is in doubt shall only be put into processing or packaging after the elimination of that doubt.

[8]These conditions equally apply to registered Traders, if and as relevant

[9] This section is complementary to Section 2.5 of GOTS

2.5.8 GRTS Goods shall clearly be identified as such on all corresponding invoices through the value chain.

2.5.9 The Certified Entity shall have a concluded contract with each Subcontractor stipulating the conditions of the relevant job work assigned and remains finally responsible for compliance with all criteria of GRTS.

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

2.6 Segregation, Storage, and Transport of GRTS Goods[10]

2.6.1 B2B Trade of GRTS goods (pre-retail)

2.6.1.1 All GRTS Goods (intermediate and final) shall be stored and transported in such a manner so as to prevent them from being contaminated by contact with prohibited Substances and commingling with conventional products or substitution of the contents.

2.6.1.2 Certified Entities shall establish a system of segregation to prevent GRTS Goods from being commingled or substituted with conventional materials and fibres.

2.6.1.3 All GRTS Goods shall be clearly labelled and identified as such along the entire stages of the supply chain.

2.6.1.4 Transportation means and shipping records shall be documented and made available to Certification Bodies when required.

2.6.2 B2C Trade of GRTS goods (retail)

2.6.2.1 Finished GRTS Goods with complete GRTS labelling can be stored and transported together with conventional products of a similar type, ensuring no risk of product substitution and of chemical contamination.

2.7 GRTS Signs and Labelling Conditions

2.7.1 Only those final products produced by a Certified Entity throughout the complete supply chain and certified by an Approved Certification Body can be labelled, represented, advertised, or sold as GRTS Goods.

2.7.2 GRTS labelling can only be applied to the product and/or its packaging by a Certified Entity, and such labelling shall be approved in advance by the Certified Entity's Certifier.

2.7.3 “Conditions for the Use of Signs - GRTS” shall be followed for the labelling and advertising of GRTS Goods.

2.7.4 The GRTS Signs comprise two registered trademark elements: the GRTS logo and the wordmark “GRTS” as detailed in the following:

[10] This section is complementary to Section 2.6 of GOTS

2.7.4.1 The “GRTS logo” refers to the registered pictorial mark, which includes an icon, the circle element, and the surrounding letters “Global Responsible Textile Standard GRTS.”

2.7.4.2 The “wordmark” refers to the registered text-based mark that is “GRTS.”

2.7.5 Labelling of GRTS Goods shall always include the following mandatory elements:

The GRTS logo.

The accompanying labelling information.

- The reference to the Approved Certification Body in the form of “Certified by xxxx”
- The Certification Number of the Certified Entity

2.7.6 For goods sold in retail, any claim, advertisement, or reference to GRTS can only be made if the finished product is certified in accordance with GRTS and bears the complete and correct labelling of GRTS

2.7.7 **Intermediate claims are prohibited**. Finished products manufactured using materials certified to GRTS at an earlier stage in the value chain, such as apparel made from certified yarn, shall not be claimed, labelled, or represented as GRTS-certified unless the complete manufacturing and trading value chain, including all processing stages and the final output up to the finished product, is certified to GRTS.

3. MATERIAL INPUT REQUIREMENTS

3.1 Responsible Fibre Content

3.1.1 Only those fibres as defined in Section 2.1 shall be used in GRTS Goods.

3.1.2 GRTS Goods shall contain a minimum of 90% Responsible Fibre content.

3.1.3 GRTS Goods may contain less than but shall not contain more than 70% certified organic fibres in their composition.

3.1.4 Product fibre composition of GRTS Goods may contain a maximum of 10% of “Additional Fibre Materials” as provided in Section 3.2.3.

3.2 Additional Fibre Materials

3.2.1 To establish a comprehensive standard for responsible textile products, GRTS meticulously specifies the types of fibres considered low-impact and allows them to be blended with GRTS-certified goods in specific percentages.

3.2.2 GRTS Goods can be blended with explicitly listed and allowed fibres in Section 3.2.2, below.

3.2.3 Table – Allowed and Prohibited Additional Fibres [11]

REQUIREMENTS FOR ADDITIONAL FIBRE TYPES	CRITERIA
Allowed fibres	
1. Virgin synthetic (polymer) fibres and only: polyamide, polypropylene, elastomultiester (elasterell-p), polyurethane, elastane (spandex) and elastolefin. 2. Stainless steel fibres and mineral fibres	✓ **ALLOWED** *Individually or in combination as a sum total **up to 10% (≤10%)***
Prohibited fibre types (miscellaneous):	
3. Conventional cotton (virgin, recycled, non-GMO) 4. Conventional angora hair fibre 5. Mulesed wool 6. Virgin polyester 7. Acrylic 8. Asbestos, carbon and silver fibres 9. Any other not explicitly permitted fibres	✗ PROHIBITED

Table 1: Allowed and Prohibited Additional Fibres

3.3 Accessories

3.3.1 All materials used under this section shall comply with the applicable residue limit values specified in Section 5.2.8.

3.3.2 Table – Allowed and Prohibited Accessories

ACCESSORIES	CRITERIA
A. General Materials: Examples include 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, decorative lace, inlays, interface, labels (GRTS labels, care labels, heat-transfer labels, and adhesives used for labels), lining (non-apparel), interlinings, pocket liners, seam bindings, sewing threads, shoulder pads, padding for undergarments, trims, zippers, soles in footwear and any other accessories not explicitly listed elsewhere in this section.	
1. Natural Materials include biogenic[12] material (such as natural fibre, wood, leather, horn, bone, shell) and non-biotic material (such as minerals, metals, stone) 2. Regenerated or synthetic material	✓ **ALLOWED**
3. Asbestos 4. Carbon fibres 5. Chlorinated plastics (e.g. PVC) 6. Chromium (e.g. as a component of metal or in leather tanning, except that stainless steel is permitted)	✗ PROHIBITED

[11] The percentage figures refer to the fibre composition of the products determined under the standard testing conditions as specified in ISO 139.

[12] Produced or originating from a living organism.

7. Decorative glitter composed of insoluble and non-biodegradable plastics. 8. Material from threatened animals, plants and timber 9. Mulesed wool 10. Nickel (e.g. as a component of metal, except that stainless steel is permitted) 11. Silver (filament, treated) fibre	
B. Linings for apparel	
• All Materials listed in Section 2.1	✓ **ALLOWED**
C. Filling, stuffing	
1. For textile fibre use	
• All Materials listed in Section 2.1	✓ **ALLOWED**
2. For latex foam use	
• Latex foam made from latex certified according to a program that verifies compliance with sustainable forestry management principles.	✓ **ALLOWED**
D. Supports and frames The requirements as specified in the row 'material in general' apply.	
1. Latex foam used in mattresses shall be made from certified organic or organic in-conversion latex or from latex certified according to a program that verifies compliance with sustainable forestry management principles.	✓ **ALLOWED**
2. Polyurethane foams are not permitted in mattresses or other textile bedding products.	✗ PROHIBITED
E. Non-slip floor covering	
1. Natural backing materials: • Latex shall be certified according to a program that verifies compliance with sustainable forestry management principles. • Natural inorganic materials (such as dolomite) may be used in conjunction with this backing material.	✓ **ALLOWED**
2. Synthetic backing materials	✗ PROHIBITED

Table 2: Allowed and Prohibited Accessories

4. ENVIRONMENTAL, SOCIAL AND GOVERNANCE CRITERIA

4.1 Due Diligence Management Process[13]

4.1.1 The Certified Entity shall engage in responsible business conduct. GRTS Chemical Input Criteria, GRTS Environmental Criteria, GRTS Human Rights and Social Criteria, and GRTS Governance Criteria shall be implemented through the due diligence process. This process shall be commensurate with the risk and appropriate to a specific Certified Entity's circumstances and context. As provided

[13] This section is identical to GOTS Section 4.1

by OECD Due Diligence Guidance for Responsible Business Conduct, OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector and GOTS Due Diligence Handbook for Certified Entities the following six steps framework shall be followed by the Certified Entity when conducting due diligence process:

(i) The Certified Entity shall embed its due diligence process into its policies and management systems,

(ii) The Certified Entity shall identify actual or potential adverse impacts associated with the Certified Entity's operation,

(iii) The Certified Entity shall cease, prevent or mitigate adverse impacts,

(iv) The Certified Entity shall track implementation and results,

(v) The Certified Entity shall communicate how impacts are addressed; and

(vi) The Certified Entity shall enable remediation when appropriate.

4.1.2 The requirement to conduct a due diligence process applies to all GRTS Certified Entities. Nevertheless, when assessing whether this requirement is met, the size, operational context, ownership and structure of the Certified Entity may be taken into account.

4.1.3 The Certified Entity shall continuously implement due diligence so that it can show progressive improvement over time.

4.1.4 The Certified Entity shall adopt a Policy on Responsible Business Conduct that articulates the Certified Entity's commitments to responsible business conduct in its own operations and in its supply chain. The Policy on Responsible Business Conduct shall articulate the Certified Entity's expectations for business partners to conduct due diligence on the most significant risks.

4.1.5 The Certified Entity shall strengthen its management systems to conduct due diligence in the Certified Entity's own operation and in its supply chain.

4.1.6 The Certified Entity shall establish a functional information management system to retain accurate and up-to-date information necessary for its due diligence.

4.1.7 The Certified Entity shall assign oversight and responsibility for due diligence to relevant senior management and assign board-level responsibilities for implementing the Policy on Responsible Business Conduct. The Certified Entity shall regularly provide the responsible person(s) with training on all relevant topics, including those related to human and labour rights.

4.1.8 The Certified Entity shall allocate adequate support and resources to conduct due diligence process and implement the Policy on Responsible Business Conduct.

4.1.9 The Certified Entity shall consider known sector and subsector risks and factors that may increase these risks in its own activities and supply chain. The Certified Entity shall identify and prioritise the most significant risks in its operations and supply chain based on their likelihood and severity of harm, for appropriate action.

4.1.10 The Certified Entity shall follow guidance and interpretations provided in the GOTS Due Diligence Handbook for Certified Entities.

4.1.1 The Certified Entity shall establish and maintain a documented internal audit system to systematically assess the implementation, adequacy, and effectiveness of their management systems in ensuring compliance with all applicable GRTS criteria. The internal audit system shall provide objective assurance and support continual improvement of the Certified Entity's due diligence process and compliance framework. Records of internal audits shall be retained and made

accessible in accordance with applicable conformity assessment and verification requirements.

4.1.2 The Certified Entity shall ensure that internal auditors are competent and independent of the activities they assess. The internal audit programme shall be risk-based and planned to ensure that all GRTS-relevant operations and processes are assessed at regular intervals. The audit frequency shall be defined, and each relevant process shall be audited at least annually.

4.2 Textile Processing Criteria[14]

4.2.1 Certified Entities shall only use those chemical inputs that are assessed, approved, and explicitly listed on the GOTS Positive List, as described in Section **Error! Reference source not found.**, for the processing of GRTS Goods.

4.2.1.1 Certified Entities shall retain copies of valid GOTS Letters of Approval and Safety Data Sheets for all Preparations used as evidence that all colourants and textile auxiliaries are compliant. A separate Letter of Approval shall not be required for GRTS.

4.2.1.2 Certified Entities shall ensure that documentations mentioned in 4.2.1.1 are readily available for inspection.

4.2.2 Certified Entities shall follow specific textile processing criteria outlined in this section.

4.2.2.1 Spinning

a. Only chemical inputs that meet the requirements set out in Sections **Error! Reference source not found.** and 7.2.4 shall be used.

b. Any paraffin product used shall be fully refined to a maximum residual oil content of 0.5%.

c. Synthetic fibres intended to be dissolved at a later processing stage shall not be used.

d. A specific exemption is granted for the controlled use of polyvinyl alcohol (PVA), subject to the following conditions:

   i. Certified Entities may use PVA fibres intended for dissolution during the spinning process, only when a PVA recycling/recovery system is in place, achieving a minimum recovery rate of 50% by weight of the aqueous solution.

   ii. Only GOTS-approved PVA chemicals shall be used.

   iii. Recovered PVA may be reused within the process without limitation on the quantity.

4.2.2.2 Sizing and Weaving/Knitting

a. Allowed sizing agents include starch, starch derivatives, other natural substances, and CMC (carboxymethylcellulose).
b. Synthetic sizes which meet the requirement set out in Sections **Error! Reference source not found.** and 7.2.4 may be used for no more than 25% of the total sizing in combination with natural Substances only, based on the calculation for the amount of chemical without water.

[14] This section is technically identical to GOTS Section 4.2 except for “First Processing” in GOTS.

c. In case such synthetic sizes are recycled/recovered from the wastewater of the desizing process with a ratio of >80%, they may be used without limitation in the total sizing but shall still meet the requirements set out in Sections **Error! Reference source not found.** and 7.2.4. Other Inputs used in the processing shall be derived from Natural Materials only.

4.2.2.3 Non-woven Manufacture

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

4.2.2.4 Table - Pre-treatment and Other Wet Processing Stages

TREATMENT / PROCESS	CRITERIA
A. Ammonia treatment	✗ PROHIBITED
1. Ammonia treatment may be allowed if performed in a closed system with a minimum of 99% recycling rate.	**! EXCEPTION**
B. Bleaching	
1. Oxygen-based inputs (e.g. peroxides, ozone) shall be used only.	✓ **ALLOWED**
2. Catalysers which contain manganese may be used provided that ETAD's manganese residue limit (1000 mg/kg, see Section 8) is met. 3. Approved Certification Body may grant exceptions for non-cotton fibre products where oxygen bleaches are not sufficiently functional, provided they meet the requirements as set in **Sections** Error! Reference source not found. **and 7.2.4.**	**! EXCEPTIONS**
C. Boiling, kiering, washing	
1. Only auxiliaries that meet the requirements set in Sections Error! Reference source not found. **and 7.2.4.**	✓ **ALLOWED**
2. Washing detergents shall not contain phosphates	**! RESTRICTED**
D. Chlorination of wools	✗ PROHIBITED
E. Desizing	
1. Only GMO-free enzymatic desizing Inputs and other auxiliaries that meet the requirements set in **Sections** Error! Reference source not found. **and 7.2.4.**	✓ **ALLOWED**
F. Mechanical/thermal treatments	✓ **ALLOWED**
G. Mercerisation	
1. Auxiliaries that meet the requirements as set in **Sections** Error! Reference source not found. **and 7.2.4.**	✓ **ALLOWED:** Alkali shall be recycled
2. Ammonia may be allowed and used for mercerisation of cotton only if performed in a closed-loop system and only if a minimum of 99% of the ammonia is recycled in such a system	**! EXCEPTION**

	H. Optical brightening	
1.	Optical brightening agents (OBAs) that meet all criteria for the selection of dyes, pigments, inks and auxiliaries as set in **Section** Error! Reference source not found. and Error! Reference source not found..	✓ **ALLOWED**
	I. Other (not explicitly listed pre-treatment methods)	
1.	Mechanical/thermal pre-treatment methods and such with the use of Substances based on Natural Materials	✓ **ALLOWED**

Table 3: Restrictions in Pre-treatment and Wet Processing

4.2.2.5 Table - Dyeing

PARAMETER		CRITERIA
	A. Selection of dyes, pigments and auxiliaries	
1.	Natural and synthetic dyes, pigments, and auxiliaries that meet the requirements set out in Sections Error! Reference source not found. and 7.2.4. only	✓ **ALLOWED**
2.	Dyes with allergenic potential (e.g. some disperse dyes)	✗ PROHIBITED
3.	Colourants classified or suspected as carcinogenic (H350/H351)	✗ PROHIBITED
4.	Dyes and pigments containing heavy metals as integral part of the dye molecule (e.g. heavy metal dyes, certain reactive dyes), under the consideration of following exceptions:	✗ PROHIBITED
	a. Iron	**! EXCEPTION:** General exception
	b. Copper	**! EXCEPTION:** Specific exception *Permitted **up to 5%** per weight, for only **blue, green and turquoise** dyestuffs and pigments*
5.	Inputs containing >1% Non-hydrolysable Halogens	✗ PROHIBITED
	a. Only for yellow, green and violet pigments	**! EXCEPTION:** ***Up to 5%** Non-hydrolysable Halogens permitted*
6.	The use of natural dyes and auxiliaries that are derived from threatened species listed on the Red List of the IUCN	✗ PROHIBITED
7.	Sensitising (H317) chemicals such as disperse dyes shall not be used, handled or manufactured unless proper and sufficient Occupational Health and Safety practices are adhered to as set in Section 4.4.7 at Certified Entities and Chemical Formulators.	**! RESTRICTED**

Table 4: Restrictions in Dyeing

4.2.2.6 Table - Printing

PARAMETER	CRITERIA
Selection of dyes, pigments and auxiliaries	
1. Natural and synthetic dyes, pigments, and auxiliaries that meet the requirements as set in Sections Error! Reference source not found. and 7.2.4 only.	✓ **ALLOWED**
2. Ammonia only as a required buffer in pigment printing paste	✓ **ALLOWED**
3. Flock printing is allowed with non-GMO natural and regenerated fibres that comply with **Section 5.2.8.**	✓ **ALLOWED**
4. Dyes with allergenic potential (e.g. some disperse dyes)	✗ PROHIBITED
5. Colourants classified or suspected as carcinogenic (H350/H351)	✗ PROHIBITED
6. Dyes and pigments containing heavy metals as integral part of the dye molecule (e.g. heavy metal dyes, certain reactive dyes), under the consideration of following exceptions:	✗ PROHIBITED
a. Iron	**! RESTRICTED:** General exception
b. Copper	**! RESTRICTED:** Specific exception *Permitted **up to 5%** per weight, for only **blue, green and turquoise** dyestuffs and pigments*
7. Printing methods using aromatic solvents, phthalates or chlorinated plastics (e.g. PVC)	✗ PROHIBITED
8. Inputs containing >1% Non-hydrolysable Halogens	✗ PROHIBITED
a. Only for yellow, green and violet pigments	**! EXCEPTION** ***Up to 5%*** Non-hydrolysable Halogens *is permitted*
9. The use of natural dyes and auxiliaries that are derived from threatened species listed on the Red List of the IUCN	✗ PROHIBITED
10. Sensitising (H317) chemicals such as disperse dyes shall not be used, handled or manufactured unless proper and sufficient Occupational Health and Safety practices are adhered to as set in Section 4.4.7 at Certified Entities and Chemical Formulators.	**! RESTRICTED**

Table 5: Restrictions in Printing

4.2.2.7 Table - Finishing and Manufacturing

PARAMETER	CRITERIA
Selection of finishing methods and auxiliaries	
1. Mechanical, thermal and other physical finishing methods	✓ **ALLOWED**

2. Natural and synthetic Inputs that meet the basic requirements as set in **Sections** Error! Reference source not found. and 7.2.4 **only** 3. Stain removers that meet the basic requirements as set in Sections Error! Reference source not found. and 7.2.4.	
4. Use of synthetic Inputs for anti-microbial finishing (including biocides); PFAS for oil, water, stain repellency; coating; filling and stiffening; lustering; matting, and weighting. 5. Garment finishing methods that are considered to be harmful to the workers (such as sandblasting of denim).	✗ PROHIBITED

Table 6: Restrictions in Finishing and Manufacturing

4.2.2.8 General Requirement for Machine Oils

a. Machine Oils, which may come in contact with GRTS Goods during processing/ manufacturing stages, shall be Heavy Metal-Free, in accordance with the limits specified in Section **Error! Reference source not found.**.

b. Such Machine Oils may undergo the GOTS chemical input approval procedure voluntarily and can be listed in the GOTS Positive List.

4.3 Environmental and Chemical Management Criteria[15]

4.3.1 Certified Entities shall establish and maintain a written Environmental and Chemical Management Policy that is appropriate to the nature and scale of their operations. This Policy shall include plans for Resource Efficiency (Section 4.3.5), Air Emissions (Section 4.3.10), GHG Emissions (Section 4.3.10.9), Waste Management (Section 4.3.11.1), Wastewater Management (Section 4.3.12.1), Textile Waste Management (Section 4.3.13.1). Detailed requirements are set out in Section 4.3.1 and each individual section.

4.3.2 Certified Entities shall comply with all applicable national, regional, and local environmental regulations relevant to their processing activities, including but not limited to air emissions, wastewater and sludge solid waste management.

4.3.3 Certified Entities shall document and demonstrate compliance with all applicable environmental permits and approvals, including the regulatory required parameters, applicable limits and monitoring frequencies.

4.3.4 For any environmental criteria outlined under Section 4.3 (e.g., Waste Management), Certified Entities shall adhere to the strictest applicable requirements, among local, national or GRTS requirements. Certified Entities shall follow GRTS criteria if they are stricter than local regulations, and vice versa.

4.3.5 Certified Entities shall address at least the following aspects as part of their Environmental and Chemical Management Policy:

4.3.5.1 Assignment of responsibilities: identification of personnel responsible for environmental and chemical management tasks.

[15] The requirements in this section are identical to those in Section 4.3 of GOTS

4.3.5.2 Resource consumption: compliance with water, energy, and chemical consumption requirements as defined in section 4.3.5

4.3.5.3 Air emissions and GHG emissions: adherence to the requirements outlined in sections 4.3.10 and 4.3.10.9.

4.3.5.4 Waste management: compliance mechanism with waste, disposal and discharge-requirements specified in sections 4.3.11.1, 4.3.12.1 and 4.3.13.1.

4.3.5.5 Employee training: documented staff training programme covering necessary topics such as conservation of water and energy resources; safe and proper chemical handling; responsible use and correct disposal of chemicals. Trainings shall be recorded to include details such as date, participants, and training content.

4.3.5.6 Monitoring and review: procedures for monitoring environmental performance.

4.3.6 Certified Entities shall implement and maintain systems for continuous monitoring of environmental performance.

4.3.7 Noise and air pollution shall be monitored, and periodic testing shall be conducted in accordance with applicable local legal requirements.

4.3.8 Certified Entities shall effectively communicate the Environmental and Chemical Management Policy to all employees to ensure awareness and compliance. It is preferable to communicate in the employees' native language.

4.3.9 Resource Efficiency: Water, Energy And Chemical Use

4.3.9.1 As part of the Environmental and Chemical Management Policy (Section 4.3.1), Certified Entities shall establish and implement documented procedures and measures for resource efficiency, including monitoring, data collection, and continuous improvement for water, energy, and chemical use as outlined in the following.

4.3.9.2 Water Use:

4.3.9.3 Monitoring and Data Collection:

a) Certified Entities shall maintain documented records of water sources (e.g. groundwater, municipal supply, recycled water).

b) Certified Entities shall monitor and record the total water consumption per kilogram of textile output.

c) Water consumption data should be disaggregated by process type (e.g. dyeing, washing) where applicable.

4.3.9.4 Improvement Goals:

a) Certified Entities shall set quantified time-bound, achievable targets to reduce specific water consumption (litres/kg of output) (e.g., water-saving technologies, low-liquor ratio machines, process optimisation, recycling and reuse strategies)

b) Progress toward improvement goals shall be reviewed annually, documented, and updated.

4.3.9.5 Energy Use:

4.3.9.5.1 Monitoring and Data Collection:

a) Certified Entities shall maintain documented records of the energy sources (electricity, thermal, and fuel types) used within the defined boundary.

b) Certified Entities shall monitor and record energy consumption per kilogram of textile output (e.g., kWh/kg output) for the defined boundary.

c) Energy consumption data should be categorised by source (e.g. grid electricity, onsite renewable electricity, fossil fuel, biomass), where applicable. The calculation method, defined boundaries and supporting evidence (e.g., metering, contracts, certificates where applicable) should be documented.

4.3.9.5.2 Improvement Planning:

a) Certified Entities shall develop and implement quantified energy efficiency targets with defined timelines, relative to the defined baseline.

b) Certified Entities shall set quantified goals to increase the share of renewable energy in their total energy mix where feasible.

c) Progress shall be reviewed at least annually and documented.

4.3.9.6 Chemical Use:

4.3.9.6.1 Monitoring and Data Collection:

a) Certified Entities shall maintain a chemical inventory list, demonstrating the chemical consumption per kilogram of textile output.

b) Certified Entities shall record the approved chemical inputs that are used for the processing of GOTS Goods.

c) Chemical data should be disaggregated by process (e.g. bleaching, dyeing, finishing).

4.3.9.7 Improvement goals:

a) Set targets and procedures to reduce chemical consumption per kilogram of textile output relative to the defined baseline.

4.3.9.8 Wet processing facilities shall maintain complete and accurate records of:

a) Chemical, energy, and water consumption.

b) Untreated wastewater data and post-ETP sludge testing data.

c) Wastewater treatment data, including the disposal of sludge.

4.3.10 AIR EMISSIONS

4.3.10.1 As part of Environmental and Chemical Management Policy (Section 4.3.1), Certified Entities shall establish and implement documented procedures and measures for air emission management, including identification of air pollutant sources, monitoring, quantification methods, and measures to prevent and reduce emissions.

4.3.10.2 In the absence of any national, regional, or local legal requirements related to air emissions, Certified Entities shall:

4.3.10.3 Provide a declaration confirming that they are not subject to any legal requirements regarding air emissions.

4.3.10.4 Develop and document an internal air emissions strategy, aligned with externally recognised guidelines, which shall be explicitly named and documented, as well as industry best practices. This strategy shall include a self-assessment framework for identifying potential air pollutant parameters related to the facility's specific industrial activities. Additionally, the strategy shall outline a plan for quantification, monitoring, and continual improvement.

4.3.10.5 Air pollutants include, but are not limited to, the following categories and substances:

4.3.10.5.1 Critical air pollutants identified by the World Health Organisation (WHO):

- **a)** Particulate Matter (PM, PM10 and PM2.5)
- **b)** Ozone (O3)
- **c)** Nitrous Oxides (NOx)
- **d)** Sulphur Oxides (SOx)
- **e)** Carbon monoxide (CO)

4.3.10.6 Air pollutants addressed under international frameworks:

- **a)** Volatile Organic Compounds (VOC) + Total Organic Carbon (TOC)
- **b)** Hazardous Air Pollutants + Toxic Air Pollutants (HAP + TAP)
- **c)** Carbon Monoxide (CO)
- **d)** Ammonia (NH3)
- **e)** Heavy metals cadmium (Cd), lead (Pb), and mercury (Hg)

4.3.10.7 Greenhouse Gases (GHGs):

- **a)** Carbon dioxide (CO_2)
- **b)** Methane (CH_4)
- **c)** Nitrous oxide (N_2O)
- **d)** Hydrofluorocarbons (HFCs)
- **e)** Perfluorocarbons (PFCs)
- **f)** Sulphur hexafluoride (SF_6)
- **g)** Nitrogen trifluoride (NF_3).

4.3.10.8 Emerging pollutants of concern

- **a)** Persistent Organic Pollutants (POPs)
- **b)** Nanoparticles and ultrafine particulates

4.3.10.9 Certified Entities shall specify, within their air emissions management procedures, the monitoring and measurement methods (section 4.3.10.1) applied, including at least the defined baseline and timeframe, for parameters that have been identified as relevant and where the Certified Entity has influence.

4.3.10.10 Certified Entities shall document and maintain an inventory of air emission categories, sources, monitored parameters, and the quantification methods applied.

4.3.11 GREENHOUSE GAS (GHG) EMISSION MANAGEMENT

4.3.11.1 As part of Environmental and Chemical Management Policy (Section 4.3.1), Certified Entities shall establish and implement documented procedures and measures for Greenhouse Gas (GHG) Emission Management, including identification of operational boundaries, GHG emission sources, quantification approaches, monitoring mechanisms, and measures to reduce emissions.

4.3.11.2 The documented Greenhouse Gas (GHG) Emission Management procedures and measures shall:

4.3.11.3 Define the scope of all relevant GHG emissions in line with the Greenhouse Gas Protocol or ISO 14064 standards, categorising emissions into Scope 1, Scope 2 and Scope 3 (see Section 8), specifying the organisational and operational boundaries.

4.3.11.4 Specify the GHG accounting methodology using a globally recognised frameworks such as the Greenhouse Gas Protocol (GHG Protocol).

4.3.11.5 Establish a data collection framework specifying required data points for each emissions scope.

4.3.11.6 List all the Emission Factors (EFs)16 (e.g. IPCC Guidelines for National Greenhouse Gas Inventories) and data sources used for calculations.

4.3.11.7 Describe monitoring mechanisms, including processes and tools used for ongoing monitoring of emissions.

4.3.11.8 Address GHG emissions by setting out medium- and long-term plans to identify and prioritise relevant Scope 3 categories, progressively improve data quality and quantification, and to build the capacity needed to engage with upstream and downstream value chain actors.

4.3.11.9 Certified Entities shall calculate Scope 1 and Scope 2 emissions in accordance with the methodologies, data requirements, and emission factors specified in their Greenhouse Gas (GHG) Emission Management Plan.

4.3.11.10 Certified Entities shall calculate Scope 1 and Scope 2 emissions at least annually.

4.3.11.11 Certified Entities should implement a system for reporting climate-related actions and performance, preferably aligned with a recognised emissions reporting standard.

4.3.11.12 Certified Entities may, where necessary, support supply chain actors by providing primary data points necessary for product-level emissions calculations.

4.3.12 WASTE MANAGEMENT

4.3.12.1 Certified Entities shall adhere to the following waste management principles for wastewater and sludge (4.3.12.1), and solid textile waste (4.3.13.1) management.

4.3.12.2 Certified Entities shall develop a comprehensive waste management procedure as part of the written Environmental and Chemical Management Policy document (4.3.1).

4.3.12.3 Certified Entities shall maintain a waste inventory system, including:

a. Type, category, and quantity of waste
b. Documentation of waste disposal practices (e.g., type, category, quantity and route)

4.3.12.4 Certified Entities shall not carry out prohibited disposal practices, including on-site landfilling of production waste, disposal in uncontrolled landfills, or on-site waste incineration.

[16] Emission factors are used to convert activity data (e.g., energy consumption, fuel use, material quantities) into GHG emissions.

4.3.12.5 Certified Entities shall, where feasible, recover and reuse process residues classified as chemical waste within closed-loop production systems in order to minimise waste generation.

4.3.12.6 Certified Entities shall establish and implement procedures to effectively manage waste- and pollution-related incidents, and to minimise environmental impact.

4.3.12.7 Certified Entities shall ensure that waste storage areas are designed and constructed to prevent environmental contamination, including leakage to soil, water, or air.

4.3.12.8 Certified Entities shall set waste reduction objectives and establish procedures to eliminate, or where elimination is not feasible, minimise the amount of waste generated. Progress against waste reduction objectives shall be documented.

4.3.13 Wastewater Management

4.3.13.1 Certified Entities shall develop a wastewater management procedure as part of the written Environmental and Chemical Management Policy (see 4.3.1).

4.3.13.2 Certified Entities shall ensure the effective treatment and management of wastewater and sludge before being discharged into the environment.

4.3.13.3 Certified Entities shall, at a minimum, comply with applicable local and national legal requirements for wastewater and sludge including limit values for pH, temperature, Total Organic Carbon (TOC), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), colour removal, residues of chemical pollutants, and discharge routes.

4.3.13.4 Certified Entities shall comply with GOTS requirements where these are more stringent than applicable local and national legal requirements for wastewater and sludge parameters.

4.3.13.5 Certified Entities shall ensure that Effluent Treatment Plants (ETP) are effective, fully operational, and properly maintained at all times.

4.3.13.6 Effluent Treatment Plants (ETPs) may operate with direct (internal, on-site) and/or indirect (external, off-site) discharge arrangements. Depending on the system design, effluent discharge may occur through one or more of the following options:

- **a.** Direct discharge
- **b.** Indirect discharge with pretreatment (with sludge)
- **c.** Indirect discharge with pretreatment (without sludge)
- **d.** Indirect discharge without pretreatment
- **e.** Zero Liquid Discharge (ZLD)

4.3.13.7 Certified Entities shall comply with the following requirements:

- **a.** Treated wastewater discharged to the environment shall not exceed 20 g COD per kg of processed textile (output).
- **b.** For the scouring of greasy wool, the following exceptions to the wastewater discharge limits shall apply:
  - **i.** Coarse wool: ≤ 25 g COD/kg
  - **ii.** Fine wool: ≤ 45 g COD/kg

c. AOX and heavy metal limits shall comply with the requirements set out in the corresponding section of the *Manual for the Implementation of GOTS*.

d. Wastewater from industrial water retting of bast fibres shall be treated to achieve a reduction of COD (or TOC) of at least 95% for hemp fibres and 75% for all other bast fibres.

e. Where legal limits for pH and temperature are not defined for wastewater discharges to surface waters, the final 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).

4.3.13.8 Certified Entities without a direct wastewater discharge system (4.3.13.6; b,c,d,e) shall refer to the guidance given in the corresponding section of the Manual for the Implementation of GOTS.

4.3.13.9 Certified Entities shall perform wastewater and sludge analyses periodically under normal operating conditions and shall document the results.

4.3.13.10 Certified Entities shall ensure that personnel responsible for the operation and maintenance of Effluent Treatment Plants (ETPs) are appropriately trained.

4.3.13.11 Microfibre Management at Processors:

4.3.13.11.1 Certified Entities shall integrate microfibre release considerations in their environmental risk assessments, as part of the continuous improvement process.

4.3.13.11.2 Certified Entities shall have a plan to identify processing stages that may contribute to microfibre and microplastic shedding in the production wastewater.

4.3.13.11.3 Certified entities should progressively work toward minimising microfibre and microplastic release into the environment, e.g., ensuring the Effluent Treatment Plant (ETP) utilised demonstrates the capacity to prevent the release of microplastics and microfibre.

4.3.14 Textile Waste Management

4.3.14.1 Certified Entities shall develop a comprehensive textile waste management procedure as part of the written Environmental and Chemical Management Policy document (see 4.3.1).

4.3.14.2 Certified Entities shall manage textile waste in accordance with the Waste Hierarchy, giving priority to prevention and reduction, followed by reuse, recycling, recovery, and, as a last resort, disposal.

4.3.14.3 Certified Entities shall establish mechanisms for the collection, segregation, and sorting of textile waste and shall implement a plan to manage such waste in accordance with prioritised practices.

4.3.14.4 Certified Entities should have plans to segregate certified organic textile fibre waste (e.g. comber noil, cotton linter, carding waste, or spinning waste) generated during processing, for potential reuse and/or recycling. The type and quantity of the organic waste, as well as the waste route, shall be documented.

4.3.14.5 Certified Entities should have plans to segregate organic certified fabric and garment waste (e.g. fabric scraps) generated during processing for potential

reuse and/or recycling. The type and quantity of the organic waste, as well as the waste route, shall be documented.

4.3.15 Packaging Criteria

4.3.15.1 Certified Entities shall record information on all packaging materials used for certified products.

4.3.15.2 Secondary Packaging

4.3.15.2.1 Synthetic packaging material shall not contain Polyvinyl chloride (PVC).

4.3.15.2.2 The use of plastic material in packaging shall be minimised.

4.3.15.2.3 The use of virgin plastic content in packaging shall be minimised.

4.3.15.3 Primary Packaging

4.3.15.3.4 Synthetic packaging material shall not contain Polyvinyl chloride (PVC).

4.3.15.3.5 The use of plastic material in packaging shall be minimised.

4.3.15.3.6 The use of virgin plastic content in packaging shall be minimised.

4.3.15.3.7 Where plastic packaging is used, Certified Entities should maximise the use of post-consumer recycled content to the highest technically feasible percentage and should target a minimum of 35% post-consumer recycled content.

4.3.15.3.8 Primary packaging should be recyclable through existing local recycling systems where the product is sold.

4.3.15.3.9 Paper or cardboard used in primary packaging, such as hangtags, shall be made from recycled fibre (from pre- or post- consumer waste) or certified to a program that verifies compliance with sustainable forestry management principles.

4.3.15.3.10 Oxo-degradable and oxo-fragmentable plastics, including polymers containing pro-oxidant additives intended to accelerate fragmentation, shall not be used.

4.3.15.3.11 Bioplastic packaging derived from non-GMO biomass sources may be used, provided it is certified or verified as non-toxic, biodegradable, and compostable (home or industrial, as applicable).

4.3.15.3.12 Certified Entities shall ensure that the following requirements apply exclusively to hangers used in the packaging of final GOTS Goods:

a) Single-use, virgin plastic hangers shall not be used.

b) Where virgin plastic is used in hangers, there shall be a documented take-back and reuse system that ensures such hangers are reused and do not function as single-use items.

c) Recycled and/or biodegradable plastic hangers may be used.

d) Biodegradable plastic hangers shall be:

i. produced from non-GMO biomass sources, and

ii. certified or tested as non-toxic, biodegradable and home- or industrially compostable.

4.3.15.3.13 Certified Entities shall ensure that textile fibre materials used for packaging or as strings for hangtags comply with one of the following options:

a) Certified organic or organic in-conversion fibres, which shall comply with the requirements set out in Sections 3.1 and 5.2.7; or

b) Allowed additional fibre materials, which shall comply with the requirements set out in Sections **Error! Reference source not found.** and 5.2.8.

4.4 Human Rights and Social Criteria[17]

4.4.1 Scope

4.4.1.1 These Human Rights and Social Criteria apply to Certified Entities employing Workers engaged in all stages of textile processing, manufacturing, packaging, labelling, trading, warehousing, and distribution of all textiles made from responsible fibres, as mentioned in Section 1.2.

4.4.1.2 While GRTS does not cover the production of fibres themselves, the Certified Entity shall ensure that responsible fibres used are produced respecting Human Rights and Social Criteria, taking into account the specific nature of this Standard and recognising its limited direct monitoring and assurance possibilities.

4.4.1.3 The Certified Entity shall respect human rights. The Certified Entity shall avoid causing, contributing, soliciting, encouraging or supporting human rights abuse through their activities. Further, the Certified Entity shall address any adverse human rights impacts or risks thereof for which they are responsible or with which they are involved.

4.4.1.4 This includes that the Certified Entity shall respect the human rights of individuals belonging to specific groups or populations at risk of particular vulnerability and in relation to whom there is particularised protection, including indigenous peoples; women; national or ethnic, religious and linguistic minorities; children; persons with disabilities; and migrant workers and their families.

4.4.2 Forced Labour

4.4.2.1 Forced labour shall not be used.

4.4.2.2 No employee shall be compelled to work under the menace of penalty, including through force or intimidation of any form.

4.4.2.3 The prohibition of forced labour includes all forms of work or service where the persons have not offered themselves voluntarily, such as servitude bonded, trafficked or indentured labour.

4.4.2.4 The Certified Entity shall not restrict the Workers' ability to voluntarily end their employment. Workers shall not be required to lodge "deposits" or their identity documents with their employer or a third party. Workers shall be free to leave their employer after a mutually agreed notice period, as stated in the employment contract.

4.4.2.5 The Certified Entity shall ensure that Workers are not required to pay fees or any other costs for entering or retaining employment.

4.4.2.6 Workers shall not be forced to use factory-provided lodging or transportation.

[17] The requirements in this section are identical to those in Section 4.4 of GOTS.

4.4.3 Child Labour

4.4.3.1 Child labour, regardless of gender, shall not be used.

4.4.3.2 If a child below minimum age appears to be employed in the Certified Entity, the Certified Entity shall take all appropriate measures to remove the child from the workplace and to ensure that this child gets appropriate remedy, including actively supporting access to education.

4.4.3.3 The Certified Entity shall not employ a Young Worker at night or in conditions that are hazardous to their physical and mental health and development.

4.4.3.4 A Young Worker cannot work for more than 8 hours in a day or the applicable domestic legal limit, 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.

4.4.3.5 A Young Worker shall be employed in a manner that allows access to continued education or additional educational opportunities, such as vocational or technical training.

4.4.4 Discrimination, Harassment and Violence

4.4.4.1 Discrimination in recruitment and employment practices is prohibited. Decisions about hiring, remuneration, benefits, training opportunities, work assignments, conditions of work, advancement, discipline, and termination or retirement by the Certified Entity shall be based solely on the ability to perform the job rather than based on personal characteristics or beliefs, such as race, national extraction, social background, religion, age, disability, marital status, parental status, association or trade union membership, gender, gender identity, sexual orientation or political opinion.

4.4.4.2 The Certified Entity shall foster and provide an environment free of harassment and violence, where all individuals are treated with respect and dignity. In particular, the Certified Entity shall operate a zero-tolerance policy for any form of sexual harassment, including sexual and gender-based violence.

4.4.4.3 The Certified Entity shall encourage confidential reporting of abuse or harsh treatment. The Certified Entity shall treat all incidents seriously and promptly investigate all allegations of discrimination, violence and harassment including sexual harassment. If a claim of harassment or discrimination is proven, the Certified Entity shall apply disciplinary measures, up to and including termination of employment.

4.4.4.4 No Worker shall be subjected to any physical, sexual, psychological, or verbal harassment or abuse or other forms of intimidation as a disciplinary measure.

4.4.4.5 The Certified Entity shall have disciplinary procedures in place and shall make sure that they are effectively communicated to the Workers. Information regarding disciplinary procedures shall be explained to the Workers when they enter employment and easily accessible at the workplace.

4.4.5 Gender Equality

4.4.5.1 The Certified Entity shall endeavour to achieve gender equality through equal, fair, and transparent recruitment, promotion, and reward procedures and practices.

4.4.5.2 Equal opportunities shall be provided to all individuals, regardless of their gender, gender identity and sexual orientation, for all aspects of training and professional and personal development.

4.4.5.3 The Certified Entity shall protect pregnant women, mothers and their children, including their health and safety.

4.4.5.4 The Certified Entity shall prevent dismissals and career setbacks due to pregnancy or maternity leave.

4.4.5.5 Women Workers shall be protected against threats of dismissal or any other employment decision that negatively affects their employment status to prevent them from getting married or becoming pregnant.

4.4.5.6 Workers with family responsibilities shall be protected against discrimination with respect to engagement in employment or dismissal therefrom.

4.4.6 Freedom of Association and Collective Bargaining

4.4.6.1 Freedom of association and the right to collective bargaining shall be respected.

4.4.6.2 Workers, without distinction, have the right to freedom of association, union membership and collective bargaining.

4.4.6.3 The Certified Entity adopts an open and supportive attitude towards the activities of trade unions and their organisational activities and does not hinder, prevent or interfere with nor engage in surveillance of those activities.

4.4.6.4 The Certified Entity shall provide time and space to Workers and their representatives to organise and engage in collective bargaining.

4.4.6.5 If there is no trade union for the Certified Entity's operation, the Certified Entity shall not deny time and resources for Workers to elect representatives. Elected representatives shall have access to Workers and Certified Entity's representatives on a regular basis.

4.4.6.6 Workers' representatives have the right to carry out their representative functions free of any act prejudicial to them or threat thereof, including dismissal, intimidation, discrimination, or reprisal. The Certified Entity shall not affect or threaten any such prejudicial act, including dismissal, intimidation, discrimination, harassment, or reprisal against Workers for their union membership or activities.

4.4.6.7 Each category of employees can be represented by the elected representative(s) of the corresponding category of employees

4.4.6.8 Collective bargaining agreements shall be respected.

4.4.6.9 Certified Entity shall display (for example, on a notice board) and communicate (for example, in employment contracts) about Workers' right to freedom of association and collective bargaining.

4.4.6.10 Where the right to freedom of association and collective bargaining is restricted under national law, the Certified Entity shall design appropriate channels to

ensure a reasonable and independent exercise of such rights. They shall not hinder the development of independent and free association and bargaining. The Certified Entity shall allow its Workers to freely elect or nominate representatives with whom the Certified Entity can enter into a dialogue on these issues.

4.4.6.11 The Certified Entity shall implement proactive measures to ensure, as far as possible and without contravening domestic law, compliance with GRTS freedom of association and collective bargaining criteria, even in the absence of equivalent legal obligations in the country of operation.

4.4.7 Occupational Health and Safety (OHS)

4.4.7.1 The Certified Entity shall ensure safe and hygienic working conditions. To ensure safe and hygienic working conditions, the Certified Entity shall put in place an OHS system to detect, assess, avoid and respond to potential threats to the health and safety of Workers.

4.4.7.2 A safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of the industry and of any specific hazards. Certified Entity shall regularly identify existing and potential hazards and assess related risks for health and safety.

4.4.7.3 The Certified Entity shall provide special protection in relation to health and safety to vulnerable categories of Workers such as – but not limited to – young Workers, new and expecting mothers and persons with disabilities.

4.4.7.4 The Certified Entity shall take appropriate steps and implement systems to prevent accidents, injuries and illnesses 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 and following the hierarchy of controls. The Certified Entity shall provide appropriate personal protective equipment to the Workers (including Homeworkers) at no cost to such Workers, and it shall assure that Workers use such equipment whenever necessary.

4.4.7.5 Certified Entity shall ensure adequate medical assistance and facilities to Workers in case of medical emergencies and accidents, including by providing adequate first-aid arrangements.

4.4.7.6 The Certified Entity shall maintain a Safety Data Sheet (SDS) for all chemical Substances and Preparations used and implement applicable health and safety measures for handling and storing these chemicals.

4.4.7.7 The Certified Entity shall take all appropriate measures within its sphere of influence to ensure the stability and safety of the equipment and buildings used, including accommodation to Workers, where provided, as well as protect against any foreseeable emergency. Workers shall be able to exit the premises in case of imminent danger without seeking permission.

4.4.7.8 The Certified Entity shall demonstrate compliance with local fire safety regulations, including the provision of required firefighting equipment.

4.4.7.9 The Certified Entity shall make available unrestricted, thus unlocked and unobstructed, access to clearly marked emergency exits and escape routes. Certified Entity shall install and maintain functioning fire alarms on every floor or working area.

4.4.7.10 The Certified Entity shall provide training and make safety signs available in the local language and the language(s) spoken by their workforce. The Certified Entity may additionally use pictograms for the safety signs. Workers shall be involved as per the law-defined mechanisms in the discussions related to occupational health and safety.

4.4.7.11 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.

4.4.7.12 If the Certified Entity's 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.

4.4.7.13 The Certified Entity shall provide and not unreasonably restrict access to functional, clean toilet facilities, free of charge potable water, and, if appropriate, rest areas, food consuming areas and sanitary facilities for food storage.

4.4.7.14 Accommodation, where provided, shall be clean, safe, and meet the basic needs of the Workers.

4.4.7.15 Where a risk from extreme weather events has been identified, considering the severity and likelihood of such events, the Certified Entity shall develop and implement emergency response plans. These plans shall address events such as extreme heat, floods, and storms, and shall include procedures for stopping work, evacuating workers to safe areas, and ensuring access to immediate medical care where necessary.

4.4.7.16 The Certified Entities shall use appropriate tools to monitor environmental conditions such as temperature and humidity in work areas. The Certified Entity shall adjust work schedules, determine the need for personal protective equipment and ensure appropriate breaks during extreme weather conditions. These measures shall be reviewed and updated at least annually or more frequently if conditions change significantly.

4.4.7.17 The Certified Entity shall assign the responsibility for the health and safety requirements to a person or persons at the senior management level.

4.4.8 Remuneration and Assessment of the Living Wage Gap

4.4.8.1 All Workers shall be provided with written and understandable information about their employment conditions, compliant with national legal requirements and including remuneration, wages and social benefits legally granted before they enter employment.

4.4.8.2 Wages, benefits and special allowances paid for regular working hours of the standard working week without overtime, 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 of workers and their families, including discretionary income.

4.4.8.3 For specified work paid at 'piece rate' (regardless of whether it is undertaken at the employer's Facility or at home), the rate of remuneration shall be comparable to that received by a Worker doing similar work on an hourly basis in the Facility of the Certified Entity. 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 Certified Entity. Additionally, in any case, the wage of such

piece rate Workers must not be less than national legal standards or negotiated wage or industry benchmark standards, whichever is higher.

4.4.8.4 Remuneration shall be paid regularly (at least monthly), promptly and with frequency, as defined by law. Workers shall be informed about the particulars of their remuneration for the pay period concerned each time that they are paid.

4.4.8.5 Workers shall receive remuneration directly in their hand/bank account or in a manner convenient to Workers. Wherever possible, efforts and priority must be given to digital payment. Any digital form of wages is permitted only under the conditions and to the extent prescribed by law or fixed by collective bargaining agreements.

4.4.8.6 Withholding of remuneration for payment as a lump sum at the end of a term of employment or training is prohibited.

4.4.8.7 Any deductions from remuneration are permitted only under the conditions and to the extent prescribed by law or fixed by collective agreement (e.g., social security), whichever affords greater protection. In case of deductions, Workers must have the relevant information regarding the grounds for such deductions communicated to them in advance.

4.4.8.8 Overtime shall be paid at a premium rate established by law or through collective bargaining, whichever is higher. The 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.

4.4.8.9 The Certified Entity shall use a credible ‘Living Wages’ estimate for their respective operations, on an annual basis. Furthermore, the Certified Entity shall compare Living Wages data with their remuneration data and calculate the 'Living Wage Gap' for its Workers.

4.4.8.10 The Certified Entity shall develop a plan to bridge the ‘Living Wage Gap’ and to pay the Living Wage to its Workers.

4.4.9 Working Time

4.4.9.1 Working hours shall comply with national laws, collective bargaining agreements and benchmark industry standards, whichever affords greater protection for the Workers. In any event and at a minimum, the working hours at the Certified Entity shall comply with ILO international framework, including the general principles in this sub-section.

4.4.9.2 Workers shall not be required to work in excess of 8 hours a day or 48 hours per week on a regular basis (excluding overtime), shall have the right to have rest breaks on every working day and shall be provided with at least 24 consecutive hours of rest within every 7-day period on average.

4.4.9.3 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.

4.4.10 No Precarious Employment is provided

4.4.10.1 To every extent possible, work performed shall be on the basis of recognised employment relationships established through and in compliance with national

law and practice, and international labour standards, whichever affords greater protection.

4.4.10.2 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, nor through apprenticeship schemes where there is no real intent to impart skills or provide regular employment, nor through seasonality or contingency work when used to undermine workers' protection. Nor shall any such obligations be avoided through the excessive use of fixed-term contracts of employment.

4.4.11 Migrant Workers

4.4.11.1 Equality in treatment shall be provided to Migrant Workers as compared to local Workers who work at the Certified Entity's Facilities. This includes remuneration, conditions of work, terms of employment and other provisions of GRTS Human Rights and Social Criteria.

4.4.11.2 The Certified Entity shall not deprive Migrant Workers access to their travel documents. The Certified Entity shall ensure that migrant workers are not charged any recruitment or employment-related fees, directly or indirectly. All such costs, including recruitment agency fees, travel, visas, medical checks, and pre-departure training, shall be borne by the employer.

4.4.11.3 Migrant Workers shall be provided with a written employment contract - in a language that the Worker understands- with clear information about the terms and conditions of employment, including as applicable, duration and hours of employment, deductions, benefits (such as leave and insurance), housing, food, and transportation.

4.4.11.4 If food, accommodation, transportation, or other services are provided, they shall be provided at a rate not higher than the market rate.

4.4.12 Homeworkers

4.4.12.1 The Certified Entity shall endeavour to ensure equality of treatment between Homeworkers and Workers working at the Facility, taking into account the special characteristics of homework and, where appropriate, conditions applicable to the same or a similar type of work carried out at the Certified Entity's Facility.

4.4.13 Social Compliance Management

4.4.13.1 The Certified Entity shall ensure the foregoing criteria are not avoided or their purpose defeated by way of informal employment modalities, including misuse of apprenticeship schemes; seasonal work; subcontracting, or recruitment or employment agencies.

4.4.13.2 The Certified Entity shall inform its Workers about the contents of their employment contract, GRTS Human Rights and Social Criteria and any other related information provided by GRTS in the applicable local language(s).

4.4.13.3 The Certified Entity shall maintain records of the name, age, working hours and the wages paid for each Worker.

4.4.13.4 The Certified Entity shall allow Workers to nominate a representative for social accountability that can provide feedback to the management regarding the

implementation status of and compliance with GRTS Human Rights and Social Criteria.

4.4.13.5 The Certified Entity shall establish a functional and effective complaint mechanism in relation to GRTS Human Rights and Social Criteria. The Certified Entity shall record and investigate complaints from Workers or third parties related to the adherence to GRTS Human Rights and Social Criteria and maintain records about any necessary corrective measures arising from them.

4.4.13.6 Upon request, Certified Entity shall provide information about complaint records to their Certified Buyers should complaints possibly be related to the business practices of such Certified Buyers.

4.4.13.7 The Certified Entity shall refrain from disciplinary measures, dismissals or other forms of discrimination against Workers for providing information concerning the observance of GRTS Human Rights and Social Criteria and any other human or labour rights related issues.

4.4.13.8 Approved Certification Bodies are expected to study and consider local and national conditions in their Risk Assessment while conducting inspections and audits.

4.5 Governance Criteria[18]

4.5.1 Ethical Business Behaviour is a cross-cutting prerequisite at all stages of the supply chain and applies to all stakeholders of the supply chain. Confidence among the stakeholders of the GRTS certification process (Workers, business partners, customers, Approved Certification Bodies and scheme) is critically important.

4.5.2 The Certified Entity shall adopt a Code of Conduct (CoC), which prescribes the principles of ethical behaviour, honesty, fair dealings and proscribes any form of corruption or bribery.

4.5.3 The Certified Entity shall adhere to relevant OECD guidelines.

4.5.4 The Certified Entity shall not be 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 incentives.

4.5.5 The Certified Entity shall keep accurate information regarding their activities, structure and performance, and disclose these in accordance with applicable regulations and industry benchmark practices.

4.5.6 The Certified Entity shall neither participate in falsifying such information nor in any act of misrepresentation in the supply chain.

4.5.7 The Certified Entity shall 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.

4.5.8 The Certified Entity shall collect, use and process personal information following privacy and information security laws and regulatory requirements.

4.5.9 The Certified Entity shall establish an anonymous non-discriminatory whistle-blower mechanism, assuring easy access and effective measures to protect

[18] The requirements in this section are identical to those in Section 4.5 of GOTS.

whistle-blowers and ensuring that any information received regarding corruption or non-compliance is followed up and necessary actions taken.

4.5.10 The Certified Entity shall provide relevant staff with training on integrity regulations and inform them about sanctions for non-compliance.

5. PRODUCT COMPLIANCE CRITERIA[19]

5.1 Quality Management of GRTS Goods[20]

5.1.1 Certified Entities shall maintain a *Product Quality Manual* as part of their Quality Management System (QMS) and it shall be made available to the relevant employees.

5.1.2 The Product Quality Manual shall define quality objectives, performance indicators, and testing protocols for materials (e.g. semi-finished, or final products, and accessories) covered under the GRTS certification.

5.1.3 Certified Entities shall ensure that the Product Quality Manual, at a minimum, includes the parameters specified in Sections 5.2.1, 5.2.7 and 5.2.8.

5.2 Quality Testing Parameters

5.2.1 Certified Entities shall carry out testing based on a documented risk assessment to ensure compliance with this Standard, in particular with the requirements set out in Sections 5.2.1 (Technical Quality Parameters), 5.2.7 and 5.2.8 (Limit Values for Residues in GRTS Goods, and Additional Fibre Materials and Accessories).

5.2.2 Certified Entities shall include all GRTS Goods, their components, and all relevant chemical inputs and processes in the risk assessment.

5.2.3 Certified Entities shall define testing frequency, test types, and number of samples in accordance with the outcome of the risk assessment.

5.2.4 Certified Entities shall allow sampling for residue testing to be carried out by the inspector during the required on-site inspection, either as a back-up to the inspection process or in case of suspected contamination or non-compliance. Certified Entities shall also accept that additional samples of goods may be taken from the supply chain at any time without prior notice.

5.2.5 Certified Entities shall ensure that residue testing is performed by laboratories accredited to ISO/IEC 17025 or qualified in accordance with Good Laboratory Practice (GLP), using test methods included in the laboratory's accredited scope, with demonstrated experience in residue testing of textiles or chemical inputs.

5.2.6 TECHNICAL QUALITY PARAMETERS[21]

5.2.6.1 Any final consumer product labelled according to GRTS shall comply with the following technical quality parameters.

PARAMETER	CRITERIA	TEST METHOD
FASTNESS TEST REQUIREMENTS		

[19] This section is aligned with Section 5 of GOTS and does not have any additional requirements.

[21] This section is identical to Section 5.2.6 of GOTS.

A. Rubbing Fastness		ISO 105 X12
Dry	3-4 3 for fibre blends	
Wet	2	
B. Perspiration Fastness. Acidic and Alkaline		ISO 105 E04
Shade Change	3-4 3 for fibre blends	
Staining on Multifibre	3-4 3 for fibre blends	
C. Light Fastness	3-4	ISO 105 B02
D. Saliva Fastness (only for textiles for babies)	5	BVL B 82.93.3 DIN 53160-1
E. Washing Fastness, washed at 40°C		ISO 105 C06 A1M
(Animal Fibre materials and blends washed at 30°C)		ISO 105 C06 A1S without steel balls
Shade Change	3-4	
Staining on Multifibre	3.4	
DURABILITY / ROBUSTNESS TEST REQUIREMENTS ! Applicable for final goods only. Perform the evaluation after five washing cycles.		
F. Dimensional Stability to Washing		ISO 3759; ISO 6330; ISO 5077
Knitted Goods / Hosiery	± 5%	
Woven Goods	± 3%	
G. Spirality		ISO 16322-3; ISO 6330
Knitted Goods / Hosiery / Woven goods	± 5%	
H. Visual Inspection Colour, Fabric, Seams, Non-textile parts	3 (Moderate change in appearance)	ISO 15487; ISO 6330
OTHER:		
I. Microfibre Shedding / Fibre Fragmentation	See Manual for guidance	ISO 4484-1/2/3 AATCC 212 TMC test method

Table 7: Technical Quality Requirements for GRTS Goods

5.2.7 Limit Values for Residues in GRTS Goods[22]

5.2.7.1 Even if produced in compliance with this Standard, textiles may carry traces of residues (e.g. due to unavoidable contamination).

5.2.7.2 The following table lists the corresponding limit values for GRTS Goods:

PARAMETER	CRITERIA (limit values)	TEST METHOD
A. Alkylphenolethoxylates (APEOs) / Alkylphenols (APs)		
NP, OP, HpP, PeP, NPEO, OPEO sum parameter	< 20 mg/kg	*For AP: ISO 21084:2019* *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)*
NP, OP, HpP, PeP sum parameter	< 5 mg/kg	
B. AOX	< 5 mg/kg	*Extraction with boiling water, adsorption on charcoal; AOX analyser based on ISO 9562* *Alternatively: HJ/T 83-2001*
C. Arylamines/Amines		
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)	< 20 mg/kg	*EN 14362-1; (HPLC/GCMS) without reductive cleavage*
D. Bisphenols	*Bisphenol A: 10 mg/kg* *Bisphenol B, AF, F, S: 1000 mg/kg each*	
E. Dyes with allergenic potential[23] (e.g., some disperse dyes) or Carcinogenic Dyes	< 20 mg/kg	*DIN 54231; (LC/MS)*
F. Formaldehyde	< 16 mg/kg	*Japanese Law 112; or based on ISO 14184-1*
G. Flame retardants	Sum < 50 mg/kg Each < 10 mg/kg	*No intentional use of prohibited flame retardants.* *EN ISO 17881-1/2*
H. Glyoxal and other short-chain aldehydes (mono- and di-aldehydes up to C6)	< 20 mg/kg	*Extraction (acc. to ISO 14184-1), ISO 17226-1 (HPLC)*
I. pH value	4.0 – 7.	*ISO 3071*
J. Chlorophenols		*LFGB 82-02-08/ EN ISO 17070 (GC/MS)*
PCP	< 0.01 mg/kg	
TeCP	< 0.01 mg/kg	

[22] This section is aligned with Section 5.2.7 of GOTS

[23] Dyes with allergenic potential are defined as those classified as skin sensitisers (H317) and associated with reported cases of allergic contact dermatitis in consumers, e.g. certain disperse dyes. A list of such disperse dyes can be found in Section 4.2.2.5 & 4.2.2.6 of the Manual for the Implementation of GRTS v1.0.

TrCP	< 0.2 mg/kg	
DCP	< 0.5 mg/kg	
MCP	< 0.5 mg/kg	
K. O-Phenyl Phenol (OPP)	< 1.0 mg/kg	
L. Pesticides, sum parameter		
All natural fibres (except shorn wool)	< 0.1 mg/kg	*§ 64 LFGB L 00.00-34 (GC/MS); § 64 LFGB L 00.00-114 (LC/MS/MS); L 00.00-115*
Shorn wool[24]	< 0.5 mg/kg	
M. Extractable heavy metals	In eluate. Values expressed as mg/kg of textile material.	
Antimony (Sb)	< 0.2 mg/kg	*EN 16711-2, ISO 17294-2 (ICP/MS)*
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	
Manganese (Mn)	< 90 mg/kg	
Zinc (Zn)	< 750 mg/kg	
Barium (Ba)	< 1000 mg/kg	
Chromium VI (Cr-VI)	< 0.5 mg/kg	*Elution using EN 16711-2, EN ISO 17075-2*
N. Total heavy metals (in digested sample)		
Cadmium (Cd)	< 40 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*
O. Organotin compounds		
TBT	< 0.05 mg/kg	*Extraction in solvent, ISO 17353 (GC/MS) or ISO/TS 16179 or ISO 22744-1:2020, Part 1 and Part 2*
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	
P. PFAS (Per- and polyfluoroalkyl Substances)		

[24] Shorn wool refers to virgin wool sheared from living animals, which is new or in other words non-recycled, ready for the spinning process, and has typically undergone scouring or washing process.

All PFAS, each	< 25 ppb (mg/kg)	*DIN EN 17681-1:2025*
All PFAS, sum	< 100 ppb (mg/kg)	
Q. Phthalates / Plasticizers		
Such as BBP, DBP, DCHP, DEHP, DEP, DHNUP, DHP, DHxP, DIBP, DIDP, DIHP, DIHxP, DINP, DMEP, DMP, DNOP, DNP, DPP, DPrP	Sum < 100 mg/kg; Each < 50 mg/kg	*DIN EN 15777:2009-12 (GC/MS) or ISO 14389*
R. Polycyclic Aromatic Hydrocarbons (PAH)		
Sum	< 5.0 mg/kg	*AfPS GS 2019:01 PAK*
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	
Acenapthene	< 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	
Dibenzo [a,i] pyrene	< 1.0 mg/kg	
Dibenzo [a,l] pyrene	< 1.0 mg/kg	
1-Methylpyrene	< 1.0 mg/kg	
S. Chlorinated paraffins		
Short Chain Chlorinated Paraffins (C10-13) Medium Chain Chlorinated Paraffins (C14-17)	Sum < 50 mg/kg Sum < 50 mg/kg	*ISO 22818*
T. Cyclic siloxanes and linear siloxane		
D4, D5, D6	Each < 1000 mg/kg	

L3		
U. Chlorinated benzenes & toluenes	Sum < 1.0 mg/kg Each < 1.0 mg/kg	*DIN EN 17137*
V. Styrene	< 10 mg/kg	
W. Xylene	< 1 mg/kg	
X. Polyester fibres		
Antimony (Sb)	< 30 mg/kg	*EN 16711-2 ; ISO 17294-2 (ICP/MS)*
Y. Natural latex foam		
Butadiene	< 1.0 mg/kg	*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*
Chlorophenols (incl. salts and esters)	< 1.0 mg/kg	
Carbon disulphide	< 0.02 mg/m^3	
Nitrosamines	< 0.001 mg/m^3	

Table 8: Limit Values for Chemical Residues in GRTS Goods

5.2.8 Limit Values For Residues In Additional Fibres And Accessories[25]

Additional fibres and Accessories (in accordance with the criteria of Section 3.2 and 3.3 respectively) used to produce GRTS Goods shall comply with the residue limit values for the corresponding parameters.

5.2.8.1 Table - Limit Values for Chemical Residues in Additional Fibres and Accessories

PARAMETER	CRITERIA (limit values)		TEST METHOD
	Baby and personal care products	**All other products**	
A. Arylamines/Amines			
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*
B. Bisphenols		Bisphenol A: 10 mg/kg Bisphenol B, AF, F, S: 1000 mg/kg each	
C. Dyes with allergenic potential[26] (e.g., some disperse dyes) or Carcinogenic Dyes	< 20 mg/kg	< 20 mg/kg	*DIN 54231; (LC/MS)*
D. Formaldehyde			

[25] This section is aligned with Section 5.2.8 of GOTS.

[26] Dyes with allergenic potential are defined as those classified as skin sensitisers (H317) and associated with reported cases of allergic contact dermatitis in consumers, e.g. certain disperse dyes. A list of such disperse dyes can be found in Section 4.2.2.5 & 4.2.2.6 of the Manual for the Implementation of GRTS v1.0.

Skin contact	< 16 mg/kg	< 75 mg/kg	*Japanese Law 112; or based on ISO 14184-1*
No skin contact		< 150 mg/kg	
E. Flame retardants	Sum < 50 mg/kg Each < 10 mg/kg	*No intentional use of prohibited flame retardants.* *EN ISO 17881-1/2*	
F. Glyoxal and other short-chain aldehydes (mono- and di-aldehydes up to C6)			
Skin contact	< 20 mg/kg	< 75 mg/kg	*Extraction (acc. to ISO 14184-1), ISO 17226-1 (HPLC)*
No skin contact		< 300 mg/kg	
G. PH value	4.0 - 7.5	4.0 - 7.5	*ISO 3071*
H. 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	
I. 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); L 00.00-115*
Shorn wool[27]	< 1.0 mg/kg	< 1 mg/kg	
J. Extractable heavy metals			
Arsenic (As)	< 0.2 mg/kg	< 1.0 mg/kg	*EN 16711-2 , ISO 17294-2 (ICP/MS)*
Cadmium (Cd)	< 0.1 mg/kg	< 0.1 mg/kg	
Chromium (Cr)	< 1.0 mg/kg	< 2.0 mg/kg	
Cobalt (Co)	< 1.0 mg/kg	< 4.0 mg/kg	
Copper (Cu)[28]	< 25.0 mg/kg	< 50.0 mg/kg	
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 by EN 16711-2* *EN ISO 17075-2*
K. 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	
L. Nickel release	< 0.5 µg/cm²/week	< 0.5 µg/cm²/week	*EN 12472, EN 1811*

[27] Shorn wool refers to virgin wool sheared from living animals, which is new or in other words non-recycled, ready for the spinning process, and has typically undergone scouring or washing process.

[28] This criterion is not applicable to inorganic / non-biological materials such as metals

M. Organotin compounds			
TBT	< 0.5 mg/kg	< 1.0 mg/kg	*Extraction in solvent, ISO 17353 (GC/MS) or ISO/TS 16179 or ISO 22744-1:2020, Part 1 and Part 2*
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	
N. PFAS (Per- and polyfluoroalkyl Substances)			
All PFAS, each	< 25 ppb (mg/kg)	*EN 17681-1:2025*	
All PFAS, sum	< 250 ppb (mg/kg)		
O. Phthalates / Plasticizers			
Such as DINP, DMEP, DNOP, DEHP, DIDP, BBP, DBP, DIBP, DEP, DIHP, DHNUP, DCHP, DHxP, DIHxP, DPrP, DHP, DNP, DPP, DMP	Sum <100 mg/kg Each < 50 mg/kg	Sum <100 mg/kg Each < 50 mg/kg	*ISO 14389*
P. Polycyclic Aromatic Hydrocarbons (PAH)			
Sum parameter	< 5.0 mg/kg	< 10.0 mg/kg	*AFPS GS 2019:01 PAK*
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	
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	
Q. Chlorinated paraffins			
Short Chain Chlorinated Paraffins (C_{10-13}) Medium Chain Chlorinated Paraffins (C_{14-17})	Sum < 50 mg/kg Sum < 50 mg/kg	< 50 mg/kg < 50 mg/kg	ISO 22818
R. Cyclic siloxanes and linear siloxane			
D4, D5, D6 L3	< 1000 mg/kg	< 1000 mg/kg	*Extraction in solvent, GC/MS*
S. Other chemical residues			
Azodicarboxamide/ Azodicarbonamide/ Diazene-1,2-dicarboxamide (ADCA)	< 1000 mg/kg	< 1000 mg/kg	
T. Solvent residues			
NMP, DMAc, DMF	Each < 0.05% by weight	Each < 0.05% by weight	*Extraction with methanol, GC-MS or dynamic headspace*
Formamide	0.02% by weight	0.02% by weight	
U. Chlorinated benzenes & toluenes	Sum <1.0 mg/kg Each <1.0 mg/kg	Sum < 1.0 mg/kg Each< 1.0 mg/kg	*DIN EN 17137*
V. Styrene	< 10 mg/kg		
W. Xylene	< 1 mg/kg		
X. Nonylphenol ethoxylates	100 mg/kg	100 mg/kg	
Y. Quinoline	< 20 mg/Kg	< 20 mg/Kg	*DIN 54231:2005 with methanol extraction followed by LC/MS*
Z. Polyester Fibres			
Antimony (Sb)	<30 mg/kg	<30 mg/kg	*EN 16711-2 ; ISO 17294-2 (ICP/MS)*
AA. Natural Latex Foam			
Butadiene	**< 1.0 mg/kg**	**< 1.0 mg/kg**	*GC - FID*
Chlorophenols and esters	**< 1.0 mg/kg**	**< 1.0 mg/kg**	*LFGB 82-02-08 (GC/MS)*
Carbon disulphide	**< 0.02 mg/m³**	**< 0.02 mg/m³**	*Chamber test, DIN ISO 16000-6*
Nitrosamines	**< 0.001 mg/m³**	**< 0.001 mg/m³**	*Chamber test; ZH 1/120-23 or BGI 505-23 for air sampling and analysis*

Table 9: Limit Values for Chemical Residues in Additional Fibres and Accessories

5.2.8.2 Table - Additional Requirements for Accessories

PARAMETER	CRITERIA (limit values)	TEST METHOD
FURTHER PARAMETERS FOR SPECIFIC MATERIALS USED IN ACCESSORIES	**CRITERIA (limit values)**	**TEST METHOD**
A. Natural latex foam		
Butadiene	< 1.0 mg/kg	*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*
Chlorophenols (incl. salts and esters)	< 1.0 mg/kg	
Carbon disulphide	< 0.02 mg/m^3	
Nitrosamines	< 0.001 mg/m^3	

Table 10: Additional Requirements for Accessories

5.3 Circularity of Final GRTS Goods[29]

5.3.1 Owners of final GRTS Goods (e.g. brand owners or retailers) that place certified products into circularity practices shall comply with the requirements set out in this section.

5.3.2 Circularity practices may involve interventions with the certified final product, including, but not limited to the processing such as repair, repurposing, or reselling/reuse of certified products.

5.3.3 Such entities that intervene in certified GRTS Goods as part of their circularity practices (5.3.2) shall hold a valid GRTS certification to maintain certified product integrity, references and claims to GRTS.

5.3.4 Such entities shall implement and document procedures to ensure continued compliance with this Standard when applying circularity practices (5.3.2) to GRTS Goods.

5.3.5 Such entities shall prepare, document, and make available all relevant information related to the applicable circularity practices (5.3.2).

6. SUPPORT FOR GOTS

6.1 Global Standards recognises that GOTS-certified entities also produce products with fibres that are not organic but are responsible. GRTS provides certification of such responsible fibre products, using the same rigour as GOTS.

6.2 One of the purposes of GRTS is to support, encourage and promote certified entities to continue to produce GOTS-certified organic goods by providing added certification possibilities for their other products.

[29] This section is identical to Section 5.3 of GOTS.

6.3 All GOTS Approved Certification Bodies shall be permitted to issue Scope Certificates for GRTS without any additional accreditation for the specific scopes that they currently hold with GOTS.

6.4 Existing GOTS Certified Entities shall directly receive authorisation to process GRTS Goods, after receiving a GRTS Scope Certificate, following a specific request to their Certification Body, a verification by the Certification Body of the capabilities of the Certified Entity and shall require payment of the requisite fees to Global Standards.

7. CHEMICAL INPUT APPROVAL CRITERIA[30]

7.1 Assessment and Approval of Chemical Inputs

7.1.1 All chemical inputs used in the processing of GRTS Goods shall be approved under GOTS and included in the GOTS Positive List. No independent or separate chemical input approval framework exists under GRTS.

7.1.2 Chemical Inputs (Substances and Preparations) intended to be used to process GOTS Goods shall be assessed as per the criteria laid in this section and be approved via the issuance of a GOTS Letter of Approval.

7.1.3 Chemical Formulators or suppliers shall apply for GOTS approval through an Approved Certification Body authorised by Global Standards gGmbH for the relevant scope, namely Scope 4: Approval of dyes and textile chemical inputs on positive lists.

7.1.4 Chemical Formulators can, following assessment by an Approved Certification Body, receive a GOTS Letter of Approval issued by the Certification Body and listing the trade names of compliant chemical inputs.

7.1.5 Following approval, trade names of compliant chemical inputs shall be included in the GOTS Positive List published on the GOTS website.

7.1.6 Chemical formulators shall provide Certification Bodies with the Safety Data Sheet (SDS), prepared in accordance with an applicable recognised standard or directive, for all chemical inputs (substances and preparations) submitted for assessment.

7.1.7 Chemical Formulators shall, where necessary and feasible, support the Approved Certification Body by providing additional sources of information for the assessment, including but not limited to toxicological and environmental data on specific components of the auxiliary agents, test reports, independent laboratory analysis, ingredient traceability checks, and relevant data sources hazard and toxicity evaluation.

7.1.8 Chemical formulators shall provide, where required by the Approved Certification Body, a 'no intentional use' declaration for the assessment.

[30] The provisions of this section are consistent with and equivalent to those set forth in Section 7 of the Global Organic Textile Standard (GOTS). All chemical inputs used in the processing of GRTS Goods shall be approved under GOTS and included in the GOTS Positive List. No independent or separate chemical input approval framework exists under GRTS.

7.2 Chemical Input Requirements[31]

7.2.1 This section lists specific substance groups that are commonly used in conventional textile processing but are explicitly banned or restricted at all stages of GRTS Goods production due to environmental and/or toxicological concerns. The list contained in Section **Error! Reference source not found.** is not exhaustive and may not cover all chemical inputs prohibited or restricted under GRTS.

7.2.2 Additional prohibitions or restrictions may apply to substance groups or individual substances not listed in Section **Error! Reference source not found.**, as a result of the requirements specified in Section 7.2.4 ("Requirements Related to Hazards and Toxicity") or other GRTS criteria.

7.2.3 Table - Prohibited and Restricted Chemicals

	SUBSTANCE GROUP	CRITERIA
1.	**Aromatic and/or Halogenated Solvents**	✗ PROHIBITED
2.	**Flame Retardants**	✗ PROHIBITED
	a. Chlorinated flame retardants b. Brominated flame retardants c. Phosphate based flame retardants, listed in the Implementation Manual d. Flame retardants containing antimony or antimony trioxide e. Flame retardants based on borate chemistry	
3.	**Chlorinated Benzenes and Toluenes**	✗ PROHIBITED
4.	**Chlorophenols (including their salts and esters)**	✗ PROHIBITED
	Such as mono-, di-, tri-, tetra-, penta- chlorophenols	
5.	**Complexing Agents, Surfactants and Wetting Agents**	✗ PROHIBITED
	a. **All Alkylphenols (APs) and Alkylphenolethoxylates (APEOs)** e.g. nonylphenol (NP), octylphenol (OP), nonylphenol ethoxylates (NPEOs), octylphenol ethoxylates (OPEOs), and APEOs terminated with functional groups, including APEO-polymers. b. Ethylenediaminetetraacetic acid (EDTA), diethylenetriaminepentaacetic acid (DTPA), nitrilotriacetic acid (NTA) c. LAS, α-MES	
6.	**Endocrine Disruptors** Known, presumed or suspected endocrine disrupters for human health and/or environment.	✗ PROHIBITED
7.	**Formaldehyde and Other Short-chain Aldehydes**	✗ PROHIBITED

[31] The provisions of this section are consistent with and equivalent to those set forth in Section 7 of the Global Organic Textile Standard (GOTS). All chemical inputs used in the processing of GRTS Goods shall be approved under GOTS and included in the GOTS Positive List. No independent or separate chemical input approval framework exists under GRTS.

	Inputs that contain or generate formaldehyde or other short-chain aldehydes (e.g. glyoxal) during designated application	
8.	**Glycol Derivatives**	✗ PROHIBITED
	All glycol derivatives listed in the Implementation Manual	
9.	**Genetically Modified Organisms (GMOs)**	✗ PROHIBITED
	All inputs that: a. Contain GMO b. Contain enzymes derived from GMO c. Are made from bio-based GMO raw materials (e.g. starch, surfactants or oils from genetically modified plants) d. Contain GMO based traceability markers	
10.	**Heavy Metals**	✗ PROHIBITED
	a. Inputs that do not comply with the "Heavy Metal Free" definition and limits as defined in Section 8.	
	b. Dyes and pigments	**! RESTRICTED** ***Exceptions are set in Sections*** *Error! Reference source not found.* ***and*** *Error! Reference source not found.**.***
11.	**Dyes and Pigments** with Allergenic Potential, Carcinogenic or Equivalent Concern	✗ PROHIBITED
	a. Allergenic potential[32] (e.g. some disperse dyes) **b.** Carcinogenic or suspected carcinogenic	*Sections* ***Error! Reference source not found.*** *and* ***Error! Reference source not found.****.*
12.	**Aromatic Amines and Aniline (free)**	✗ PROHIBITED
	a. Banned Amines: Inputs (e.g., azo dyes and pigments) which release arylamines with carcinogenic properties (MAK III, category 1,2,3) **b.** Aniline (free): Inputs (e.g., indigo and some azo dyes) containing free aniline residue (MAK III, category 4)	
13.	**Inputs containing functional nanoparticles**	✗ PROHIBITED *Particles with a size < 100 nm*
14.	**Halogen Containing Inputs**	
	a. Inputs that contain > 1% Non-hydrolysable Halogens[33]	✗ PROHIBITED
	b. Specific exemptions for certain dyes and pigments	**! RESTRICTED** ***Exceptions are set in Sections*** *Error! Reference*

[32] Dyes with allergenic potential are defined as those classified as skin sensitisers (H317) and associated with reported cases of allergic contact dermatitis in consumers, such as certain disperse dyes. A list of such disperse dyes can be found in Section 4.2.2.5 & 4.2.2.6 of the Manual for the Implementation of GRTS v1.0.

[33] Formerly referred to as "permanent AOX".

		source not found. ***and*** *Error! Reference source not found.***.**
15.	**Organotin Compounds**	✗ PROHIBITED
	Such as DBT, DMT, DOT, DPhT, DPT, MBT, MMT, MOT, MPhT, TBT, TCyHT, TeBT, TeET, TMT, TOT, TPhT, TPT	
16.	**Phthalates / Plasticizers**	✗ PROHIBITED
	a. Including all other esters of phthalic acid **b.** Polycyclic Aromatic Hydrocarbons (PAHs) **c.** Bisphenol A and all other plasticisers with endocrine disrupting potential	
17.	**Per- and Polyfluoroalkyl Substances (PFAS)**	✗ PROHIBITED
	All PFAS compounds including PFCA (incl. PFOA), PFSA (incl. PFOS) FTOH, PFNA, PFHpA, PFDA, PFOSA, PTFE	
18.	**Quaternary Ammonium Compounds**	✗ PROHIBITED
	DTDMAC, DSDMAC and DHTDMAC	
19.	**Chlorinated Paraffins**	✗ PROHIBITED
	a. Short-chain chlorinated paraffins (SCCPs, C_{10-13}) **b.** Medium-chain chlorinated paraffins (MCCPs, C_{14-17})	
20.	**Cyclic siloxanes (D4, D5, D6) and Linear Siloxanes**	✗ PROHIBITED
	a. D4, D5, D6: Inputs that contain ≥ (0,1%) 1000 mg/kg, each **b.** L3: Inputs that contain ≥ (0,1%) 1000 mg/kg	
21.	**Substances and Preparations that are prohibited for application in textiles with an internationally recognised or a nationally valid legal character**	✗ PROHIBITED
	Substances and Preparations having restrictions in usage for application in textiles with an internationally recognised or a nationally valid legal character	*The same restrictions apply, provided the Substances and Preparations are not already prohibited or have stricter restrictions criteria according to this Standard.*
	Substances and Preparations listed in regulation EC 552/2009 (amending regulation EC 1907/2006 (REACH), annex XVII), and the 'candidate list of Substances of very high concern (SVHC) for authorisation' of the European Chemicals Agency (ECHA) are prohibited.	✗ PROHIBITED
22.	**Synthetic Microplastics Polymers**	✗ PROHIBITED
	Intentionally added Synthetic Microplastic Polymers	
23.	**In-can preservatives in chemical Inputs**	
	a. In-can preservatives which do not meet the requirements of Sections **Error! Reference source not found.** and 7.2.4.	✗ PROHIBITED

	b. Biocidal active Substance(s) that comply with European biocidal products regulation (BPR 528/2012) and are listed on the Union list of BPR for product type PT06 (preservatives for products during storage), which are accessible here are exceptionally allowed.	**! EXCEPTION**
24.	**Quinoline**	✗ PROHIBITED

Table 11 - Prohibited and Restricted Chemicals

7.2.4 Requirements Related to Hazard and Toxicity of Chemical Inputs

7.2.4.1 Table - Hazards Restrictions in Chemical Inputs

SUBSTANCE GROUP	CRITERIA
A. Inputs which are classified with specific hazard statements (risk phrases) related to health hazards	✗ PROHIBITED

1. Substances which are classified with any of the hazard statements/risk phrases listed in this section, if applied as direct Input.
2. Preparations which are classified with any of the hazard statements/risk phrases listed in this section.
3. Preparations which contain at least one Substance which is classified with any of the hazard statements listed in this section.
4. Prohibited hazard statements/risk phrases in accordance with the codification system of the Globally Harmonized System of Classification (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
   - 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

Note: *For Inputs assessed on the 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 Inputs assessed according to the 'risk phrase' classification (Directive 67/548EEC amended and appealed by Regulation EC 1272/2008), the equivalent risk phrases apply.*

5. Prohibited hazard statements/risk phrases for Endocrine Disruptor Classes 1 and 2, in accordance with the CLP (classification, labelling and packaging of substances and mixtures) Regulation (EC) No 1272/2008:
   - EUH 380 May cause endocrine disruption in human.

• EUH 381 Suspected of causing endocrine disruption in human.	
B. Inputs which are classified with specific hazard statements/risk phrases related to environmental hazards	
1. Substances which are classified with any of the following hazard statements/risk phrases, if applied as direct Input 2. Preparations which are classified with any of the following hazard statements/risk phrases Prohibited hazard statements/risk phrases in accordance with the codification system of the Globally Harmonized System of Classification (GHS) as published by the United Nations, Annex 3: • 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 3. Prohibited hazard statements/risk phrases for Endocrine Disruptor Classes 1 and 2, in accordance with the CLP (classification, labelling and packaging of substances and mixtures) Regulation (EC) No 1272/2008: • EUH 430 May cause endocrine disruption in the environment. • EUH 431 Suspected of causing endocrine disruption in the environment.	✗ PROHIBITED
C. Inputs which are bio-accumulative and not rapidly degradable	
1. Substances, if applied as direct Input, and Preparations classified with H413: 'May cause long-lasting harmful effects to aquatic life' that are both 'bio-accumulative' [34] and not 'rapidly degradable' [35] [36]	✗ PROHIBITED

Table 12 - Toxicity Restrictions in Chemical Inputs – 1

7.2.4.2 Hazards Restrictions in Chemical Inputs

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

PARAMETER	CRITERIA
A. Oral Toxicity[37]	**! RESTRICTED LD_{50} > 2000 mg/kg[38]**

[34] 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

[35] Testing requirement: >70% OECD 301A [28d] or equivalent testing method according to Footnote 40, *Table 13 "Toxicity Restrictions in Chemical Inputs-2"*, 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 ≥ 0,5

[36] This criterion is not applicable to preparations whose very low solubility in water prevents their bioaccumulation (e.g. pigment preparations)

[37] Performing new animal tests to determine unknown LD_{50} values in the course of the GOTS assessment procedure for inputs is prohibited. Instead, alternative methods (e.g. Acute Toxicity Estimates (ATE); conclusions on an analogy from similar products; validated structure-activity relationships; the calculation from available data of substances contained; expert judgment; in vitro tests) shall be used to determine unknown values.

[38] 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.

B. Aquatic Toxicity[39]	**! RESTRICTED** **LC_{50}, EC_{50}, IC_{50} > 1 mg/l**
C. Relation of Biodegradability / Eliminability[40] to Aquatic Toxicity[39]	**! RESTRICTED** Allowed only if: < 70% and > 100 mg/l **> 70% and > 10 mg/l** **> 95% and > 1 mg/l**

Table 13 - Toxicity Restrictions in Chemical Inputs - 2

7.2.5 Onsite Audit Requirements for Chemical Formulators[41]

7.2.5.1 Chemical formulators and, where applicable, Chemical Subcontractors shall undergo an on-site audit by their Approved Certification Body (Scope 4) as part of the chemical Input assessment and approval process under GOTS.

7.2.5.2 Chemical formulators shall comply with the onsite audit requirements specified in the entire Section 7.2.5.

7.2.5.3 Chemical Formulators shall implement and maintained onsite audit requirements at the entire site during the validity of GOTS Letter of Approval.

7.2.5.4 Chemical Formulators shall implement effective measures throughout all stages of chemical manufacturing and distribution to ensure proper separation and identification of GOTS-approved chemical Inputs. These measures shall prevent any commingling with, or contamination by, non-approved or prohibited substances.

7.2.5.5 Product Stewardship

7.2.5.5.1 Chemical Formulators and, where applicable, Chemical Subcontractors shall implement appropriate and effective Product Stewardship practices.

7.2.5.5.2 Chemical Formulators shall maintain an adequate system for chemical input product testing and quality assurance, which shall be demonstrated during an on-site audit.

7.2.5.5.3 Chemical Formulators shall designate suitably trained and authorised personnel to carry out Product Stewardship responsibilities.

7.2.5.5.4 Chemical Formulators shall ensure that the designated personnel receive regular updates and appropriate training.

[39] Performing new fish and daphnia tests to determine unknown LC_{50} / EC_{50} values in the course of the GOTS chemical input assessment procedure is prohibited. Instead, alternative methods such as Acute Toxicity Estimates (ATE); validated structure-activity relationships; conclusion on an analogy from similar products; the calculation from available data of substances contained; fish egg test (embryo toxicity test (FET)); in vitro test; IC_{50} algae; OECD 201 [72hr] shall be used to determine unknown values.

[40] 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. The testing duration with each method is 28 days.

[41] The provisions of this section are consistent with and equivalent to those set forth in Section 7 of the Global Organic Textile Standard (GOTS). All chemical inputs used in the processing of GRTS Goods shall be approved under GOTS and included in the GOTS Positive List. No independent or separate chemical input approval framework exists under GRTS.

7.2.5.6 Environmental Management

7.2.5.6.5 Chemical Formulators and, where applicable, Chemical Subcontractors shall follow the requirements set out in Sections 4.3.9 - 4.3.13.

7.2.5.7 Occupational Health and Safety

7.2.5.7.6 Chemical Formulators and Chemical Subcontractors, where applicable, shall follow the requirements set in sections 4.4.7.

8. DEFINITIONS

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

TERM	DEFINITION FOR THE PURPOSE OF THIS STANDARD
Accessories	*Items that are added to supplement GRTS Goods for required functional or for fashionable reasons. Most commonly used Accessories are listed in Section 3.3.* *Accessories also include trims, and in certain cases the two terms are used interchangeably depending on the specific component.* *The processing of those Accessories is not under the direct scope of the GRTS on-site certification system.* *GRTS criteria that applies to Accessories are listed in Sections 3.3 and 5.2.8.*
Approved Certification Body/ Approved Certifier	*An Approved Certification Body or Approved Certifier is a certification body that has been duly accredited by an Accreditation Body. By signing a contract with Global Standards gGmbH, they are permitted to implement the relevant Standard within a designated geographical area and for specific scopes of the Standard.* *An updated list of Approved Certification Bodies and their scopes is available on the Global Standards Website.*
Carbon Footprint of a Product/CFP	*Sum of GHG emissions and GHG removals in a product system, expressed as CO2 equivalents and based on a life cycle assessment using the single impact category of climate change.*
Certified Entity	*Processor, manufacturer, trader or retailer of GRTS Goods certified by an Approved Certification Body.*
Chemical Formulator /Supplier	*A Chemical Formulator places chemical products on the market under own trade name. Generally the recipe, formulation and processing know-how belong to the Chemical Supplier. These chemical products can be manufactured by either the Chemical Supplier itself, or another Chemical Formulator or a toll-manufacturer.*
Chemical Subcontractor (toll manufacturing)	*Producing of chemical products on behalf of another Chemical Supplier. The recipe, process technology and know-how belong to the Chemical Supplier, not the manufacturer.*
Chemical Trader (rebranding)	*Purchasing of finished chemical products from a Chemical Supplier and distribution of these products under own brand/trade name and responsibility. Some chemical companies are using the term "sourcing" as synonym for this activity.*
Coating	*One- or two-sided application of coating compounds or foam films to fabric by means of coating machines, rotary screen printing or by means of spray, hot melt and transfer coating methods.*
Emission Scopes 1, 2 & 3	***Scope 1: Direct GHG emissions*** *Direct GHG emissions occur directly from sources that are owned or controlled by the company, for example, emissions associated with on-site combustion in owned or controlled boilers, furnaces, vehicles, etc.* ***Scope 2: Indirect GHG emissions*** *Scope 2 accounts for GHG emissions from the generation of purchased electricity which is consumed by the company. Scope 2 emissions physically occur at a Facility where electricity is generated.* ***Scope 3: Other indirect GHG emissions*** *Scope 3 emissions result from the activities of the company along the value chain from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.* *Reference:*

	https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf
Endocrine Disruptor	*A substance or mixture that alters one or more functions of the endocrine system and consequently causes adverse effects in an intact organism, its progeny, populations or subpopulations.* *"Adverse effect" means a change in morphology, physiology, growth, development, reproduction or lifespan of an organism, system, population or subpopulation that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences. Source: Commission Regulation (EU) 2023/707.*
Facility	*An individual establishment or site where processing, manufacturing, trading or retailing of GRTS Goods is done. It is operated by a Certified Entity and inspected by an Approved Certification Body.*
Formulation	*A Formulation is the finished chemical product sold or distributed ready for use.*
Formulator	*An organisation involved in manufacturing, producing or creating a mixture of chemical Substances blended together (Formulation) to be used for textile processing.*
GRTS Goods	*Textile goods (finished or intermediate) produced in compliance with GRTS (and properly labelled, as applicable) by a Certified Entity and certified by an Approved Certification Body.*
Heavy Metal Free	*An Input is considered as 'Heavy Metal Free' if it does not contain heavy metals as a functional constituent and any impurity contained does 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.*
Homeworker	*Individuals carrying out work for remuneration in their home or at other premises mutually agreed with the employer, other than the regular workplace of the employer.*
Input	*General term for all Substances and Preparations directly applied as textile auxiliary agents, inks, dyes or pigments.*
Machine Oil	*Oil intended essentially for lubrication of machines and machine parts used for processing of GRTS Goods, including but not limited to spinning, weaving, knitting etc. and which may come in contact with GRTS Goods.*
Manufacturer	*An entity in the manufacturing chain (sewing industry or so-called CMT (cut, make, trim) industry up to labelling and final packing) of GRTS Goods.*
Synthetic Microplastics Polymers (SMP)	*Polymers that are solid and which fulfil both of the following conditions:* *(a) are contained in particles and constitute at least 1 % by weight of those particles; or build a continuous surface coating on particles;* *(b) at least 1 % by weight of the particles referred to in point (a) fulfil either of the following conditions:* *(i) all dimensions of the particles are equal to or less than 5 mm;* *(ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.* *Following synthetic polymer microparticles, as substances on their own or in mixtures are exempted from the definition:* *(a) synthetic polymer microparticles which are contained by technical means so that releases to the environment are prevented when used in accordance with the instructions for use during the intended end use;* *(b) synthetic polymer microparticles the physical properties of which are permanently modified during intended end use in such a way that the polymer no longer falls within the scope of this entry;*

	(c) synthetic polymer microparticles which are permanently incorporated into a solid matrix during intended end use. *Source: REACH restriction of synthetic polymer microparticles*
Migrant Worker	*Individual who migrates from one geographical region to another with a view of being employed. The term covers any person regularly admitted as a migrant for employment.*
Mulesing	*Removal of wool-bearing strips of skin from the breech area of sheep intended to avoid problems of flystrike. This includes any type of breech modification, including freeze branding/steining.*
Natural Materials	*Natural material 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 to this category. Natural Materials include biotic materials (materials that originate from living organisms such as (organic) natural fibre, wood, leather, horn, bone, shell, seed and plant oils etc.) and non-biotic materials (such as minerals, metals, stone).*
Organic in-conversion	*A product from an operation or portion thereof which has completed at least 12 months under organic management and is under the supervision of an Approved Certification Body.*
Non-hydrolysable Halogens	*Non-hydrolysable Halogens are permanently bound to the molecule (e.g. in the chromophore of a dyestuff or pigment) and cannot get hydrolysed or released during textile processing instead remains on textiles.* *Previously referred as "permanent-AOX".*
Positive List:	*GOTS Positive List contains GOTS-compliant chemical products which are evaluated and approved by Global Standards approved chemical auditors. The List provides trade names of the chemicals and immediate access to all chemical Inputs which are allowed to be used for the processing of GRTS products.*
Post Industrial Waste	*Material diverted throughout the manufacturing processes.*
Post-consumer Waste	*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.*
Pre-consumer Waste	*Unsold products at retail should be considered as pre-consumer waste as they have not reached consumer use stage.*
Primary Packaging	*Packaging that accompanies the product to the retailer or end consumer as part of the sales unit.*
Preparations	*Mixtures or solutions composed of two or more Substances.*
Processor	*An entity in the processing chain (post-harvest handling up to finishing) of GRTS Goods.*
Protein-based Regenerated Fibres	*Azlon is the generic name given to protein based regenerated fibres in which the fibre-forming Substance is composed of any regenerated, naturally occurring protein.* *The fibre-forming Substance can be derived from various naturally occurring proteins such as skimmed milk (casein), eggs (albumin), corn and soy (zein), hide waste (collagen) etc.*
Recycling	*Activities through which materials are collected and treated in order to generate recovered resources that can be used as inputs for new products or production processes. Energy recovery is not considered recycling.* *Recycling activities may include the collection, transport, sorting, cleaning, and reprocessing of materials. Reuse of products is not considered recycling.*
Repair	*Bringing a product back to a state in which it can perform its originally intended function. Restoration may involve repairing the product or renewing or replacing components that have become worn, damaged, or degraded through use.*

Repurpose / Repurposing	*Modifying a product so they can be used for a purpose different from the one originally intended, without significant changes to their physical, chemical, or mechanical characteristics.*
Reuse	*Using a product again for the same purpose for which it was originally designed after its initial use. Reuse may occur by the original user or by subsequent users over time and may require only limited actions, such as cleaning, to enable continued use.*
Secondary Packaging	Materials used exclusively for shipping, transport, or storage (e.g., cartons, plastic films).
Site	*An individual establishment where chemical Inputs are formulated (see Formulator) and produced. It is included in a Letter of Approval and audited by a Scope 4 Approved Certification Body.*
Subcontractor	*An entity in the supply chain of GRTS Goods performing job work (in the field of processing or manufacturing) for a Certified Entity without becoming the proprietor of the GRTS Goods. A Subcontractor may be independently certified to GRTS.*
Substances	*Chemical elements and their compounds as they occur in the natural state or as produced by industry.*
Textiles for Babies	*Textile products used for babies and small children up to the age of 36 months*
Trader	*Entity trading with (=buying and selling) GOTS Goods in the supply chain between the producer of the fibre and the retail merchant of the final product regardless of whether the goods are physically received or not (e.g. an import, export or wholesale trading entity).* *Agents that do not become proprietors of the goods and retailers only selling to the end consumer are not considered Traders.*
Volume Reconciliation	*Calculation process by which it is ascertained that output volumes of a product's certified materials are compatible with their corresponding Input volumes. Input volume and output volume of certified material for a product are compatible if their ratio falls within a percentage range, which reflects estimated production losses specific to the production process of the particular product and if the Input volume can be demonstrated to have been available on stock.*
Wage Gap	*The difference between average Living Wage and Average Wages Paid to Workers in a Certified Entity.*
Waste Hierarchy	*The Waste Hierarchy is the priority order of waste management options established in Article 4 of the EU Waste Framework Directive (Directive 2008/98/EC). It ranks waste prevention and management strategies from the most to the least environmentally preferred, with the aim of reducing overall environmental impact and promoting resource efficiency.*
Wholly Owned Subsidiary	*A subsidiary company is considered wholly owned when all of the common stock is owned by another company, the parent company. With a wholly-owned subsidiary, the company's stock is not traded publicly. It remains an independent legal body, a corporation with its own organized framework and administration. Its day-to-day operations are likely directed entirely by the parent company, however.*
Worker	*Any individual engaged in work who is not a senior manager or owner.*
Young Worker	*A Worker who is older than the minimum age but less than 18 years old.*

Table 14: Definitions of Terms Used in the Standard

9. LIST OF ACRONYMS & ABBREVIATIONS

α-MES	α-methyl ester sulphonate (C16/18)
AOX	Adsorbable Organic Halogens
APEDA	Agricultural & Processed Food Products Export Development Authority, India
APEO	Alkylphenolethoxylates
APs	Alkylphenols
B2B	Business to Business
B2C	Business to Consumer
BBP	Benzylbutyl phthalate
BOD	Biological Oxygen Demand
COD	Chemical Oxygen Demand
DBP	Dibutyl phthalate
DBT	Dibutyltin
DCHP	Di cyclohexylphthalate
DEHP	Diethylhexyl phthalate
DEP	Diethyl phthalate
DHNUP	Di-C7-11 branched and linear alkylphthalates
DHP	Di-n-hexylphthalate
DHTDMAC	Dihydrogenated tallow dimethylammonium chloride
DHxP	Di hexyl phthalates
DIBP	Di-isobutyl phthalate
DIDP	Diisodecyl phthalate
DIHP	Di-C6-8 branched alkylphthalates
DIHxP	Di-iso hexylphthalate
DINP	Diisononyl phthalate
DMAc	Dimethylacetamide
DMEP	Bis(2-methoxyethyl) phthalate
DMF	Dimethylformamide
DNOP	Di-n-octyl phthalate
DNP	Di-n-nonylphthalate
DPhT	Diphenyltin
DPP	Dipentylphthalate
DPrP	Di-n-propyl phthalate
DPT	Dipropyltin
DSDMAC	Distearyldimethylammonium chloride
DTDMAC	Ditallowdimethylammonium chloride

DTPA	Diethylenetriamine penta-acetate
EC	European Commission
EC_{50}	Effect concentration (50%)
ECHA	European Chemicals Agency
EDTA	Ethylendiamine tetra-acetate
ETAD	Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers
FCTs	Food Contact Textiles
FTOH	Fluorotelomer alcohols
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GLP	Good Laboratory Practice
GMO	Genetically modified organisms
GMP	Good Manufacturing Practices
GOTS	Global Organic Textile Standard
HpP	Heptylphenol
IC_{50}	Inhibition concentration (50% inhibition)
IFOAM	International Federation of Organic Agriculture Movements
ILO	International Labour Organisation
IOAS	International Organic Accreditation Service
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
IVN	International Association Natural Textile Industry, Germany
JOCA	Japan Organic Cotton Association
LAS	Linear alkyl benzene sulphonate
LC50	Lethal concentration (50% mortality)
MAK	Maximum Allowable Concentration (of a Substance at the working place). *The parameter refers to the findings and categorisation of a German research commission*
MBT	Monobutyltin
MMT	Monomethyltin
MOT	Monooctyltin
MPhT	Monophenyltin
NMP	N-Methyl-2-pyrrolidone
NP	Nonylphenol
NPEO	Nonylphenol ethoxylates
NTA	Nitrilotriacetic acid
OECD	The Organisation of Economic Cooperation and Development
OP	Octylphenol
OPEO	Octylphenol ethoxylates

OTA	Organic Trade Association, USA
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated Biphenyls
PCP	Pentachlorophenol
PeP	Pentylphenol
PFAS	Per- and polyfluoroalkyl Substances
PFCA	Perfluorinated carboxylic acids
PFDA	Perfluoro-decanoic acid
PFHpA	Perfluoro-heptanoic acid
PFNA	Perfluoro-nonanoic acid
PFOA	Perfluorooctanoic acid
PFOS	Perflurooctane sulfonate
PFOSA	Perfluoro-octane-sulfon-amide
PFSA	Perfluorosulfonic acids
PPE	Personal Protective Equipment
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl chloride
REACH	EC Regulation regarding Registration, Evaluation, Authorisation and Restriction of Chemicals
SA	Soil Association, UK
TBT	Tributyltin
TCyHT	Tricyclohexyltin
TeBT	Tetrabutyltin
TeCP	Tetrachlorophenol
TeET	Tetraethyltin
TMT	Trimethyltin
TOC	Total Organic Carbon
TOT	Trioctyltin
TPhT	Triphenyltin
TPT	Tripropyltin
USDA	United States Department of Agriculture

Table 15: Table of Abbreviations used in the Standard