Criteria for the award of Green Product Mark

Textiles, Shoes and Bags

1 Foreword

The work of selecting and developing criteria for the award of Green Product Mark is carried out through Global 2 PfG-E Technical Committees (PTC) convened by TÜV Rheinland.

Interested parties participate in the selection and development of criteria for the award of Green Product Mark through either PTC membership or stakeholder consultation mechanism.

Criteria for the award of Green Product Mark are drafted in accordance with the rules given in following standards and guides:

- ISO/IEC Directives, Part 1 and Part 2
- ISO/IEC Guide 21, Part 1 and Part 2
- ISO Guide 64
- ISO Guide 82
- ISO 14024
- US EPA Guidelines for Environmental Performance Standards and Ecolabels for Use in Federal Procurement
- ISEAL Code of Good Practice for Setting Social and Environmental Standards

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. TÜV Rheinland shall not be held responsible for identifying any or all such patent rights.

This document was developed using a multi-stakeholder approach involving experts from multiple stakeholder groups including but not limited to consumers, government, industry, labour, non-governmental organizations (NGOs), and service, support, research, academics. Although efforts were made to ensure balanced participation of all the stakeholder groups, a full and equitable balance of stakeholders was constrained by various factors, including the availability of resources and the need for English language skills.

2 Introduction

Product environmental labels are claims which indicate the environmental aspects of a product and provide information about a product in terms of its overall environmental character, a specified environmental aspect, or any number of aspects. Green Product Mark is a voluntary environmental labelling scheme operating in accordance with ISO 14020 *Environmental labels and declarations – General principles* and ISO 14024 *Environmental labels and declarations – Type I environmental labelling – Principles and procedures*. Green Product Mark has been developed in accordance with ISO/IEC 17067 *Conformity assessment – Fundamentals of product certification and guidelines for product certification schemes*. Certification activities under Green Product Mark scheme shall be performed in accordance with ISO/IEC 17065 *Conformity assessment – Requirements for bodies certifying products, processes and services*.

Through the communication of verifiable and accurate information on environmental aspects of products, Green Product Mark aims to encourage the demand for and supply of those products that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

Green Product Mark certification scheme is owned by TÜV Rheinland, a leading international technical service provider who have been developing solutions to ensure the safety, quality and economic efficiency of the interaction between man, technology and the environment.

This document is intended to convey clear and unambiguous requirements to be fulfilled for products to get awarded with Green Product Mark.

2.1 Scope

This document lays out prerequisites, product environmental criteria and product function characteristics that Textiles, Shoes and Bags shall comply with, in order to get awarded with Green Product Mark.

All products which demonstrate compliance with relevant prerequisites, product environmental criteria and product function characteristics set forth in this document are entitled to be awarded Green Product Mark.

3 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- SA 8000 Social Accountability
- ISO 14040, Environmental management -- Life cycle assessment – Principles and framework
- ISO 14044, Environmental management – Life cycle assessment – Requirements and guidelines
- Product Environmental Footprint (PEF) Guide
- Directive 2001/95/EC General Product Safety Directive
- ISO/TS 14067, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification
- ISO 14021, Environmental labels and declarations–Self-declared environmental claims (Type II environmental labelling)
- ISO 14044: 2006 Environmental management, Life cycle assessment
- Regulation (EC) No 1907/2006 (REACH)
- Regulation (EU) 2019/1021 (POP)
- Regulation (EC) No 1278/2012 (CLP)
- Directive 2005/20/EC and amendments on Packaging and Packaging waste
- Chemicals Prohibition Ordinance (ChemVerbotsV - Chemikalienverbotsverordnung)
- AfPS GS 2019-01 on polycyclic aromatic hydrocarbons
- 2 PfG S 0151 - Textiles, clothing, shoes and leather goods

4 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

4.1 Green Product Mark

A voluntary environmental labelling program owned by TÜV Rheinland to indicate the overall environmental preferability of a product within a particular product category based on life cycle considerations and contribute to a reduction in the environmental impacts associated with products.

4.2 Prerequisites

Preconditions that a product shall comply with to be awarded Green Product Mark, which in principle consist of two pillars: legislative/regulatory requirements that the product shall meet in order to access target market; social compliance requirements prescribed to the site where the product has been manufactured.

4.3 Product environmental criteria

Environmental requirements that the products shall meet in order to be awarded an environmental label.[1]

4.4 Product function characteristics

Attribute or characteristic in the performance and use of a product. In the context of environmental labelling, fitness for purpose implies that a product satisfies health, safety and consumer performance needs.[2]

5 Prerequisites

5.1 Social compliance

The social compliance of brand owner, manufacturer and production site shall be maintained with all statutory and regulatory requirements for the jurisdiction in which the manufacturing operations are located.

Methodology for assessing and demonstrating compliance:

The Brand owner, manufacturer and the factory/third-party producer shall

- Fulfil the requirements of SMETA or BSCI by providing a documented proof of SMETA or BSCI audit report conducted at production facility of Green Mark certified products; or
- Fulfil the requirements of SA8000 by providing a valid SA8000 certificate issued by a SAAS-accredited certification body or a COC audit report issued by TÜV Rheinland; or
- Fulfil the requirements of RBA by providing a documented proof of RBA VAP audit report conducted at production facilities of Green Mark certified products; or
- Fulfil the requirements of ICTI by providing a valid ICTI certificate issued by a ICTI accredited audit firm; or
- Fulfil the requirements of SLCP by providing a documented proof of SLCP audit report by a SLCP accredited and APSCA registered audit firm

The documented proof/report shall be a maximal of 12 months old at the time of application for Green Product Mark certification.

[1] SOURCE: ISO 14024: 1999, definition 3.4

[2] SOURCE: ISO 14024: 1999, definition 3.5

6 Product environmental criteria

6.1 Protection of human health and environment

Compliance shall be maintained with safety requirements based on 2 PfG S 0151.

For selected, by TÜV Rheinland appointed, wet process facilities and chemical suppliers the applicant has to submit:

- Wastewater test and sludge test report,
- Chemical management audit report complying with the minimum criteria in the Annex, and
- MRSL test reports or certificates for chemical products selected by TÜV Rheinland (1-2 representative samples)

6.1.1 Restriction of hazardous substances

The final product shall not contain hazardous substances listed in the Restricted Substance List of 2 PfG S 0151 at or above the specified concentration limits or according to the specified restrictions.

The chemical test report complies with substance scope and reporting limits set out in.

- Report must identify the product and/or materials.
- Test reports should not be older than 12 month from the date of certification.

Chemical preparations with or combinations of H-Phrases mentioned in Annex of this document, (according to CLP Regulation (EC) No 1278/2012) are restricted in the manufacturing of chemical products and preparations above the threshold limit of 0.1 %.

Controlling and monitoring the chemical usage in production is covered by auditing process and the testing of the producer's Chemical Management System.

Biocide finishes used to give biocidal properties to the final products shall not be incorporated into fibres, fabrics or the final product.

Examples on biocidal treatment include triclosan, nano- silver, zinc organic compounds, tin organic compounds, dichlorophenyl(ester) compounds, benzimidazol derivatives and isothiazolinones.

6.1.2 Biodegradability of substances

To meet the criterion, of requirements for the biodegradability of substances supplier has to declare the nonintentional use of none-biodegradable substance (like textile auxiliaries such as surfactants, spinning solutions, spinning additives, softeners and complexing agents) within the production.

A number of chemicals that may be used in the textile process have potential slow or missing biodegradability with a negative effects on the environment (refer to Annex 8.2, H413 - for exclusion of hazardous chemicals due to persistent within environment).

Relevant substances are usually removed from the fiber during the pretreatment process before dyeing and finishing. The removal of auxiliaries such as spinning lubricants and knitting oils or preparations by aqueous treatment results in wastewater, which may contain not only organic substances that are difficult to biodegrade, such as mineral oils, but also hazardous compounds such as polyaromatic hydrocarbons, alkylphenol ethoxylates (APEO) and biocides. The use of those substances should be replaced by biodegradable and/or eliminable substances.

6.1.3 Wastewater test and sludge test report

Green Product Mark Certification requires regular wastewater tests from supplier's production units. It accompanies the greater goal of the certification as well validates the performance against customer (e.g. ZHDC standard) and certification related limits in wastewater. In the context of this certification, TÜV Rheinland accepts all reports based on ZDHC approved laboratories.

Key aspects for validity and technical requirements

- Wastewater test and sludge should be conducted from ZDHC approved laboratories.
- The report needs to comply with substance scope, and reporting limits set out in Annex 3.
- Test reports should not be older than 12 months from the date of certification.
- The wastewater and sludge test reports shall be made publically available as required per level.

Wastewater and sludge chemical analysis results are not evaluated for certification. All documents must be available and collected by TÜV Rheinland. All supporting documents can be randomly spot-checked to comply with due diligence of the supply chain. For none compliance of selected parameters, TÜV Rheinland observes the right to refuse the certification based on the expert decision.

6.1.4 Test report for manufacturing substances

- MRSL test reports or certificates of compliance shall be based on ZDHC MRSL and/or should achieve at least Level 1 of the ZDHC MRSL Conformance Certification.
- Bluesign certificates for chemical products are accepted.
- Test reports or certificates should not be older than 12 months from the date of certification.

Additional requirements:

The product must not show any obvious defects in safety and serviceability.

Demonstrating compliance with the specifications listed in this criteria catalogue is done by applying appropriate tests, audits and document checks in the laboratories and under the expertise of TÜV Rheinland.

The choice of which tests conducted is left entirely to the TÜV Rheinland and carried out based on many years of testing experience while taking into account relevant exposure scenarios. The investigations thus focus on production-contingent and material-specific substances.

TÜV Rheinland reserves the right to decide whether to recognise reports from other accredited laboratories. Test reports which are older than 12 months from the date of certification will not be accepted. TÜV Rheinland observes the right to have random re-inspections.

6.1.5 Product quality standards

Products need to fulfil basic quality requirements, verified by TÜV Rheinland either through testing or by accepting test reports as defined under point 4 (additional requirements). The selections of tests is depending on the type of product and material.

Colour fastness		
Colourfastness to rubbing (Textiles) dry wet	 min. 4 min. 3	 min. 4 min. 3
Colourfastness to Rubbing (Leather) dry wet alkaline	 min. 3 min. 2-3 min. 2-3	 min. 3 min. 2-3 min. 2-3
Colourfastness to water	min. 3	min. 3
Colour fastness to perspiration alkaline acidic	 min. 3-4 min. 3-4	 min. 3-4 min. 3-4
Colourfastness to saliva and perspiration	fast	fast

6.2 Sustainable material content

6.2.1 Synthetic and chemical fibres

Synthetic and chemical fibres, regardless of the composition or the use of recycling materials, must meet the criteria set out in Point 6.1 Protection of human health and environment.

For products containing recycled materials, a minimum content of 20 % recycled material must from pre and/or post-consumer waste.

In this context, the definition of (A) pre-consumer waste is polymer and fibre production waste, cuttings from textile and clothing manufacturers and (B) post-consumer waste as textile and all kind of fibre and textile products, as well as non-textile waste including PET drinking bottles.

Verification requirements:

a. Calculation of the percentages of more sustainable material based on the article weight.
b. Certification schemes for recycled fibres, e.g. DINCERTCO certificates for Recycled material, Textile Exchange certificates or similar

6.2.2 Natural fibres

Natural fibres, regardless of the composition or the use of recycling materials, must meet the criteria set out in Point 6.1 Protection of human health and environment.

Cotton and other natural cellulosic seed fibres shall contain a minimum content of either organic cotton or integrated pest management (IPM) cotton. In addition to all conventional cotton and IPM cotton used shall comply with the pesticide restrictions in criterion

In every case, the manufacturer of the cotton or other natural cellulosic seed fibres has to assure by means of an appropriate input control, for example by supplier evaluation and supplier selection, purchase conditions and testing program, that the RSL limits are kept.

Verification requirements:

c. Calculation of the percentages of more sustainable material based on the article weight.

d. Organic certification schemes for natural fibres (e.g. BCI, FSC for cellulose fibres, CmiA for cotton, GOTS).

e. Sourcing of Man-made Cellulose fibres can be fulfilled by the requirement of cellulose of sustainable Forest Management defined by FAO.

7 Product function characteristics

7.1 Information for User

Information that the product has been awarded the Green Product Mark, including a summary of the major features for award of the Green Product Mark on a separate page and a link to www.tuv.com/world/en/green-product-mark.html

8 Annex

8.1 Wastewater and Sludge testing

Criteria for the acceptance of wastewater and sludge test reports from none TÜVR labs:

- ISO 17025 accreditation
- Test method and individual substances as per current valid ZHDC wastewater guideline ZDHC Wastewater Laboratory Sampling and Analysis Plan (SAP)
- Test method must meet the reporting limits for all parameter

8.2 List of relevant H statements

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
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
H412: Harmful to aquatic life with long-lasting effects
H413: May cause long lasting harmful effects to aquatic life

8.3 Minimum requirements for Chemical Management audits (CMA)

CMA or verification reports must not be older than one year from the date of certification. In addition, the report must cover the following topics.

Point 1 to 3 list out criteria of Zero-Tolerance the facility need to comply with.

1. The facility does not monitor chemical management related laws, regulations, and standards, and update them regularly.
2. The facility's wastewater discharge is not following legal requirements.
3. The facility does not identify the hazardous waste, or the hazardous waste's storage condition does not comply with the legal requirements.
4. There is no training program about chemical management for staff.
5. The facility does not establish and traceability procedures for its raw materials.
6. The facility has not prepared a full chemical inventory.
7. The facility has not conducted any risk assessment for the chemical contact working place.
8. The facility has not conducted air emission test, or the test result is not following the legal requirements.

Alternatively, the following audit schemes can be accepted:

- TÜV Rheinland audit scheme
- LWG Bronze, Silver and Gold standard
- BEPI
- SAC Higg Index FEM 3.0
- Audit reports from third parties after expert assessment