#### PD CEN/TS 16822:2015



## **BSI Standards Publication**

Textiles and textile products — Self-declared environmental claims — Use of the terms



#### **National foreword**

This Published Document is the UK implementation of CEN/TS 16822:2015.

The UK participation in its preparation was entrusted to Technical Committee TCI/66, Apparel and interior textiles.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015. Published by BSI Standards Limited 2015

ISBN 978 0 580 82056 4 ICS 13.020.50; 59.080.01

## Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 November 2015.

#### Amendments/corrigenda issued since publication

Date Text affected

# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

## **CEN/TS 16822**

November 2015

ICS 13.020.50; 59.080.01

#### **English Version**

# Textiles and textile products - Self-declared environmental claims - Use of the terms

Textiles et produits textiles - Autodéclarations environnementales - Utilisation des termes Textilien und textile Erzeugnisse - Umweltbezogene Anbietererklärung - Verwendung von Begriffen

This Technical Specification (CEN/TS) was approved by CEN on 22 May 2015 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

### **Contents** Page

Europ	ean foreword	4
Introd	uction	5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Guidance on the use of terms in relation to self-declared environmental claims	8
4.1	Objective	
4.2	Fundamental principles	
4.2.1	General	8
4.2.2	Principle of accurate information	8
4.2.3	Principle of verifiable methods	
4.2.4	Principle of significant impact	9
4.3	Methodology for developing self-declared environmental claims	
4.3.1	Methodology	
5	Terms frequently used in self-declared environmental claims for textile products	10
5.1	List of the terms frequently used	
5.2	Terms: explanation and allowance	
5.2.1	Organic	
5.2.2	Respect the environment, environmentally friendly, eco-friendly, ecological and	
0.2.2	lower environmental impact	12
5.2.3	Bio-based	
5.2.4	Recycled, recyclable	
5.2.5	Biodegradable	
5.2.6	Compostable	
5.2.7	Renewable	
5.2.8	Natural	
5.2.9	Eco-designed	
5.2.10	Green	
	Sustainable	
_	"Substance" free	
	Carbon neutral	_
	"Less water used"	
	"Less energy used"	
	A (informative) Consideration of the terms "organic", "biological", "biology" and "ecological"	
<b>A.1</b>	General	
A.2	Etymology and definitions from reference dictionaries	
A.2.1	"organic" (English)	
A.2.2	"biological" (English), "biology" (English)	18
A.2.3	"ecological" (English)	19

<b>A.3</b>	Considerations	19
A.4	European Regulation 834/2007/EC, Community Ecolabel for textile products and the translations in the different European languages	19
A.5	Useful links	21
Annex	B (informative) European/International standards related to environmental aspects	22
<b>B.1</b>	Generalities	22
<b>B.2</b>	Organization-related standards	22
B.2.1	EN ISO 14001- series of standards	22
B.2.2	EN ISO 19011- series of standards	22
B.2.3	EN ISO 14031+ series of standards	22
<b>B.2.4</b>	EN ISO 14063- series of standards	22
<b>B.3</b>	Product-specific standards	22
B.3.1	EN ISO 14020- series of standards	22
B.3.2	EN ISO 14040- series of standards	23
B.3.3	Technical Report ISO/TR 14062	23
B.3.4	EN ISO 14064 (all parts) and CEN ISO/TS 14067	23
Annex	C (informative) Methods frequently used to verify claims related to the terms as mentioned in Clause 5	24
Annex	D (informative) Flow chart check-list when drafting a self-declared environmental claim	25
Biblio	graphy	26

#### **European foreword**

This document (CEN/TS 16822:2015) has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### Introduction

This Technical Specification has been written to help companies within the textile supply chain to define self-declared environmental claims for textile products based on accurate and verifiable information and to harmonize the use of self-declared environmental claims and, therefore, to promote to the final consumer the purchase of textile products with less negative environmental impact and to increase environmental consciousness.

It is essential that the self-declared environmental claims for textile products are reliable, based on a clear, transparent, accurate and documented methodology.

The self-declared environmental claims for textile products can be carried out by any entity from the textile chain, including manufacturers, importers, distributors, retailers, etc.

In many sectors, including the textile sector, the offers of "ecological" products are numerous and their number is increasing. The environment is now the spot light on which many companies focus their strategy.

However, this tendency leads to a proliferation of claims about textile products and these claims are sometimes difficult to understand correctly, such as "sustainable", "responsible", "organic", "natural", "biodegradable", or may even be abusive, for example "greenwashing".

The purpose of this Technical Specification is to answer the following questions: What is the meaning of these terms and what can they really guarantee? How can we know exactly the environmental characteristics of the textile products concerned? What are the practical conditions for using these terms?

The environmental claims for textile products may take the form of statements, symbols or graphics on product or package labels, or in product literature such as technical bulletins, company advertising, promotional material, etc.

#### 1 Scope

This Technical Specification establishes guidelines for the development and use of self-declared environmental claims for textiles (e.g. fibres, yarns, fabrics), textile products (e.g. clothing) and textile components of products (e.g. upholstery fabric in furniture), which includes principles, methodology and rules for some terms commonly used in environmental claims.

This Technical Specification does not provide any substitute for any legal requirements applicable to textile products, related to environmental information, environmental claims or labelling, or any other legal requirement.

#### 2 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.

EN ISO 14006, Environmental management systems - Guidelines for incorporating ecodesign (ISO 14006)

EN ISO 14021:2001<sup>1)</sup>, Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)

EN ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework (ISO 14040:2006)

EN ISO 14044, Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044)

CEN ISO/TS 14067, Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification and communication (ISO/TS 14067)

#### 3 Terms and definitions

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

#### 3.1

#### textile product

term covering "textiles", textile products and "textile components of products"

#### 3.2

#### environmental claim

statement, symbol or graphic that indicates an environmental aspect of a product, a component or packaging

[SOURCE: EN ISO 14021]

Note 1 to entry: An environmental claim may be made on product or packaging labels, through product literature, technical bulletins, advertising, publicity, telemarketing, as well as through digital or electronic media such as the Internet [EN ISO 14021]. Some brand names or visual drawings which call to mind the protection of the environment may be considered as environmental claims.

<sup>1)</sup> This document is currently impacted by the stand-alone amendment EN ISO 14021:2001/A1:2011.

#### 3.3

#### self-declared environmental claim

environmental claim that is made, without independent third-party certification, by manufacturers, importers, distributors, retailers or anyone else likely to benefit from such a claim

[SOURCE: EN ISO 14021:2001, 3.1.13<sup>2</sup>)]

#### 3.4

#### life cycle

consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to the final disposal

[SOURCE: EN ISO 14040:2006, 3.1]

#### 3.5

#### life cycle assessment

#### I.CA

compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle

[SOURCE: EN ISO 14040:2006, 3.2]

#### 3.6

#### environmental aspect

element of an organization's activities, products or services, which can interact with the environment

[SOURCE: EN ISO 14020:2001, 2.3]

#### 3.7

#### environmental impact

any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities or products

[SOURCE: EN ISO 14021:2001, 3.1.5<sup>2</sup>]

#### 3.8

#### explanatory statement

any explanation which is needed or given so that an environmental claim can be properly understood by a purchaser, potential purchaser or user of the product

[SOURCE: EN ISO 14021:2001, 3.1.62)]

#### 3.9

#### functional unit

quantified performance of a product system for use as a reference unit

[SOURCE: EN ISO 14040:2006, 3.20]

<sup>2)</sup> The numbering of the original definitions in EN ISO 14021:2001 was impacted by the stand-alone amendment EN ISO 14021:2001/A1:2011.

#### 4 Guidance on the use of terms in relation to self-declared environmental claims

#### 4.1 Objective

This Technical Specification has been written to help companies within the textile supply chain to define self-declared environmental claims for textile products based on accurate and verifiable information and to harmonize the use of those self-declared environmental claims and therefore, to promote to the final consumer the purchase of textile products with less negative environmental impact and to increase environmental consciousness.

#### 4.2 Fundamental principles

#### 4.2.1 General

The self-declared environmental claims for textile products (including processes) shall be accurate (4.2.2), verifiable (4.2.3) and relevant (4.2.4), which means that they shall be based on measurable information, substantiated in data that can be checked and is relevant to that particular product.

No environmental claim shall be based on a mere restatement of fact, e.g. natural cotton.

#### 4.2.2 Principle of accurate information

The self-declared environmental claims shall not be ambiguous, misleading or result, in any way, in a misinterpretation. It shall not, directly or by implication, suggest an environmental improvement that does not exist, or enlarge the environmental aspect.

The self-declared environmental claims shall be accompanied by an explanatory statement, which should clearly indicate the environmental benefit, especially if the claim alone is likely to result in misunderstanding.

The self-declared environmental claims shall be defined and presented in a manner that clearly indicates its range of application (complete product, part of the product, packaging, service, etc.).

The self-declared environmental claims shall be updated, when necessary, to reflect any circumstances that can affect the accuracy of the claim.

#### 4.2.3 Principle of verifiable methods

The self-declared environmental claims shall be based on scientifically verifiable methods, which are accepted and information on them shall be provided upon request to all interested parties.

NOTE Tracking of the production, known as product traceability, is an integral part of these verifiable methods.

The claim shall be justified by practical, measurable, relevant, meaningful and verifiable elements (e.g. in terms of eco-design, of limitation of the use of polluting substances or emissions of greenhouse gas, of management control of the natural resources, energy and waste, etc.), in order to demonstrate that negative environmental impacts related to the concerned activities have been significantly reduced or that positive environmental impacts exist.

Justification may be provided by an independent body.

The informative Annex C lists the most frequent verifiable methods related to the terms mentioned in Clause 5.

#### 4.2.4 Principle of significant impact

Whatever the environmental claims, they shall address significant environmental impacts of the textile product. The claimed advantage shall not create or exacerbate other environmental impacts of the product, at any stage of its life cycle.

The development of self-declared environmental claims for textile products shall take into consideration the life cycle of the textile product, in order to identify all relevant aspects and study the potential for increasing one environmental impact in the process of decreasing another (this does not mean that a life cycle assessment shall be carried out according to EN ISO 14040).

#### 4.3 Methodology for developing self-declared environmental claims

#### 4.3.1 Methodology

#### 4.3.1.1 General

The methodology for developing the self-declared environmental claims for textile products shall be based on an accurate study that shall be documented and shall consider the following steps:

NOTE Further information can be found in EN ISO 14044 and, related to the general framework, in Annex D.

#### 4.3.1.2 Objective (goal) and scope

The specific objective (goal) of the study, the target group (consumer, industrial customers, etc.) and the scope shall be defined.

In the scope, some of the following shall be considered: the functional unit, the supply chain of the product (including the material sources, production processes, transport and end use), the complete process flow with inputs and outputs of each unit process (e.g. raw material, accessories, chemicals, water, energy, textile product, wastewater, atmospheric emissions and wastes) and the existing difficulties (e.g. in quantitative values, lack of information).

As a result, the study system boundary (see EN ISO 14044 for definition) and assumptions shall be defined. The system boundary shall consider all unit processes, inputs or outputs that are relevant to the study objective (goal). Whenever unit processes, inputs or outputs are not considered in the system boundary this shall be clearly stated, and the reasons and implications for their omission shall be given.

#### 4.3.1.3 Inventory analysis

After the system boundary and assumptions have been defined, all necessary data to quantify the inputs and outputs of each unit process shall be collected. The data collected shall be measured, calculated or estimated and, for each case, the source of the data and other relevant information related to the data quality shall be referenced.

The necessary calculations shall be carried out in order to relate the collected data to each functional unit.

As a result, the quantified inputs and outputs relating to each functional unit shall be defined.

#### 4.3.1.4 Impact assessment

Based on the inventory analysis, the significance of potential environmental impacts associated with the inputs and outputs shall be evaluated. For that, the environmental impact evaluation process (environmental impact categories, indicators and decision about significance), including the positive and negative impacts shall be defined. All information relevant to the impact assessment shall be referenced.

As a result, the significance of all environmental impacts shall be defined.

#### 4.3.1.5 Environmental claim definition

Based on the results from the inventory analysis and impact assessment and considering the objective (goal) and scope of the study, the self-declared environmental claim and the respective explanatory statement shall be defined. The environmental claim shall consider the most significant environmental impacts (positive or negative) of the product.

Before deciding the content of any self-declared environmental claim, the content may be checked against the document sources as described in the flow chart (see Annex D, Figure D.1).

## 5 Terms frequently used in self-declared environmental claims for textile products

#### 5.1 List of the terms frequently used

Table 1 lists examples of the terms frequently used in self-declared environmental claims, which are categorized as related to process and/or related to product. The list is not exhaustive.

NOTE The terms listed are common examples found on textile products. 5.2 gives an explanation of each term and describes what is allowed. However, the principles of EN ISO 14020 and EN ISO 14021 take priority.

Table 1 — Examples of terms frequently used in self-declared environmental claims

Term	Related to process	Related to product	Sub-clause
organic		X	5.2.1
respect the environment, environmentally friendly, eco-friendly and ecological	X	X	5.2.2
bio-based		X	5.2.3
recycled, recyclable		X	5.2.4
biodegradable		X	5.2.5
compostable		X	5.2.6
renewable		X	5.2.7
natural		X	5.2.8
eco-designed	X	X	5.2.9
green	X	X	5.2.10
sustainable	X	X	5.2.11
"Substance" free		X	5.2.12
carbon neutral	X	X	5.2.13
less water used	X	X	5.2.14
less energy used	X	X	5.2.15

Attention is drawn to EU legislation for fibre composition labelling. Where an environmental claim is attached to a textile product, it should comprise a separate label that is less prominent than the fibre composition label.

#### 5.2 Terms: explanation and allowance

#### 5.2.1 Organic

NOTE For further consideration related to the word "organic" (English), see Annex A.

#### 5.2.1.1 Explanation

Only certified organic agricultural products according to European regulation can use the term "organic".

The production of raw agricultural textile fibres such as vegetable or animal fibres, is within the scope of the European organic regulation.

For processed textile products (such as yarns, fabrics, clothes, etc.), the use of the term "organic" is not regulated.

#### **5.2.1.2 Allowance**

Only unprocessed vegetable or animal fibres shall be described as "organic".

Environmental claims of "made with organic..." can be used in textile processed products but only if the content of organic vegetable or animal fibres, expressed in percentage, is stated (application of the accurate information principle). The percentage of "organic" fibres shall not be confused with the fibre composition marking. For example, it is not the T-shirt that is claimed as "organic" but the cotton, and the T-shirt may be labelled "made from x % organic cotton where x is the amount of organic cotton in the article".

NOTE For certain categories of products (textiles, etc.), there are private and voluntary approaches that provide for the incorporation of certified organic fibres in the product. These approaches can be subject to control by an independent body (leading to certificate).

Fibres, such as cotton, hemp, flax, wool, silk, etc. are considered as agricultural non-food products, for which the production can be controlled to ensure that the production is organic. In this case, the production of "organic" fibre can be compared with a non-organic one, and then the qualification "organic" is applicable.

Table 2 summarises acceptable expression(s) and non-acceptable expression(s).

Table 2 — Expression(s) including "organic" related to cotton, hemp, flax, etc.

Acceptable expression(s)	Non-acceptable expression(s)	
Organic cotton <sup>a</sup>		
Organic hemp <sup>a</sup>	Organic synthetic fibres	
Organic flax <sup>a</sup>	Organic viscose from bamboo	
Organic wool <sup>a</sup>	Organic textile products	
Organic silk <sup>a</sup>		

 $<sup>^{\</sup>rm a}$  Only available when referring to unprocessed raw fibres. The term "unprocessed" means not having undergone any chemical treatment other than that required to obtain the fibres from the plant or animal.

## 5.2.2 Respect the environment, environmentally friendly, eco-friendly, ecological and lower environmental impact

#### 5.2.2.1 Explanation

The terms "respect the environment", "environmentally friendly", "eco-friendly" and "ecological" are too vague. Use of these means that the principle of accurate information has not been followed. For further interpretation of the word "ecological" (English), see Annex A.

The term "lower environmental impact" is accepted in 2009/567/EC and means that a comparison with a former process has been carried out to prove the environmental impact reduction.

#### **5.2.2.2 Allowance**

The terms "respect the environment", "environmentally friendly", "eco-friendly" and "ecological" shall be avoided for any textile products.

The term "lower environmental impact" can be used when the reduction of the impact is proved.

#### 5.2.3 Bio-based

#### 5.2.3.1 Explanation

The term "bio-based" refers to non-food products, partially or completely produced from biomass (material of vegetable or animal origin), i.e. from renewable raw materials ("renewable", see 5.2.7).

#### **5.2.3.2 Allowance**

The bio-based fibre shall be identified in the claim.

Table 3 summarises acceptable expression(s) and non-acceptable expression(s).

Table 3 — Expression(s) related to bio-based

Non-acceptable expression(s)
Bio-based fibre Bio-based textile
Bi

#### 5.2.4 Recycled, recyclable

#### 5.2.4.1 Explanation

"recycled" refers to a material that has been reprocessed from recovered [reclaimed] material by means of a manufacturing process and made into a final product or into a component for incorporation into a product [EN ISO 14021].

It is possible to claim that a textile article is made from "recycled fibres" if the percentage of recycled fibres is specified. For example, a t-shirt may be labelled "made with 70 % recycled polyester".

"recyclable" refers to a material that can be recycled. Textile products can be complex, including also accessories: buttons, zip fasteners, etc. or elements of presentation, such as a plastic or metal hanger. Without further information, the term "recyclable" refers to the product as it is dispensed. If a product is claimed as "recyclable" the conditions under which it can be recycled shall be stated. It may be allowed to throw the whole product into a recycling bin or the product may have to be broken down and only the recyclable part put in the bin. Each country will organize recycling in different ways in relation to the industrial technology employed to effect the extraction of the product or component for its effective recycling.

For many thermoplastic fibres, recyclability is not a unique property but a common feature of all thermoplastic fibres (e.g. polyester, polyamide and polypropylene fibres can be recycled).

NOTE "recyclable" is not to be considered as "reusable".

#### **5.2.4.2 Allowance**

The term "recyclable" can be used simply to give an instruction to the user to sort but shall not be used in any environmental claim.

Table 4 summarises acceptable expression(s) and non-acceptable expression(s).

Table 4 — Expression(s) related to recycled/recyclable

Acceptable expression(s)	Non-acceptable expression(s)	
Made from $x\%$ recycled polyester (or other recycled fibres such as polypropylene, polyamide, cotton, wool, etc.), where $x$ is the amount of recycled fibre in the article <sup>a</sup>	Made from <i>x</i> % recycled fibres Made from recyclable material	
<sup>a</sup> The percentage quoted shall relate to the whole textile product.		

#### 5.2.5 Biodegradable

#### 5.2.5.1 Explanation

"Biodegradable" refers to a textile product that can, under the action of living organisms (bacteria), be broken down into various elements, without adverse effect on the environment. Biodegradability is assessed by taking into account both the degree of decomposition of a textile product and the time required to obtain this decomposition. The term shall be applied to products that break down under the action of microorganisms, to form a biomass, without a negative impact on the environment. The percentage of the degradation and/or the time to degrade shall be quoted in the claim.

#### 5.2.5.2 Allowance

Unless specified, a "biodegradable" claim shall focus on the whole product.

Most non-treated, natural fibres are necessarily biodegradable, which means that there is no significant impact (4.2.4), and thus the term "biodegradable" shall be avoided for these kinds of fibres.

Table 5 summarises acceptable expression(s) and non-acceptable expression(s).

Table 5 — Expression(s) including "biodegradable" related to textile products

Acceptable expression(s)	Non-acceptable expression(s)	
Made with x % biodegradable fibre <sup>a</sup>	Biodegradable cotton	
Biodegradable polylactic acid		
<sup>a</sup> The percentage quoted shall relate to the whole textile product.		

#### 5.2.6 Compostable

#### 5.2.6.1 Explanation

A textile product that is biodegradable produces a humus type material. The term is applicable to products that will undergo an industrial composting process [EN ISO 14021 gives more information on "compostable"].

#### **5.2.6.2** Allowance

The claim shall clearly state that the product is only compostable in an industrial composting process.

Table 6 summarises acceptable expression(s) and non-acceptable expression(s).

Table 6 — Expression(s) including "compostable" related to textile products

Acceptable expression(s)	Non-acceptable expression(s)	
Made with x % compostable fibre <sup>a</sup> Compostable cotton		
	Compostable polylactic acid	
<sup>a</sup> The percentage quoted shall relate to the whole textile product.		

#### 5.2.7 Renewable

#### 5.2.7.1 Explanation

The term "renewable" is used to refer to a resource that can be replenished rather than an exhaustible resource. A renewable raw material can be defined as a material from animal or vegetable sources whose renewal, with or without human intervention, compensates quantitatively and qualitatively for natural recovery and removal by man.

#### **5.2.7.2** Allowance

The scope of the term "renewable" is too wide; it is a characteristic of the resource rather than the product. It means that the principle of accurate information is not followed and thus the term "renewable" shall be avoided for any textile products. Statements such as "the product has been made from renewable resources" are allowed.

#### 5.2.8 Natural

#### 5.2.8.1 Explanation

The term "natural" only applies to fibre. A natural fibre is one that is included in EN ISO 6938. Some wool and cotton fibres are naturally coloured, i.e. the colour is developed by the animal or plant. The term natural in these cases refers to the colour and any claims shall reflect this.

#### **5.2.8.2 Allowance**

The term "natural" is not relevant for environmental claims of textile products and shall not be used. Where the colour of the fibre is produced by animal or plant, the term "naturally coloured" may be used. Statements such as "the product has been made from naturally occurring fibres" are allowed.

#### 5.2.9 Eco-designed

#### 5.2.9.1 Explanation

Integration of environmental aspects into product design and development, with the aim of reducing adverse environmental impact throughout a product life cycle [EN ISO 14006].

#### **5.2.9.2 Allowance**

The scope of the term is wide and shall only be used if the product has been assessed in accordance with EN ISO 14006.

#### 5.2.10 Green

#### 5.2.10.1 Explanation

"Green" refers to the colour associated with nature.

Reference to any colour should not be used in any environmental claim.

#### **5.2.10.2** Allowance

The term "green" is too vague and ambiguous (it can be confused with the colour itself). It means that the principle of accurate information is not followed and thus the term "green" shall be avoided for any textile product.

#### 5.2.11 Sustainable

#### 5.2.11.1 Explanation

The scope of the term "sustainable" is too wide as it covers economic, social and environmental aspects. It means that the principle of accurate information is not followed.

#### **5.2.11.2** Allowance

The term "sustainable" shall be avoided for any textile product.

#### 5.2.12 "Substance" free

#### 5.2.12.1 Explanation

This type of expression is often used to assure the consumer about the absence of a substance, which could be a danger or risk to human health or to the environment. The term "free" is defined as below the level at which the specified substance is no more than that which would be found as an acknowledged trace contaminant or background level [EN ISO 14021].

#### **5.2.12.2** Allowance

"Substance X" free shall not be used when:

- a) Substance X is no longer used or has never been used in textile products by any company (e.g. "bisphenol A free").
- b) Substance X is prohibited by the legislation for the textile product family (e.g. "Blue Colorant free").

Moreover, the expression "substance X free" shall not be used when referring to a family of substances, in which no distinction can be made between those restricted and those allowed (e.g. "azo free", "phthalate free").

Table 7 summarises acceptable expression(s) and non-acceptable expression(s).

Table 7 — Expression(s) of "substance free" related to textile products

Acceptable expression(s)	Non-acceptable expression(s)
Formaldehyde free	Phthalate free
Dimethylfumarate free	Azo dye free

#### 5.2.13 Carbon neutral

#### 5.2.13.1 Explanation

Carbon neutral refers to a product (as a product system) that has a carbon footprint of zero or a product with a carbon footprint that has been offset so there is a zero balance between the carbon emitted by the process used and carbon collected by the environment. The carbon footprint is the net amount of life cycle greenhouse gas emissions [EN ISO 14021]. Carbon neutral is a zero balance between the carbon emitted by the process used and carbon collected by the environment.

#### **5.2.13.2** Allowance

To be labelled "carbon neutral" the product shall conform to CEN ISO/TS 14067. Any claim shall declare how the carbon emitted was offset [EN ISO 14064-3].

#### 5.2.14 "Less water used"

#### 5.2.14.1 Explanation

This is a comparative term and shall only be used where a quantified improvement has been established by the producer, for the same product or process.

#### **5.2.14.2** Allowance

The reduction in use of water, shall be quantified as the total volume of water used in the process and the percentage saving shall be stated in the claim.

#### 5.2.15 "Less energy used"

#### **5.2.15.1 Explanation**

This is a comparative term and shall only be used where a quantified improvement has been established by the producer, for the same product or process.

#### **5.2.15.2** Allowance

The reduction in use of energy, shall be quantified as the total amount of energy used in the process and the percentage saving shall be stated in the claim.

NOTE Introduction of renewable energy sources will contribute to a reduction in the use of energy.

#### Annex A

(informative)

#### Consideration of the terms "organic", "biological", "biology" and "ecological"

#### A.1 General

In the text of the Community Ecolabel for textile products (further information in Annex C), the term "organic" (English) is used as an adjective to qualify some textile fibres in the English version of this decision. This English version was the working draft which has been translated in the languages applicable in the European Union.

IMPORTANT — When "(English)" is used in the text of the present document, it means that the word it is referring to shall not be translated and be kept in English. The same rule is applicable when another language is mentioned, e.g. (Greek).

The translation in these different languages led to a confused situation because two words, each based on the same linguistic roots through most of the European languages, are used but without the same meaning. These words exist in English as well and are "biological" (English) and "ecological" (English).

In order to clarify the meaning of "organic" (English), "biological" (English) and "ecological" (English), etymology and definitions given in reference dictionaries are useful.

NOTE As the framework of this item is related to textile fibre production, the term "organic" (English) is not related to the vocabulary applicable in chemistry.

#### A.2 Etymology and definitions from reference dictionaries

#### A.2.1 "organic" (English)

Etymology: "organic" (English) is from όργανικός – *organikos* - (Greek), meaning "*of or pertaining to an organ*" (ca. 1510); the meaning "*free from pesticides and fertilizers*" was introduced in 1942.

#### Definition:

"of, relating to, or grown with the use of fertilizers or pesticides derived from animal or vegetable matter, rather than from chemicals" [World English Dictionary (Ed. Collins)]

"using or produced with fertilizers or pesticides that are strictly of animal or vegetable origin" [American Heritage]

#### A.2.2 "biological" (English), "biology" (English)

Etymology: "biological" (English) is from "biology" (English) and the suffix "-ical" (English). "Biology" (English) is from  $\beta$ (o $\gamma$  –  $\beta$ 0 –  $\beta$ 1 (Greek), meaning "life" and  $\beta$ 1 –  $\beta$ 2 (Greek), meaning "study of"; the term occurs in the  $\beta$ 2 century used by German and French scientists.

#### Definition:

biological (English) "of or relating to biology" [World English Dictionary (Ed. Collins)]

biology (English) "the study of living organisms, including their structure, functioning, evolution, distribution, and interrelationships" [World English Dictionary (Ed. Collins)]

#### A.2.3 "ecological" (English)

Etymology: "ecological" (English) is from "Ecology" and the suffix "-ical" (English). "Ecology" (English) is from οἶκος – oikos - (Greek), meaning "house, dwelling place, habitation" and  $\lambda$ ογία - logia - (Greek), meaning "study of"; the term occurs in the 19th century, used by a German scientist.

#### Definition:

"ecological" (English) "of or relating to ecology" [World English Dictionary (Ed. Collins)]

"ecology" (English) the study of the relationships between living organisms and their environment" [World English Dictionary (Ed. Collins)].

#### A.3 Considerations

The meaning of "organic" (English) is closer to "biological" (English), being related to living organisms (such as cotton plants, etc.), rather than "ecological" (English), which is related to the study of a system.

## A.4 European Regulation 834/2007/EC, Community Ecolabel for textile products and the translations in the different European languages

Table A.1 lists the translations of "organic" (English) in the European languages, as well as, when relevant, another translation obtained from IATE (InterActive Terminology for Europe).

 ${\bf Table~A.1-Translations~of~the~term~organic}$ 

Languages	EC 834/2007	Community Ecolabel for textile products	IATE	CEN/TC 248 recommendations
EN	organic	organic		
BG	биологичен	not available	биологично Органично	биологично
CS	ekologické	not available	ekologické	
DA	økologisk	økologisk	biologisk økologisk	biologisk
DE	ökologisch, biologisch	ökologisch	organisch biologisch ökologisch	biologisch
EL	βιολογικό	βιολογικό	βιολογική	βιολογική
ES	ecológico	orgánico	ecológica orgánico biológica	biológica
ET	mahe, ökoloogiline	not available	specific word	
FI	Luonnonmukainen	luonnonmukaisesti	specific word	
FR	biologique	biologique	biologique organique	biologique
GA	orgánach	not available	orgánach	orgánach
HU	ökológiai	not available	ökológiai biogazdálkodás	biogazdálkodás
IT	biologico	organico	biologica organica	biologica
LT	ekologiškas	not available	ekologinis	
LU	biologesch	not available		biologesch
LV	bioloģisks, ekoloģisks	not available	bioloģiskā	bioloģiskā
MT	organiku	not available	organika	organika
NL	biologisch	biologisch	biologische ecologische	biologische
PL	ekologiczne	not available	ekologiczne	
PT	biológico	biológico	biológico	biológico
RO	ecologic	not available		
SK	ekologické, biologické	not available	organické	organické
SL	ekološki	not available	ekološko organsko	organsko
SV	ekologisk	organisk	ekologiskt	

#### A.5 Useful links

Etymology: <u>www.etymonline.com</u>

Definitions: <a href="http://dictionary.reference.com">http://dictionary.reference.com</a>

IATE: <a href="http://iate.europa.eu/">http://iate.europa.eu/</a>

#### Annex B

(informative)

#### European/International standards related to environmental aspects

#### **B.1** Generalities

The EN ISO 14000- series of standards provide guidelines for companies, telling them how they can provide product-specific product information on a voluntary basis and, at the same time, satisfy the customers' need for information.

#### **B.2 Organization-related standards**

#### B.2.1 EN ISO 14001- series of standards

This series supports an organization in the establishment and optimization of an environmental management system.

#### **B.2.2 EN ISO 19011- series of standards**

This series contains instructions for the performance of environmental audits.

#### B.2.3 EN ISO 14031+ series of standards

This series contains instructions for the selection and application of indicators for evaluation of an organization's environmental performance.

#### B.2.4 EN ISO 14063- series of standards

This series contains environmental communication guidelines.

#### **B.3 Product-specific standards**

#### B.3.1 EN ISO 14020- series of standards

This series contains instructions for product labelling and identification.

The environmental labels in accordance with EN ISO 14021 (Type II):

- are primarily intended for end users;
- frequently focus on one specific environmental aspect;
- also apply to complex information in principle;
- are labels for which the manufacturer assumes sole responsibility.

The environmental labels in accordance with EN ISO 14024 (Type I):

- are intended for both private and commercial end users;
- draw attention to one or two critical environmental aspects;
- are relevant to public purchasing;

- have a high level of credibility;
- are issued by independent bodies.

The allegations/claims/declarations in accordance with EN ISO 14025 (Type III):

- are intended for users in trade and industry, as well as end users;
- supply extensive quantitative information;
- are based on a life cycle assessment;
- contain impartial descriptions of environmental impact;
- involve interested parties;
- are declarations for which the manufacturer assumes sole responsibility;
- may be certified by a third party.

Life cycle assessments as per EN ISO 14040 and EN ISO 14044:

- are intended for experts in business, science and politics;
- contain a comprehensive description of a product's environmental impact;
- are based on the entire life cycle of a product;
- are suitable for all products and services;
- are assessments for which the study commissioner assumes sole responsibility;
- verification by an independent third party may be stipulated under certain circumstances.

#### B.3.2 EN ISO 14040- series of standards

This series contains instructions for the preparation of life cycle assessments.

#### **B.3.3 Technical Report ISO/TR 14062**

This Technical Report describes concepts for environmentally compatible product development and design.

#### B.3.4 EN ISO 14064 (all parts) and CEN ISO/TS 14067

EN ISO 14064-1, EN ISO 14064-2 and EN ISO 14064-3 concerns specifications for greenhouse gases. CEN ISO/TS 14067 concerns the carbon footprint of products in relation to greenhouse gases.

# **Annex C** (informative)

# Methods frequently used to verify claims related to the terms as mentioned in Clause 5

Verifiable methods, related to the terms as mentioned in Clause 5, are summarized in Table C.1.

Table C.1 — Methods frequently used to verify claims

Terms Clause Verifiable methods		Verifiable methods		
Organic 5.2.1		Traceability and mass balance verification		
Respect the environmentally friendly, ecofriendly and ecological	5.2.2	Not applicable – term not be used in any environmental claim related to textile product		
Bio-based	5.2.3	Traceability		
Recycled, recyclable	5.2.4	Traceability and mass balance verification		
Compostable	5.2.5	EN 14995, EN 13432		
Biodegradable	5.2.6	EN ISO 14855-2, EN 13432		
Renewable	5.2.7	Traceability		
Natural	5.2.8	Not applicable – term not be used in any environmental claim related to textile product		
Eco-designed	5.2.9	EN ISO 14006		
Green	5.2.10	Not applicable – term not be used in any environmental claim related to textile product		
Sustainable	5.2.11	Not applicable – term not be used in any environmental claim related to textile product		
"Substance" free	5.2.12	Test method related to the detection and/or determination of the content of the concerned substances		
Carbon neutral	5.2.13	CEN ISO/TS 14067		
Less water used 5.2.14 W		Water consumption		
Less energy used	5.2.15	Energy consumption		

# Annex D (informative)

#### Flow chart check-list when drafting a self-declared environmental claim

This annex is intended to position the self-declared environmental claim in a general framework.

Beside the content of the self-declared environmental claim, which focuses on environmental matter, the content of the claim should be questioned regarding its commercial or sectorial aspects, which could be covered by legislation.

Figure D.1 is intended to present a flow chart, as a check list, of the various aspects to be considered when drafting a self-declared environmental claim. This flow chart is based on a common hierarchy of the reference documents (i.e. general legislation, then specific legislation, then EN or ISO standards, then labels, etc.)

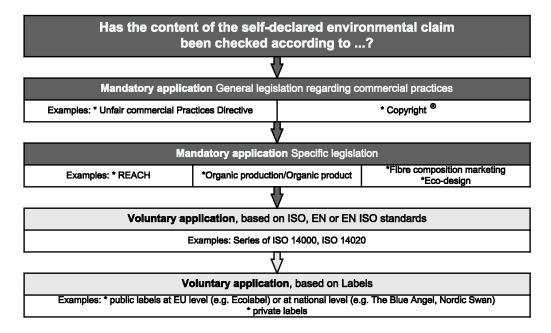


Figure D.1 — Flow chart check-list when drafting a self-declared environmental claim

#### **Bibliography**

- [1] EN 13432, Packaging Requirements for packaging recoverable through composting and biodegradation Test scheme and evaluation criteria for the final acceptance of packaging
- [2] EN 14995, Plastics Evaluation of compostability Test scheme and specifications.
- [3] EN ISO 2076, Textiles Man-made fibres Generic names (ISO 2076)
- [4] EN ISO 6938, Textiles Natural fibres Generic names and definitions (ISO 6938)
- [5] EN ISO 14001, Environmental management systems Requirements with guidance for use (ISO 14001)
- [6] EN ISO 14020:2001, Environmental labels and declarations General principles (ISO 14020:2000)
- [7] EN ISO 14024, Environmental labels and declarations Type I environmental labelling Principles and procedures (ISO 14024)
- [8] EN ISO 14025, Environmental labels and declarations Type III environmental declarations Principles and procedures (ISO 14025)
- [9] EN ISO 14063, Environmental management Environmental communication Guidelines and examples (ISO 14063)
- [10] EN ISO 14064-2, Greenhouse gases Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements (ISO 14064-2)
- [11] EN ISO 14064-3, Greenhouse gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (ISO 14064-3)
- [12] EN ISO 14855-2, Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions Method by analysis of evolved carbon dioxide Part 2:

  Gravimetric measurement of carbon dioxide evolved in a laboratory-scale test (ISO 14855-2)
- [13] EN ISO 19011, Guidelines for auditing management systems (ISO 19011)
- [14] EN ISO 14031, Environmental management Environmental performance evaluation Guidelines (ISO 14031)
- [15] ISO/TR 14062, Environmental management Integrating environmental aspects into product design and development
- [16] ISO 26000, Guidance on social responsibility
- [17] Regulation (EC)  $n^{\circ}66/2010$  on the EU Ecolabel
- [18] Regulation <u>n°834/2007</u> on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91
- [19] Regulation n°1007/2011

- [20] Regulation (EC) n°1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- [21] Directive n°2005/29/EC concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive')
- [22] Directive <u>n°2009/125/EC</u> establishing a framework for the setting of ecodesign requirements for energy-related products.
- [23] Decision  $\underline{n}^{\circ}2009/567/EC$  establishing the ecological criteria for the award of the Community Ecolabel for textile products.
- [24] Regulation related to organic product in Switzerland
- [25] Regulation related to organic product in Turkey (to be checked)
- [26] 16 CFR Part 260 in the USA related to organic product
- [27] ADEME (FRANCE). <u>Study</u>: Textile and sustainable development International inventory of labels and claims, 2007.
- [28] The Blue Angel (Der Blaue Engel, Germany): Basic Criteria for Award of the Environmental Label Textiles RAL-UZ 154.
- [29] SWAN N. (Denmark, Finland, Iceland, Norway, Sweden,): <u>Nordic</u> Ecolabelling of Textiles, skins and leather.
- [30] (France) <u>Guide pratique</u> des allégations environnementales à l'usage des professionnels et des consommateurs, 2010, revised in 2012.
- [31] (Germany) Environmental information for products and services Requirements Instruments Examples, 2008.





## British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

#### About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards -based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

#### Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

#### **Buying standards**

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

#### **Subscriptions**

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

**PLUS** is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email bsmusales@bsigroup.com.

#### **BSI Group Headquarters**

389 Chiswick High Road London W4 4AL UK

#### **Revisions**

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

#### Copyright

All the data, software and documentation set out in all British Standards and other BSI publications are the property of and copyrighted by BSI, or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI. Details and advice can be obtained from the Copyright & Licensing Department.

#### **Useful Contacts:**

#### **Customer Services**

Tel: +44 845 086 9001

Email (orders): orders@bsigroup.com
Email (enquiries): cservices@bsigroup.com

#### Subscriptions

Tel: +44 845 086 9001

Email: subscriptions@bsigroup.com

#### **Knowledge Centre**

Tel: +44 20 8996 7004

Email: knowledgecentre@bsigroup.com

#### **Copyright & Licensing**

Tel: +44 20 8996 7070 Email: copyright@bsigroup.com

