

STANDARD TESTEX CIRCULARITY



1 - Purpose

2 - Applicability

3 - Trademark

4 - Testing and labelling procedure

4.1 - Testing

4.1.1 - Durability

4.2 - Labelling procedure

4.2.1 - Durability

5 - Standard updating

6 - Protection of standard content

7 – Publication of data

Annex

1 Table of Durability tests

1 - Purpose

The aim of this standard is to provide clear, measurable criteria for promoting Circularity in the textile sector, focusing on three key areas: Durability, Reparability and Recyclability. By establishing precise criteria in these areas, the standard encourages design and production practices that extend the lifespan of textiles, facilitate their repair and ensure their end-of-life recycling. By guiding stakeholders in the textile industry towards more responsible and sustainable choices, the standard aims to reduce the sector's overall environmental impact, preserve natural resources and support the transition to a circular economy.

Durability, as defined within the framework of this standard, refers to the ability of textile products to maintain their functionality, aesthetics, and structural integrity over an extended period, which will be assessed through laboratory tests.

2 - Applicability

The subcategories are segmented as follows: First, products are classified according to their level of technicality to determine the appropriate tests. Second, they are classified by their intended use (sport or non-sport), allowing the tests to be adjusted accordingly.

This standard is applicable for textile products as defined below:

Subcategory 1: T-shirts, Segment: Woven, All uses
Subcategory 1: T-shirts, Segment: Knit, Non-sport
Subcategory 1: T-shirts, Segment: Knit, Sport
Subcategory 2: Shirts & Blouses, Segment: Woven, All uses
Subcategory 2: Shirts & Blouses, Segment: Knit, Non-sport
Subcategory 2: Shirts & Blouses, Segment: Knit, Sport
Subcategory 3: Sweaters & midlayers, Segment: All technicities, Non-sport
Subcategory 3: Sweaters & midlayers, Segment: All technicities, Sport
Subcategory 4: Jackets & Coats, Segment: Woven, Non-sport
Subcategory 4: Jackets & Coats, Segment: Woven, Sport
Subcategory 4: Jackets & Coats, Segment: Knit, Non-sport
Subcategory 4: Jackets & Coats, Segment: Knit, Sport
Subcategory 5: Pants & Shorts, Segment: Woven, Non-sport
Subcategory 5: Pants & Shorts, Segment: Woven, Sport
Subcategory 5: Pants & Shorts, Segment: Knit, Non-sport
Subcategory 5: Pants & Shorts, Segment: Knit, Sport
Subcategory 6: Dresses, Skirts & Jumpsuits, Segment: Woven, All uses
Subcategory 6: Dresses, Skirts & Jumpsuits, Segment: Knit, Non-sport
Subcategory 6: Dresses, Skirts & Jumpsuits, Segment: Knit, Sport
Subcategory 7: Leggings, Stockings, Tights and Socks, Segment: Classic thick, Non-sport

Subcategory 7: Leggings, Stockings, Tights and Socks, Segment: Classic thick, Sport
Subcategory 7: Leggings, Stockings, Tights and Socks, Segment: Sheer, All uses
Subcategory 8: Underwear, Segment: Woven, All uses - Tops
Subcategory 8: Underwear, Segment: Woven, All uses - Bottoms
Subcategory 8: Underwear, Segment: Knit, All uses - Tops
Subcategory 8: Underwear, Segment: Knit, All uses - Bottoms
Subcategory 9, Swimwear, Segment: Woven, All uses - Tops
Subcategory 9: Swimwear, Segment: Woven, All uses - Bottoms
Subcategory 9: Swimwear, Segment: Knit, All uses - Tops
Subcategory 9: Swimwear, Segment: Knit, All uses - Bottoms

3 - Trademark

The use of the trademark and logo associated with the standard is strictly regulated, and any unauthorised use is prohibited (refer to “declaration of conformity” in the application form).

4 - Testing and labelling procedure

4.1 - Testing

4.1.1 - Durability

To assess the durability of products within the framework of our textile standard TESTEX CIRCULARITY, we rely on a series of specific tests. Each test determines a performance level based on the results obtained. Aspects assessed include product deformation, fabric strength, fabric aspect damage, accessories aspect damage and colour damage. These tests enable us to accurately measure product strength and longevity, contributing to a comprehensive assessment of durability.

The tests tables are listed in Annex 1.

Testing specimen will be taken from samples as received in accordance with the relevant testing standard. Tests evaluating product deformation, specifically dimensional stability and spirality, will be conducted after 5 care cycles. Tests evaluating appearance after care cycles (ISO 15487) will be evaluated after 15 care cycles.

Tests not applicable, impossible or not carried out:

Occasionally, certain tests cannot be performed on a product. These tests are classified in one of the following three categories, with a justification verified during validation of the results:

Not applicable:

A test is “not applicable” if the product does not have the tested characteristic (for example, a zipper test for a product without a zipper).

Impossible:

A test is “impossible” if physical limitations of the product or equipment prevent it from being carried out. A full explanation must be given. For example, a test may be impossible if the product does not contain enough material. On the other hand, to claim that a test is impossible because it would destroy the product is unacceptable.

Not performed:

Tests which have not been carried out, but which are neither “not applicable” nor “impossible”, are classified as “not carried out”.

Exemption for genuine leather and fur

The durability tables in the Annex 1 do not apply to products made of 80% or more genuine leather and/or fur.

4.2 - Labelling procedure

4.2.1 - Durability

After the tests are carried out, a report will be provided.

The certificate attesting to the results of the product durability tests comes into force on the date of issue and is valid for one year. Renewal of the certificate is at the request of the company holding the label. During the period of validity of the certificate, the company may use the TESTEX CIRCULARITY trademark. This standard will be supplemented later with sections on Reparability and Recyclability. For now, when the TESTEX CIRCULARITY label is used, it must be specified that only the Durability section has been assessed.

Any product certified under the TESTEX CIRCULARITY will automatically lose its certification and the right to use TESTEX CIRCULARITY if it is professionally, physically, or chemically altered or treated.

5 - Standard updating

The standard will be updated later to include aspects of Repairability and Recyclability. These additions will allow TESTEX CIRCULARITY to be applied in its entirety. For now, the label only assesses the Durability of products, but once the sections on Repairability and Recyclability have been integrated, the label will offer a global assessment of product Circularity.

6 - Protection of standard content

The content of this standard is protected by copyright and is the exclusive property of TESTEX. Any unauthorised reproduction, distribution or use of this standard, in whole or in part, is strictly prohibited. This includes, but is not limited to, copying, distributing, modifying, adapting and using the associated text, graphics, tables, logos and trademarks. Any use of this standard must be expressly authorised in writing by TESTEX. Any violation of these conditions may result in legal action and appropriate sanctions to guarantee the security and confidentiality of information.

General Terms and Conditions of TESTEX AG at: [TESTEX GTC](#)

TESTEX undertakes to comply with all applicable data protection regulations and to implement appropriate measures to guarantee the security and confidentiality of information.

7 - Publication of Data

Relevant data from the durability tests may be published on the website, subject to approval. Please consult your TESTEX contact to ensure the correct handling and visibility of this information.

Annex 1 - Table of Durability tests

STANDARD TESTEX CIRCULARITY

Product Deformation	ISO 6330/ISO 5077: Determination of dimensional change after washing and drying (%)
	ISO 16322-3: Determination of spirality after laundering - Part 3: Woven and knitted garments (%)
	ISO 20932-1: Determination of the elasticity of fabrics - Part 1: Strip tests – Method A (min. recovery %)
	ISO 20932-3: Determination of the elasticity of fabrics - Part 3: Narrow fabrics(%) ⁸ ⁸ Shoulder straps measurement
	ISO 20932-3: Determination of the elasticity of fabrics - Part 3: Narrow fabrics(%) ⁹ ⁹ Measurement of the half side between brackets and between breasts
	ISO 20932-3: Determination of the elasticity of fabrics - Part 3: Narrow fabrics(%) ¹⁰ ¹⁰ Half waist measurement
Fabric Strength	EN ISO 12947-2: Determination of the abrasion resistance of fabrics by the Martindale method - Part 2: Determination of specimen breakdown (cycles)
	ISO 13934-2: Tensile properties of fabrics - Part 2: Determination of maximum force using the grab method (N)
	ISO 13937-1: Tear properties of fabrics - Part 1: Determination of tear force using ballistic pendulum method (Elmendorf) (N)
	ISO 13938-1 (or 2): Bursting properties of fabrics - Part 1: Hydraulic method for determination of bursting strength and bursting distension (Kpa)
Fabric Aspect Damage	BS 8479 modified: Method to determine a fabric's propensity to snagging (snagpod)
	ASTM D3939: Test method for snagging resistance of fabrics (Mace)
	ISO 12945-1: Determination of fabric propensity to surface pilling, fuzzing or matting - Part 1: Pilling box method

STANDARD TESTEX CIRCULARITY



	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Collar appearance: Curled or blistered aspect</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Interlining & reinforcements</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Product aspect: Holes or broken yarn</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Product aspect: Pulled yarn</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Appearance of collar & edges: Looseness</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Pilling and fuzzing</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Underwire aspect: Piercing</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Product aspect: Broken elastane (goes out)</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Fabric appearance: Delamination</p>
Seam Aspect Damage	<p>ISO 13936-2: Determination of the slippage resistance of yarns at a seam in woven fabrics - Part 2: Fixed load method (mm): Main fabric</p>
	<p>ISO 13936-2: Determination of the slippage resistance of yarns at a seam in woven fabrics - Part 2: Fixed load method (mm): Lining</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Seam appearance: Smoothed, delaminated or puckered for main fabric</p>

STANDARD TESTEX CIRCULARITY



<p>Accessories Aspect Damage</p>	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Handling of functional accessories</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Trims and accessories appearance</p>
<p>Colour Damage</p>	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Colour change: Prints & embroideries</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Colour change: Main fabric</p>
	<p>ISO 15487: Method for assessing appearance of apparel and other textile end products after domestic washing and drying - Colour change: Lining</p>
	<p>ISO 105-E02: Tests for colour fastness - Part E02: Colour fastness to sea water</p>
	<p>ISO 105-E03: Tests for colour fastness - Part E03: Colour fastness to chlorinated water</p>
	<p>ISO 105-B02: Tests for colour fastness - Part B02: Colour fastness to artificial light: Xenon arc fading lamp test</p>