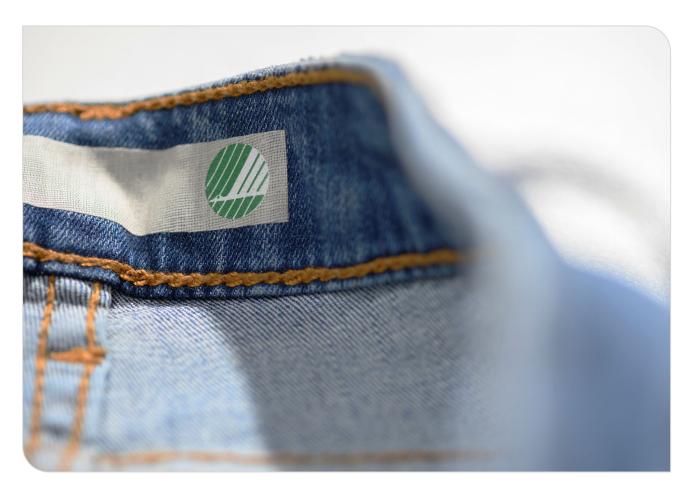
# Nordic Ecolabelling for

# Textiles, hides/skins, and leather



Version **5.4** • 01 March 2022 – 31 December 2026



# Content

1	Definitions	8
2	Product licence	9
3	Manufacturing licence	11
3.1	Description of product and production methods	11
3.2	Material limitations	12
3.3	Re-design of re-used textiles, hides/skins, and leather	14
3.4	Fibre production	15
3.4.3 3.4.4 3.4.5 3.4.6	1 Cotton and other natural seed fibres of cellulose	18 19 21 24 27
3.5	Chemicals used in textile production	29
3.5.2 3.5.2	1General chemical requirements2Specific chemical requirements	29 32
3.6	Coatings, laminates, and membranes	33
3.7	Specific chemical requirement for adhesives	36
3.8	Discharges from wet processes	36
3.9	Energy and water consumption	36
3.10	0 Fillings, stuffing materials, and padding	37
3.11	1 Hides/skins and leather	40
3.12	2Quality and performance requirements	45
3.12 3.12 3.12	2.2 Quality and performance requirements for hides/skins and leather	50
3.13	3Packaging, storage, and transport	51
3.14	4 Social and ethical requirements	52
3.15	5Quality and regulatory requirements	53
App App	pendix 1 Analysis and test laboratories pendix 2 Azo dyes and Carcinogenic aromatic amines pendix 3 Guidelines for standard, renewable pendities	

039 & 112 Textiles, hides/skins, and leather, 5.4, 14 November 2023

This document is a translation of an original in Danish. In case of dispute, the original document should be taken as authoritative.

# **Contact information**

In 1989, the Nordic Council of Ministers decided to introduce a voluntary official ecolabel, the Nordic Swan Ecolabel. These organisations/companies operate the Nordic Ecolabelling system on behalf of their own country's government. For more information, see the websites:

#### Denmark

Ecolabelling Denmark info@ecolabel.dk www.svanemaerket.dk

#### **Finland**

Ecolabelling Finland joutsen@ecolabel.fi www.ecolabel.fi

#### Sweden

Ecolabelling Sweden info@svanen.se www.svanen.se

#### Iceland

Ecolabelling Iceland Norræn Umhverfismerking á Íslandi svanurinn@ust.is www.svanurinn.is

#### Norway

Ecolabelling Norway info@svanemerket.no www.svanemerket.no

This document may only be copied in its entirety and without any type of change.
It may be quoted from provided that Nordic Ecolabelling is stated as the source.

# What is Nordic Swan Ecolabelled textiles, hides/skins, and leather?

The description of what characterizes Nordic Swan Ecolabelled textiles, skins and leather is divided into 2 product areas:

- 1. Textiles
- 2. Skins and leather

#### Nordic Swan Ecolabelled textiles

Nordic Swan Ecolabelled textiles have reduced environmental impact throughout the lifecycle of the textile. Among other things, through strict requirements for fibres and chemicals. At the same time, the textile producer must ensure that production complies with UN's International Labour Organization (ILO) conventions on workers' rights.

The requirements promote a more circular economy, reduce climate impact and save resources: Textiles with the Nordic Swan Ecolabel must be suited for a long lifetime and the quality is therefore tested and documented. Recycled fibres and reused textile can be used in the Nordic Swan Ecolabelled product if it complies with requirements to previously used chemicals. At the same time several of the Nordic Swan Ecolabel requirements support that the textile can be used in new resource loops after use and the textile production itself must be energy efficient.

#### The requirements for textiles include such as:

- Made from fibres, that are either organic, recycled or based on renewable resources complying with specific environmental requirements.
- Meets strict environmental and health requirements for chemicals used in textile production - this is important for wastewater, the people who produce the textiles and those who wear them.
- Meet strict requirements for substances that are classified carcinogenic, toxic to reproduction and can damage genetic material. Identified and potential endocrine disruptors on up-to-date lists from EU and national authorities are excluded. Also, flame retardants, fluorinated substances, and antibacterial additives incl. nanoparticles are excluded.
- Produced with water and energy efficient technology, which saves water and reduces CO<sub>2</sub> emissions.
- Quality tested to enable a long lifetime.
- Only contain metal parts e.g., zippers and buttons that meet strict requirements for heavy metals, and plastic parts are without phthalates.
- Is produced under proper working conditions, where UN's International Labour Organizations (ILO) conventions on workers' rights has been complied with.
- Unsold textiles must not be sent for incineration or dumped in landfill. This motivates to avoid overproduction.

## Nordic Swan Ecolabelled products of skins and leather

Nordic Swan Ecolabelled skins and leather have reduced environmental impact throughout the life cycle. Among other things, through strict requirements for the production of skins and leather and chemicals used. At the same time, the UN's International Labour Organizations (ILO) conventions on workers' rights must be complied with in the production of hides and skins.

The requirements promote a more circular economy, reduce climate impact and save resources: Only skins and leather which are residuals or by-products, or comes from reindeer and elk can be Nordic Swan Ecolabelled. Skins and leather with the Nordic Swan Ecolabel must have the ability to have long lifetime, and the quality is therefore tested and documented. Reused skins and leather can be used for re-design in the Nordic Swan Ecolabelled product if it complies with requirements to previously used chemicals. Several of the Nordic Swan Ecolabel requirements support that skins and leather can be used in new resource loops after ended use.

# Nordic Swan Ecolabelled products in hide/skin and leather:

- Are produced by residuals or by-products or skins from free-living, nonendangered species.
- Meet strict requirements for substances that are classified carcinogenic, toxic to reproduction and can damage genetic material. Identified and potential endocrine disruptors on up-to-date lists from EU and national authorities are excluded. Also, flame retardants and fluorinated substances are excluded.
- Meets strict environmental and health requirements for chemicals in the tanning process, but also for dyes, coatings, solvents, and biocides. This is important for wastewater, the people who produce the products and those who use them.
- Are tested free of chromium VI, which can be allergenic.
- Meets strict requirements for wastewater treatment from tanneries.
- Only contain metal parts e.g., zippers and buttons that meet strict requirements for heavy metals, and plastic parts are without phthalates.
- Quality tested to enable a long lifetime.
- Is produced under proper working conditions, where UN's International Labour Organizations (ILO) conventions on workers' rights has been complied with.
- Unsold skin and leather must not be sent for incineration or dumped in landfill. This motivates to avoid overproduction.

# Why choose the Nordic Swan Ecolabel?

- Brand owners with a product Licence may use the Nordic Swan Ecolabel trademark for marketing. The Nordic Swan Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Swan Ecolabel is a simple way of communicating environmental work and commitment to customers.
- The Nordic Swan Ecolabel clarifies the most important environmental impacts and thus shows how a company can cut emissions, resource consumption and waste management.

- Environmentally suitable operations prepare the brand owner for future environmental legislation.
- Nordic Ecolabelling can be seen as providing a business with guidance on the work of environmental improvements.
- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Swan Ecolabel Licence can also be seen as a mark of quality.

# What can carry the Nordic Swan Ecolabel?

The criteria cover products made from textiles, hides/skins and leather, or a combination of the above. In this context, textiles, hides/skins, and leather means:

- Products for both private and professional use may carry the Nordic Swan Ecolabel.
- Fibres\*, yarn, fabric, and finished textile products.
- Apparel and accessories, for example trousers, shirts, jackets, workwear, uniforms, underwear, handkerchiefs, scarves, purses, wallets, and bags.
- Furnishing fabrics (for both private and professional use), such as towels, bedding, curtains, tablecloths, pillows, duvets, and upholstery textiles, plus textiles for use in the furnishing of cars/trains/aircraft/boats.
- Durable non-woven textiles that are to be used for apparel and accessories
  or in interior furnishings as described above. Durable non-woven products
  are those that can be used multiple times and washed.
- Hide and leather products, such as jackets, trousers or bags, and hides/skins and leather as raw materials for clothing or home furnishings (including for cars/trains/aircraft/boats), from the following species of animal: sheep, goat, cow, horse, pig, elk, deer, and reindeer.
- Synthetic leather is included if textile fibre requirements, coating requirements (for textiles) and chemical requirements (for textiles) can be complied with.

The following products and materials cannot be ecolabelled in accordance with the criteria for textiles, hides/skins, and leather:

- Mineral fibre, glass fibre, metal fibre, carbon fibre and other inorganic fibres.
- Products or materials that are treated with flame retardants. This also applies to flame retardants that are integrated in the product or material.
- Wall coverings, such as textile wallpapers.
- Disposable products. 'Disposable products' refers to products that cannot be washed/cleaned or reused.
- Products containing electronic components.

<sup>\*</sup> Only the following fibre types can be certified with the Nordic Swan Ecolabel as a certified fibre and only if the relevant fibre requirements of the criteria are met: Organic cotton fibres, wool, and other creatine fibres (either sheep, camel, alpaca, or goat), regenerated cellulose produced by closed loop process, flax (linen), silk, bamboo, sisal and other bast fibres

• Products containing perfume or other fragrances.

Products that can be ecolabelled in accordance with other Nordic Swan Ecolabelling criteria are not covered by the textile criteria. Examples include:

- Disposable products made from non-woven material that cannot be washed or reused, for example paper towels (criteria for tissue paper).
- Microfibre cleaning cloths (criteria for supplies for microfibre based cleaning).
- Disposable products such as cotton pads for personal care (criteria for sanitary products).
- Wet wipes (criteria for cosmetic products).
- Baby products with textiles such as strollers and nursing pillows (criteria for baby products with textiles).
- Textile floor coverings, such as wall-to-wall carpets and floor mats (criteria for textile floor coverings and carpets).
- Textile products that form part of a piece of furniture, e.g. sofa cushions, mattresses and floor cushions (beanbags) (criteria for furniture and fitments). Pillows that are part of a combined furniture Licence, for example with beds or mattresses, and have the same type of filling, can be ecolabelled according to the criteria for furniture and fitments.
- Microfibre cloths (criteria for supplies for microfibre based cleaning).
- Textile banners and roll-ups with print on them (criteria for printing companies, printed matter, envelopes, and other converted paper products).
- Toys/soft toys (criteria for toys).
- Shoes (covered by the EU Ecolabel's criteria for shoes).

# How to apply

#### **Application and costs**

For information about the application process and fees for this product group, please refer to the respective national web site. See first in this document.

#### What is required?

The application must consist of an application form/web form and documentation showing that the requirements are fulfilled.

Each requirement is marked with the letter O (obligatory requirement) and a number. All requirements must be fulfilled to be awarded a Licence.

The text describes how the applicant shall demonstrate fulfilment of each requirement. There are also icons in the text to make this clearer. These icons are:

P Requirement checked on site

All information submitted to Nordic Ecolabelling is treated confidentially. Suppliers can send documentation directly to Nordic Ecolabelling, and this will also be treated confidentially.

## Licence validity

The Nordic Swan Ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended, and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

## **On-site inspection**

In connection with handling of the application, Nordic Ecolabelling normally performs an on-site inspection to ensure adherence to the requirements. For such an inspection, data used for calculations, original copies of submitted certificates, test records, purchase statistics, and similar documents that support the application must be available for examination.

#### Queries

Please contact Nordic Ecolabelling if you have any queries or require further information. See first in this document for addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

# 1 Definitions

Terms	Definition
Product Licence	Only with a product Licence the product is Nordic Swan Ecolabelled.  It is a mandatory Licence for companies, that want to place products in its own brand on the market with the Nordic Swan Ecolabel.  The ecolabelled product may be e.g., fibres, yarns, fabric or finished goods for the end
Manufacturing	marked.  A product Licence will always draw on one or more manufacturing Licences.
Licence	The Licence where most of the environmental requirements are documented.  A manufacturing Licence does not provide Nordic Swan Ecolabelled products. The Licence gives the right to produce for product Licences and this within a product range specified in the manufacturing Licence (product types and material compositions).  A holder of a manufacturing Licence can communicate to brand owners, that they can produce for Nordic Swan Ecolabelled products if the brand owner applies for a product Licence within the same product range as defined in the manufacturing Licence.  A manufacturing Licence does not give the right to communicate that the product is Nordic Swan Ecolabelled or meets the requirements of the Nordic Swan Ecolabel.  A brand owner who also produces the textile or wants to be the holder of a manufacturing Licence, must always also have a product Licence.
Ingoing substances	All substances, in the chemical product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine and in-situ generated preservatives) are also regarded as ingoing substances.

Impurities	Residuals, pollutants, contaminants etc. from production, including production of raw materials, that remain in the raw material/ ingredient and/ or in the chemical product in concentrations less than 100 ppm (0.0100 weight%, 100 mg/kg). Impurities according to this definition are not regarded as ingoing substances and are therefore except from the 0ppm restriction.  Examples of impurities are residues of the following: reagents including monomers, catalysts, by-products, "scavengers" (i.e. chemicals used to eliminate/minimise undesirable substances), cleaning agents for production equipment, and carry-over from other/earlier production lines.
Laminate	A laminated fabric is a two (or more) layer construction with a polymer film bonded to a fabric. Laminated fabrics are used in rainwear, automotive, and other applications.
Textile	Material made from weaving, knitting, crocheting, thread lacing, or made from felted fibres.
Textile element  "Textile element" is the designation of a unique textile element on the final product. element" describes the finished textile. Various textile elements have different supp or are produced differently, but may be of the same fibre type. Textiles which are of distinguished by dyeing or printing by the same supplier are considered to be the set textile element. For example, polyester from supplier 1 is one textile element, and product.  Textile element on the final p	
Fibre type	Types of textile fibre such as cotton, wool, polyester, and regenerated cellulose.
Reused textiles, hides/skins, leather	Reused textiles, hides/skins, leather, and filler materials are defined here as post-consumer materials or pre-consumer, where it can be documented that the material is a residual material or waste from another business. Fabrics (not made-up) are only counted as reused textiles, if it can be documented that more than two years have elapsed since the fabric was originally produced.
Recycled material  Chemical	Recycled material is defined in the requirement according to ISO 14021, which applies the following two categories:  "Pre-consumer/commercial" is defined as material that is recovered from the waste stream during a manufacturing process. Materials that are reworked or reground, or waste that has been produced in a process, and can be recycled within the same manufacturing process that generated it, are not considered to be pre-consumer recovered material.  Nordic Ecolabelling considers reworked, reground or scrap material that cannot be recycled directly in the same process, but requires reprocessing (e.g. in the form of sorting, remelting and granulating) before it can be recycled, to be pre-consumer/commercial material. This is irrespective of whether the processing is done in-house or externally.  "Post-consumer/commercial" is defined as material generated by households or commercial, industrial, or institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes materials from the distribution chain.  The definition of chemical recycling used here includes processes in which the final product
recycling	is either monomers, oligomers, or higher hydrocarbons. Processes with end-product in the form of naphtha or pyrolysis oils are not covered.
Recycled fibres	This covers both mechanical and chemical recycling of fibres and materials.

In this generation 5 of the criteria there are two Licence types:

- 1. Product Licence
- 2. Manufacturing Licence

Each Licence type requires a separate application. To get a Nordic Swan Ecolabelled product, you must have both types of licences. See definitions in the table above in section 1.

# 2 Product licence

A company selling Nordic Swan Ecolabelled products under its own brand, or in other ways places a Nordic Swan Ecolabelled product on the market, shall as a minimum meet the requirements O1 to O4 in this section, relevant part of requirement O96 and relevant requirements in section 3.15, to obtain its own product licence.

Find more information about product licence under definitions in section 1.

# O1 Traceability of the Nordic Swan Ecolabelled product

The brand owner is responsible for ensuring that a Nordic Swan Ecolabelled product can be traced back to a production licence (see section 1 Definitions).

The brand owner must provide the following information about the Nordic Swan Ecolabelled products:

- Whether the products are sold to consumers (B2C) and/or to professionals (B2B).
- Which production licence/licences are being used for each Nordic Swan Ecolabelled product.
- Textiles for B2C segment: Enter the brand owner's trade names as it appears on the products and a description of product type (e.g., bedding, workwear) and fibre composition.
- Textiles for B2B segment: Enter a unique naming of the Nordic Swan Ecolabelled product where at a minimum the product type (e.g., bedding, workwear) and fibre composition is stated. For products with "private label" for a leasing service (e.g., textile services), it must be stated here which "private labels" are included in the product licence.

The trade name must be identical to the trade names present on the Nordic Swan Ecolabelled products that are sold for retail. A Nordic Swan Ecolabelled product must not have the same trade name as a **non-**Nordic Swan Ecolabelled product from the same brand owner.

☑ The brand owner must submit the information specified in the requirement.
 ☑ A description of the procedure of the brand owner, which shows how it is ensure that the information held by Nordic Ecolabelling is kept updated for the entire period of the licence.

## O2 Unsold textiles, skins, and leather

For the Nordic Swan Ecolabelled products unsold textiles, skins and leather and nonconformity productions must not be sent for incineration or dumped in landfill.

The brand owner must inform Nordic Ecolabelling and state on their website how they deal with unsold products.

#### **Exemptions:**

- Products, with contaminations which is either harmful to the environment or to health, are exempt from this requirement. The contamination must be documented by a test report, which is archived at the company and thus accessible by inspection from Nordic Ecolabelling.
- Military and police uniforms are also exempt from this requirement.

For the product licence, the requirement includes the company's Nordic Swan Ecolabelled products until they are sold to the retail link, which is not owned by the same brand or corporation.

- Description of how unsold products are dealt with.
- Link to page on brand owner's website that has information on how unsold products are dealt with.

# O3 Information on reduced washing

For washable garments (except underwear, socks, and stockings) for the consumer market (B2C) the following text must be stated to the consumer: "Reduce number of washes - and help save energy and reduce climate impact". Equivalent wording shall be approved by Nordic Ecolabelling.

Submit photo of hang tag or care label on a product as well as routine for how this is done.

## O4 Primary textile packaging

If the brand owner is responsible for the primary textile packaging\* the following requirements shall be documented by the brand owner: O91, O92, O93 and O94

- \* Primary packaging is defined here as packaging from the manufacturer that accompanies the product all the way to the consumer. Delivery packaging used by online retailers is not considered to be primary packaging.
- Declaration from the brand owner describing who is responsible for the primary packaging of the product.

# 3 Manufacturing licence

All the following requirements are included in the manufacturing Licence.

See more about manufacturing Licence under definitions in section 1.

# 3.1 Description of product and production methods

This section contains the general requirements for the products and is where the Nordic Swan Ecolabelled products and their production methods are to be described. Requirement limits concerning sewing thread, care labels, elastic and small textile elements are also outlined here.

#### O5 Product description

Describe the products by providing the following information:

- If the product type is: fibre, yarn, fabric or finished textile product.
- For finished textile products specify the type (e.g., clothing for babies, children and adults, work wear, underwear, sportswear, swimwear, rainwear, home furnishings, bed linen etc.).
- A unique naming of the product e.g., product name and at a minimum the fibre composition.
- ☐ Information requested in the requirement.

#### O6 Material composition

The applicant must provide the information below for each unique product\*. An overview of all the materials, with indication of weight, present in the

An overview of all the materials, with indication of weight, present in the product (Bill of Materials), stating:

- All fabrics, specifying their designation/name and fibre composition as a percentage by weight (weight%).
- Membranes/coatings, impregnations, or laminates.
- Details/accessories (e.g., zippers, buttons, Velcro strips, etc.), with information of the material type (e.g., plastic, metal).
- Fillings and stuffing with information of the material type (e.g., foam, feather).
- Information must be provided on whether textile fibres, coating polymer, filling and plastic materials are recycled and/or biobased.
- If the fabric is reused, this must be stated.

- \* The same product in different colours and sizes is still defined here as one unique product.
- Schematic overview containing the above information for all products covered by the manufacturing Licence. The overview must clearly state which materials are present in the individual product.

#### O7 Production chain

The following information about the production chain\*\* must be stated, in overview form, for each unique product\*:

- Description of all the production methods/treatment techniques for the whole production of the product, including production by suppliers, as far back as the fibre/ material suppliers, preferably presented in a flow chart.
- Designation/name of the fibres, yarns, and fabrics, which matches the designation/name stated in requirement O6. It must be clear which actors produce and process the various materials.
- Information on all the actors in the production chain, including suppliers and agents, is to be provided: company name, production location, contact person and the production processes used.
- \* The same product in different colours and sizes is still defined here as one unique product. Products with an identical production chain can be grouped together if it is clear which trade names/product name that are gathered into groups.
- \*\* For re-design, the required description of the production chain starts with the recycled textile as feedstock/raw material.
- Schematic overview (e.g., flow chart) presenting the above points.

#### 3.2 Material limitations

#### O8 Material limits

The criteria contain the following material limitations and triviality limits:

- Sewing thread is not covered by the requirements.
- For embroidery thread, only the following chemical requirements apply: O33 Classification of chemical products, O34 Prohibition of CMR substances and O35 Prohibited substances.
- Embroideries, which together amount to a maximum of 50 cm<sup>2</sup>, are exempt from the requirements.
- Belt buckles of metals must not exceed 25% by weight of the belt.
- Fibre types, hides/skins, and leather for which there are requirements in the criteria, and which are included with a total amount of no more than 5% by weight of the product are exempt from the fibre requirements in section 3.4 and requirements for hides/skins and leather.
- Description showing compliance with the material limits in the requirement. The material overview from requirement O6 may be used as documentation.

# O9 Smaller textile elements

Smaller textile elements (e.g., pocket linings) that are individually present to a maximum of 5% by weight and in total to a maximum of 10% by weight in the finished product may be exempted from the requirements concerning fibre and textile production, if one of the following conditions is met:

• the textile element has an EU-Ecolabel certificate or

- the textile element has a GOTS certificate or
- the textile element has an Oeko-Tex 100 class I certificate or can be documented as meeting the requirement level for Oeko-Tex 100 class I in test reports. In addition, fluorinated substances (fluorinated organic compounds) must not be used.

Alternatively, the requirements concerning fibre and textile production are to be fulfilled and documented.

- Certificate relating to the requirements for the textile elements that invoke this exemption.
- For Oeko-Tex 100 certified textiles: an additional statement regarding fluorinated organic compounds.

#### O10 Elastic bands

Elastic bands up to a total maximum of 25% of the product's weight may be exempted from the requirements for fibre and textile production, if:

- the elastic band has a GOTS certificate for accessories or Oeko-Tex 100 class I certification
- ☐ Certificate showing that the requirement is fulfilled.

## O11 Info print/labels

Information printed directly on the textile product itself must meet the following chemical requirements: O33 Classification of chemical products, O34 Prohibition of CMR substances and O35 Prohibited substances, O37 Metal complex dyes and pigments and O42 VOC in printing paste. There are no requirements relating to fabric info labels sewn or glued into textiles (care label, brand name label and size label).

State which labels are used on the product.

## O12 Zippers, buttons and other details

Details/accessories\* with no practical function such as sequins, rivets, glitter and so on are not permitted.

Rivets may, however, be used on denim to attach pockets, as they have a reinforcing function in this situation, if the material meets the requirements below.

Metal or plastic details/accessories that have a function may be used (e.g., buttons, press studs, zippers, buckles and reflectors), if the material meets the requirements below.

#### Metal details

The following limit values apply for metal details:

- Lead (Pb) <90 mg/kg (Digested sample, Detection GC-ICP-MS)
- Cadmium (Cd): <40 mg/kg (Digested sample, Detection GC-ICP-MS)</li>
- Nickel (Ni): Migration limit <0.5 micrograms/cm2/week (Test methods EN 12472 and EN 1811 or EN 16128).

## Plast- and rubber details:

Plastic and polymer elements such as tape for seams must not be made from chlorinated plastic such as PVC (polyvinylchloride) or contain phthalates.

- \* All parts of the product that are not fabric, sewing thread, stuffing or skin and leather are details.
- Metal: Test report for the metal material in question (e.g., buttons) showing fulfilment of the metal requirement. Alternatively, a GOTS or Oeko-Tex 100 class I certificate may be used as documentation for metal details.

- Plastic: Declaration from the manufacturer of the plastic material (e.g. button manufacturer) that the plastic meets the requirement.
- Declaration from the Licencee that no details or accessories are used without a practical function.

# 3.3 Re-design of re-used textiles, hides/skins, and leather

Nordic Ecolabelling wishes to promote the re-use of textiles, hides/skins, and leather. However, to prevent the spread of substances that are harmful to health and the environment, the reused textile, hide/skin, and leather elements used must meet the requirements below. Other newly produced elements of the product and details such as buttons and zippers must meet the relevant requirements in the criteria.

If the re-used material or the finished product is subject to additional processing with chemical products (e.g. dyes, printing, finishing, etc.), the requirements in sections 3.5.1 and 3.5.2 regarding the relevant chemicals must be fulfilled and documented. Recycled textiles, hides/skins or leather that are not further processed using chemicals do not need to meet the requirements concerning chemicals used in textile, hide/skin, and leather production.

The requirements regarding recycled fibres are described in the section on fibre production since this section only addresses textile recycling.

## O13 Re-used textiles, hides/skins, leather

Re-used textile, hide/skin, and leather materials\* may be used for redesign\*\* of the whole or part of the product if the following are met:

- the material shall not come from workwear and other textiles used in the chemical and oil industry.
- the materials must not contain plastisol print (e.g., PVC, polyvinylchloride), e.g., in print, coatings or details.
- before re-design, textiles from the health care sector have been washed
  at an industrial laundry in a wash, where microorganisms are
  inactivated. The washing method must either comply with EN 14065:
  Textiles Laundry-treated textiles Control systems for
  biocontamination or equivalent national certification standard approved
  by Nordic Ecolabelling\*\*\*.

At the same time, the material must either:

- originally be ecolabelled with the Nordic Swan Ecolabel, the EU-Ecolabel, GOTS or Bra Miljöval, or have Oeko-Tex 100/Leather standard by Oeko-Tex certification, or
- · only used for
  - o furnishing fabrics such as rugs, tablecloths, blankets (not bed linen) and curtains
  - outerwear and suit jackets for consumers
  - o bags, purses, wallets, and other adult accessories.

#### Re-design for professional use:

When re-designing products for professional use, there must be a procedure to perform an internal quality assessment of the reused textile to ensure that the produced re-design can fulfil the expected function of the re-designed product.

#### Further processing of the textile:

If further processing is carried out with chemical products (e.g., dyeing, printing, finishing, etc.), the requirements in section 3.5 for relevant chemicals must be complied with. As well as requirement O12 for details such as buttons and zippers, if used.

- \* Reused textiles, hides/skins, leather, and filler materials are defined here as post-consumer materials or pre-consumer, where it can be documented that the material is a residual material or waste from another business. Fabrics (not made-up) are only counted as reused textiles, if it can be documented that more than two years have elapsed since the fabric was originally produced. For a further definition, see ISO 14021.
- \*\* Re-design is defined here as changing the original appearance, function, or content of the product. Direct reuse without re-design is not covered here.
- \*\*\* Examples on equivalent national industry standards: DK: DS 2451-8
  Infection control in the health care sector Part 8: Requirements for laundering
  and handling of textiles for multiple use. Norway: Norwegian Laundries' Quality
  Supervision industry standard «Infection control for laundries that process
  textiles for health care institutions».
- Originally labelled: Documentation that the textile, hide/skin, or leather was originally labelled with the ecolabels stated in the requirement or labelled with Oeko-Tex 100. This may be an original invoice or a label on the textile.
- No labelling: Documentation showing that the textile, hide/skin, or leather being used is reused. Also, description of the type of product in which the reused textile, skin or leather will be used.
- Textiles from the health care sector: Declaration on that the textile has been washed in an industrial laundry in a microbiological wash in accordance with the requirement.
- Declaration that reused material from the mentioned industries has not been used, and that the material does not contain PVC, for example in plastisol print, coatings, or details.
- Procedure on how in the production of re-design for professional use an assessment is made of the quality of the reused textile, to ensure the quality makes it possible to fulfil the expected function of the re-designed product.

Procedure on how in the production of re-design for professional use an assessment is made of the quality of the reused textile, to ensure the quality makes it possible to fulfil the expected function of the re-designed product.

# 3.4 Fibre production

Nordic Ecolabelling sets requirements concerning the production of both natural fibres and synthetic fibres. Natural and synthetic fibres all impact on the environment in one way or another. Synthetic fibres, for example, uses fossil resources, while conventional cultivation of cotton involves high consumption of water and pesticides.

The criteria cover the most common fibre types in the textile industry, with the intention of promoting the variants of each individual fibre type with the best environmental profile. Nordic Ecolabelling also wishes to encourage the textile industry to work towards more sustainable textile production along the whole value chain. The approach here is therefore to focus on the fibre types that are most widely used and thus make a major contribution to the textile industry's environmental impact — to nudge them in a less environmentally harmful

direction – and to promote new, less environmentally harmful, fibres. This makes it possible to steer even more textile production in a sustainable direction.

The fibres are usually spun. However, if the if fabric is non-woven, for example as a substrate (e.g., for laminates, coatings and membranes), the fibre raw materials must also meet the requirements associated with the relevant fibre in this section.

Fibres must comply with relevant requirements for the type of fibre in the criteria, regardless of whether they apply for Nordic Ecolabelling of fibre, yarn, fabric or finished textile product. The following fibre types can be Nordic Ecolabelled at fibre level: Organic cotton fibres, wool, and other creatine fibres (either sheep, camel, alpaca, or goat), regenerated cellulose, flax (flax), silk, bamboo, sisal and other bast fibres.

#### **Natural fibre**

Vegetable fibres are subject to specific requirements concerning the cultivation of cotton and other cellulose seed fibres, as well as flax and other bast fibres. For animal fibres such as wool and other keratin fibres, requirements are set for the level of residues of pesticides against parasites in wool, as well as COD discharges in wastewater.

# Regenerated cellulose fibre

Raw material for regenerated cellulose fibres must either consist of recycled raw material or a high proportion of certified FSC or PEFC wood raw. In addition, requirements banning use of endangered wood species. The production of regenerated cellulose fibres must be a closed loop system or for textiles with less than 30% regenerated cellulose in the fabric, productions that meet strict requirements for emissions are also accepted. In addition, bleaching of cellulose pulp or cellulose fibres with chlorine gas or hypochlorite is prohibited.

# Synthetic fibre - recycled fossil or biobased

Synthetic fibres are subject to the requirement that either they must be bio-based or recycled materials are used in production. For bio-based fibres, there are also requirements stipulating the types of raw materials that may be used and that they must not be cultivated using genetically modified raw materials. Recycled fibres are required to have been tested for content of harmful chemicals. For regenerated cellulose fibre, requirements are set regarding the production processes. Here, the fibre production must involve no discharge to wastewater, and sourcing of a high share of fibres from sustainable forestry or as recycled.

# Fibre from recycled material

Fibre from recycled material/fibres\* is exempted from the requirement for virgin fibre but, instead of meeting the requirements for the type of fibre concerned, the applicant must document that the material or fibre is purchased as recycled, and document requirement O30 on testing for content of undesirable substances. There are no requirements concerning chemicals used in the actual recycling processes. However, as with other chemicals added, for example during dyeing or spinning, there are requirements concerning the chemicals used in the treatment of the fibres in requirement O31 and the requirements for chemicals used in all the processes in the textile production, as set out in section 3.5.

\* See definition of recycled material and fibre in section 1 Definitions.

# Fibre not covered by the criteria

Textile fibres that are not subject to any fibre requirements in these criteria may account for no more than 5% by weight of the individual fabric.

#### 3.4.1 Cotton and other natural seed fibres of cellulose

#### O14 Cotton fibres

Cotton and other natural seed fibres of cellulose (including kapok) must be organically cultivated\* or recycled\*\*.

The following product types for professional use can be exempted from the requirement of 100% organic cotton:

- Clothing (uniforms and workwear) and
- Bed linen, towels, bathrobes, tablecloths, tea towels, cloths and napkins for e.g., hotels, hospitals and other institutions.

If using the exception, the cotton fibres shall not come from GMO (genetically modified organisms)\*\*\* and shall be cultivated according to one of the following standards:

- BCI (Better Cotton Initiative)
- CmiA (Cotton made in Africa)
- FairTrade cotton for cotton

The proportions of the different types of certified cotton must add up to 100% and all documentation shall reference the Control Body or certifier of the different standards.

Documentation that BCI cotton does not contain material from GMO shall be documented with either a) or b):

- a) A yearly test of the raw cotton in accordance with test method ISO/IWA 32:2019 or equivalent.
- b) Only for countries where genetically modified cotton varieties are forbidden to grow: documented traceability back to the cultivation and a declaration that no genetically modified cotton varieties have been cultivated.

Cotton certified via CmiA and FairTrade cotton does not need to be tested, as long as these schemes exclude the use of genetically modified cotton.

Cotton fibre, cotton yarn and cotton fabrics cannot as a own licence product be Nordic Swan Ecolabelled if using the exception.

- \* Organic cotton means cotton fibre that is certified as organic or transitioning to organic according to a standard approved in the IFOAM Family of Standards, such as Regulation (EU) 2018/848, USDA National Organic Program (NOP), APEDA's National Programme for Organic Production (NPOP), China Organic Standard GB/T19630. Also approved are GOTS, OCS 100, OCS blended (shares that are not organic must meet other relevant requirements in this criteria) and DEMETER and certification as "transitioning to organic cultivation". The certification body must have the accreditation required for the standard, such as ISO 17065, NOP or IFOAM.
- \*\* Recycled fibres or materials: Pre-consumer or post-consumer recycled raw materials, see the definition in the ISO 14021 standard. Both mechanically and chemically recycled fibres are included. See the definitions in section 1 for more details.
- \*\*\* Genetically modified organisms are defined in EU Directive 2001/18.

- Organic cotton: Valid certificate showing that the cotton in the Nordic Swan Ecolabelled product was organically cultivated in line with the standards in the requirement. If the supplier is the holder of GOTS certification, the requirement must be documented with a transaction certificate showing that the goods supplied are GOT certified.
- Recycled fibres: Fulfilment of the requirement is documented for recycled fibre with either a) and/or b) below:
  - a) Certificate showing that the raw material is 100% recycled (post and/or preconsumer) with Global Recycled Standard certificate 4.0 (or later versions), Recycled Claim Standard (RCS) or other equivalent certification approved by Nordic Ecolabelling.
  - b) Present documentation demonstrating that the recycled fibre was purchased as 100% recycled (post and / or pre-consumer) and state the supplier.
- Cotton fibres covered by the exception: Documentation showing that the cotton is grown within one of the three IPM standards BCI, CmiA or Fair-Trade cotton. All documentation shall reference the Control Body or certifier of the different forms of cotton, and be documented
  - o on an annual basis for purchased cotton with transaction records and/or invoices, or
  - on a final product basis (by weight) measured at spinning and/or fabrication.
- Yearly test report showing that the BCI raw cotton does not contain material from genetically modified cotton and procedure demonstrating that how a yearly test is done.
- Alternative to test for BCI cotton: Declaration that cotton originates from countries with a ban on genetically modified cotton as well as documentation showing that the purchased cotton can be traced back to the BCI farmers.

# 3.4.2 Silk, flax (linen) and other bast fibres (hemp, jute, and ramie)

#### O15 Silk

Silk fibre that makes up more than 30% by weight of the fabric must either be certified as "organic"\* or be recycled\*\*.

- \* Organic silk: silk that is certified as organic or transitioning to organic according to a standard approved in the IFOAM Family of Standards, such as Regulation (EU) 2018/848, USDA National Organic Program (NOP), APEDA's National Programme for Organic Production (NPOP), China Organic Standard GB/T19630. Also approved are GOTS and DEMETER and certification as "transitioning to organic cultivation". The certification body must have the accreditation required for the standard, such as ISO 17065, NOP or IFOAM.
- \*\* Recycled fibres: See the definitions in section 1.
- Valid certificate showing that the silk in the Nordic Swan Ecolabelled product was organically cultivated in line with the standards in the requirement. If the supplier is the holder of GOTS certification, the requirement must be documented with a transaction certificate showing that the goods supplied are GOT certified.
- Fulfilment of the requirement is documented for recycled fibre with either a or b below:
  - a) Global Recycled Standard certificate 4.0 (or later versions), Recycled Claim Standard (RCS)or other equivalent certification approved by Nordic Ecolabelling.
  - b) Present documentation demonstrating that the recycled fibre was purchased as recycled and state the supplier.

## O16 Flax (linen) and other bast fibres

Flax (linen) and other bast fibres (e.g. hemp, jute and ramie) may only be cultivated using pesticides permitted according to Regulation (EC) No 1107/2009.

Valid certificate from European Flax Standard or equivalent.

# O17 Water retting of flax (linen) and other bast fibres

Production of flax (linen) and other bast fibres (e.g., hemp, jute and ramie) using water retting is only allowed if the wastewater from the retting ponds is treated so as to reduce the chemical oxygen demand (COD) or the total organic carbon (TOC) by at least:

- 75% for hemp fibres
- 95% for flax (linen) and other bast fibres

Test method: Test in accordance with ISO 6060.

Measurement of BOD (Bio-chemical oxygen demand), PCOD (particulate chemical oxygen demand) or TOC (total oxygen demand) may also be used if a correlation to COD is evident.

- Test report from the producer of the flax (linen)/bast fibre, showing that the requirement is fulfilled, <u>or</u>
- Proof of a valid EU Ecolabel licence in line with the Commission Decision of July 2014.

# 3.4.3 Wool and other keratin fibres

#### O18 Wool and other keratin fibres

Any wool and other keratin fibres used must originate from sheep, camels, alpaca, or goats, and must be one of the following:

- 1. certified organic wool\*
- 2. recycled wool\*\*, or
- 3. conventional wool with documentation that the requirement below concerning pesticide content in the raw wool is fulfilled.

Pesticide content in conventional wool:

- The total content of the following substances may not exceed 0.5 ppm: γ-hexachlorocyclohexane (lindane), α-hexachlorocyclohexane, β-hexachlorocyclohexane, δ-hexachlorocyclohexane, aldrin, dieldrin, endrin, p,p'-DDT and p,p'-DDD, cypermethrin, deltamethrin, fenvalerate, cyhalothrin and flumethrin.
- The total content of the following substances may not exceed 2 ppm: diazinon, propetamphos, chlorfenvinphos, dichlorfenthion, chlorpyriphos, fenchlorphos, dicyclanil, diflubenzuron and triflumuron.
- The requirement to test for pesticide residues does not apply if documentation can show which farmers produced at least 75% by weight of the wool or keratin fibres, and those farmers can confirm that the substances named in the requirement have not been used in the areas or on the animals in question.

**Test method:** The tests must be performed in accordance with IWTO Draft Test Method 59: Method for the Determination of Chemical Residues on Greasy Wool or equivalent.

The analysis must be performed on raw wool before wet processing and the test report must be submitted with the application. Thereafter, the applicant must have a procedure in place for annual testing in line with the requirement and for ensuring compliance with the requirement. Nordic Ecolabelling must be informed if the requirement is not fulfilled.

- \* Definition of organic wool: wool fibre that is certified as organic or transitioning to organic according to a standard approved in the IFOAM Family of Standards, such as Regulation (EU) 2018/848, USDA National Organic Program (NOP), APEDA's National Programme for Organic Production (NPOP), China Organic Standard GB/T19630. Also approved are GOTS and DEMETER and certification as "transitioning to organic cultivation". The certification body must have the accreditation required for the standard, such as ISO 17065, NOP or IFOAM.
- \*\* Definition of recycled wool: Pre-consumer or post-consumer recycled raw materials, see the definition in the ISO 14021 standard. Both mechanically and chemically recycled fibres are included. See the definitions in section 1 for more details.
- Organic wool: Valid certificate showing that the wool in the Nordic Swan Ecolabelled product was organically cultivated in line with the standards in the requirement. If the supplier is the holder of GOTS certification, the requirement must be documented with a transaction certificate showing that the goods supplied are GOT certified.
- Recycled fibre: Fulfilment of the requirement is documented for recycled fibre with either a) or b) below:
  - a) Global Recycled Standard certificate 4.0 (or later versions) or Recycled Claim Standard (RCS) certificate showing that the raw material is recycled, or other equivalent certification approved by Nordic Ecolabelling.
  - b) Present documentation demonstrating that the recycled fibre was purchased as recycled and state the supplier.
- Conventional wool: Declaration from the wool supplier that no mulesing has been used.
- Conventional wool: Test report showing that the pesticide requirement has been fulfilled, plus a written procedure showing how an annual test is performed in line with the pesticide requirement, along with annual in-house checks of compliance with the requirement. Test results are to be archived and kept available for inspection by Nordic Ecolabelling. An alternative to the pesticide test is a confirmation from the farmers that the stated substances are not used, plus an overview of the proportion of wool concerned.

# O19 Scouring agents

Scouring agents that are used in the washing of raw wool must be either readily aerobically biodegradable or inherently aerobically biodegradable in accordance with test method: OECD 301 A-F (60% degradability), OECD 310 (60% degradability), OECD 302 A-C (70% degradability) or equivalent test methods.

Declaration from the chemical supplier and safety data sheet for the scouring agents used and/or OECD or ISO test results showing compliance with the requirement.

## O20 COD emissions from wool scouring plants

Emissions of COD (chemical oxygen demand) from wool scouring plants must not exceed (expressed as a 6-month average):

- 45 g/kg for fine wool (merino wool or wool fibre that is 25 microns or thinner)
- 25 g/kg for coarse wool

Wastewater that is sent to municipal or other regional treatment works is exempted.

Measurement of PCOD (particulate chemical oxygen demand), TOC (total oxygen demand) or BOD (bio-chemical oxygen demand may also be used, if a correlation to COD is evident.

Test method: Test according to ISO 6060.

Test report from the wool scouring plant showing that the requirement is fulfilled. Alternatively, a valid GOTS or EU Ecolabel certificate may be used as documentation.

# O21 pH value and temperature of wastewater from wool scouring

The pH value of the wastewater released to the surface water must be 6-9 (unless the pH value in the recipient lies outside this interval), and the temperature must be lower than  $40\,^{\circ}\mathrm{C}$  (unless the temperature in the recipient is higher).

Test reports from the wool scouring plant showing measurements of the wastewater's pH and temperature. Alternatively, a valid GOTS certificate may be used as documentation.

# O22 Ban on mulesing

Surgical mulesing and mulesing performed using liquid nitrogen are not permitted on merino sheep.

Declaration from the merino wool producer, stating that no mulesing has taken place.

# 3.4.4 Regenerated cellulose fibre

Raw materials for regenerated cellulose fibres must meet either requirements O23 or O24 for recycled textile fibre and wooden fibre materials, respectively. A fibre which is based on raw materials from a combination of requirements O23 and O24 can also be approved if the different raw materials each meet their own requirements.

#### O23 Regenerated cellulose fibre, recycled textile fibre

Recycled raw materials for the production of new regenerated cellulose fibres must be pre-consumer or post-consumer\* cellulosic material.

It must be documented that 100% is recycled material.

The traceability of the recycled raw material must be documented with a certificate from either the Global Recycled Standard (version 4 or later) or the Recycled Claim Standard (version 2 or later).

- \* Recycled material is defined here as pre-consumer and post-consumer, see definition in ISO 14021. See definition in section 1.
- Certificate from either Global Recycled Standard (version 4 or later) or Recycled Claim Standard (version 2 or later) documenting, that the raw material has been recycled.
- Documentation showing that 100% of the raw material has been recycled.
- When using a mixture of virgin and recycled raw material: Documentation which shows that 100% of the raw material meets either requirement O23 or O24.

#### O24 Regenerated cellulose fibre, limitation of tree species

The requirement only applies to virgin wood fibres and must be documented either by the manufacturer of regenerated fibres or the manufacturer of the dissolving pulp and the manufacturer of regenerated fibres.

Nordic Ecolabelling's list of tree species\* consist of virgin tree species listed on:

- a) CITES (Appendices I, II and III)
- b) IUCN red list, categorized as CR, EN and VU
- c) Rainforest Foundation Norway's tree list
- d) Siberian larch (originated in forests outside the EU)

Tree species listed on a) CITES (Appendices I, II and III) are not permitted to be used.

Tree species listed on either b), c) or d) may be used if it meets all the following requirements:

- the tree species does not originate from an area/region where it is IUCN red listed, categorized as CR, EN or VU.
- the tree species does not originate from Intact Forest Landscape (IFL), defined in 2002 http://www.intactforests.org/world.webmap.html.
- the tree species shall originate from FSC or PEFC certified forest/plantation and shall be covered by a valid FSC/PEFC chain of custody certificates documented/controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.
- the tree species grown in plantation shall in addition originate from FSC or PEFC certified forest/plantation, established before 1994.

## **Exemptions:**

- Eucalyptus and acacia are exempted from the list. Eucalyptus/acacia must be
  at least 50% certified and come from forests/plantations managed in
  accordance with sustainable forestry management principles that meet the
  requirements of FSC or PEFC. The remaining share must be from controlled
  sources (FSC controlled wood or PEFC controlled sources).
- \* The list of tree species is located on the website: <a href="http://www.nordic-ecolabel.org/certification/paper-pulp-printing/pulp--paper-producers/forestry-requirements-2020/">http://www.nordic-ecolabel.org/certification/paper-pulp-printing/pulp--paper-producers/forestry-requirements-2020/</a>
- Declaration from the applicant/manufacturer/supplier that tree species listed on a-d) are not used, <u>or</u>

#### If species from the lists b), c) or d) is used:

- The applicant/manufacturer/supplier are required to present a valid FSC/PEFC Chain of Custody certificate that covers the specific tree species and demonstrate that the tree is controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.
- The applicant/manufacturer/supplier are required to document full traceability back to the forest/certified forest unit thereby demonstrating that:
  - the tree does not originate from an area/region where it is IUCN red listed, categorized as CR, EN or VU;
  - the tree species does not originate from Intact Forest Landscape (IFL), defined in 2002 http://www.intactforests.org/world.webmap.html;
  - for plantations, the applicant/manufacturer/supplier are required to document that the tree species does not originate from FSC or PEFC certified plantations established after 1994.
- For pulp of eucalyptus/acacia: valid traceability certificate from the pulp producer and documentation showing that the certification requirement of a minimum of 50% is fulfilled and that the remaining share comes from controlled sources.

## O25 Regenerated cellulose fibre, traceability, and certified raw materials

The manufacturer of regenerated fibre or the manufacturer of the dissolving pulp must state the name (species name) of the raw material used in its production.

The manufacturer of regenerated fibre or the manufacturer of the dissolving pulp must have Chain of Custody certification under the FSC or PEFC schemes.

Manufacturers who only use recycled material are exempt from the requirement for Chain of Custody certification.

Certification of the fibre raw materials in regenerated fibres, on an annual basis:

- 1. At least 50% of the raw materials must origin from forest managed according to sustainable forestry management principles that meet the requirements set out by FSC or PEFC chain of custody schemes, or
- 2. At least 70% of the fibre raw material must be recycled material\*, or
- 3. A combination of certified and recycled fibres.

The remaining percentage of wood raw materials must be covered by the FSC/PEFC compliance schemes (FSC Controlled Wood/PEFC Controlled Sources).

The requirement must be documented as purchased raw material/fibre on an annual basis (volume or weight) by the producer of regenerated fibre or the manufacturer of the dissolving pulp.

Producers of dissolving pulp must be specified. If several pulps are mixed, the certification percentage must be met for the finished pulp that is used.

- \* Recycled material is defined according to ISO 14021. See section 1 for additional definitions.
- The manufacturer of regenerated fibres or the manufacturer of the dissolving pulp shall describe name (species name) on the fibre raw material used.
- Valid Chain of custody certificate from manufacturer of pulp or regenerated cellulose or link to certificate holders' valid certificate information in FSC/PEFC databases covering all wood and bamboo fibre raw materials used (e.g., via link to the website).
- Producers that only use recycled fibres from carboard and paper shall show that the recycled fibres are covered by EN 643 delivery notes. In the case of recycled fibres from other sources, the supplier must be stated, and it must be shown that the fibres are recycled according to the definition.
- If the requirement for certification percentage is documented by the manufacturer of dissolving pulp (s) must be specified. The pulp producer must document that the pulp contains a minimum of 50% certified raw material on an annual basis by enclosing accounts which show the proportion of certified wood raw material in production, and that the rest of the raw material is from controlled sources.
- If the requirement for certification percentage is documented by the manufacturer of regenerated cellulose, the supplier (s) of the dissolving pulp must enclose documentation for the proportion of certified fibre in the various pulps purchased and that the average certification percentage is met on an annual basis. Documentation must be attached, e.g., invoice or delivery note, for delivery between pulp producer and producer of regenerated cellulose which shows that purchased pulp contains a minimum of 50% certified wood raw material or bamboo.
- Alternatively, the claim can be documented by the next link (purchaser of the regenerated cellulose fibres) purchasing FSC/PEFC marked regenerated

cellulose fibre or with a claim with 50% certification. Nordic Ecolabelling may request further documents to examine whether the requirements are fulfilled.

## O26 Bleaching with chlorine gas

Chlorine gas must not be used when bleaching cellulose mass or cellulose fibres.

- \* Residual amounts of chlorine gas formed during the production of chlorine dioxide from chlorate are excluded.
- A declaration from the cellulose mass and regenerated cellulose manufacturers that the requirement is fulfilled or a valid EU Ecolabel Licence in accordance with the Commission's decision from July 2014.

# O27 Regenerated cellulose fibre (viscose), process

If the fabric contains more than 30% by weight of regenerated cellulose fibre, Part A must be met. At 0-30% by weight, it is sufficient that part B or part C is met.

#### Part A:

Fibre production must be based on "closed loop"\* processes such as the lyocell process, direct spinning of cellulose (the Spinnova process) or similar closed processes.

\* "Closed loop" is defined here as processes with a high degree of recycling of chemicals that are included (>99%) or processes without release of chemicals.

#### Part B:

Emissions from production with "traditional production process" for regenerated cellulose fibres such as viscose and rayon.

- The sulphur content of the emissions of sulphur compounds to the air shall not exceed 120 g S/kg filament fibre and 30 g/kg staple fibre produced, expressed as an annual average.
- Emissions of zinc to water shall not exceed 0.3 g Zn/kg regenerated cellulose, expressed as an annual average.

#### Part C:

Emissions from the production of cupro fibre.

• The copper content of the effluent from the plant that produces cupro fibre shall not exceed 0.1 ppm, expressed as an annual average.

Information analysis methods and analysis laboratories is given in Appendix 1.

- Part A: Documentation showing that the production of the regenerated cellulose fibres is produced with "closed loop" processes in accordance with the requirement.
- Part B and C: A test report from the manufacturer showing that the emission requirements are fulfilled. Emissions of sulphur to air can be documented with a valid EU Ecolabel licence in accordance with the Commission's decision from July 2014.

#### 3.4.5 Synthetic fibre

Synthetic fibre is subject to the requirement that the fibre must either comprise recycled material, if it is of fossil origin, or be bio-based (see further definition of these in the requirements below). The requirement sets out which types of recycled and bio-based raw materials are acceptable.

## O28 Synthetic fibre – fossil origin

Synthetic fibre of fossil origin must comprise 100% recycled material\*. This must not include recycled plastic from plants that are EFSA\*\* or FDA\*\*\* approved as food contact material or marketed as compatible with these.

# **Exception:**

- For elastane fibres that are STANDARD 100 by OEKO-TEX (annex 4 class II) certified, an exception is given for up to 10% elastane fibres in the fabric.
- For white\*\*\*\* polyester for professional textiles, an exception is given until June 30th, 2024. When using the exception, it is required, that the fibres must be STANDARD 100 by OEKO-TEX (annex 4 class II) certified.

The traceability of the recycled raw material must be documented with either a) or b) below:

- a) Global Recycled Standard certificate or Recycled Claim Standard certificate showing that the raw material is recycled, or other equivalent certification approved by Nordic Ecolabelling.
- b) By stating the producer of the recycled raw material and documenting that the feedstock used in the raw material is 100% recycled material, see definition in requirement.
- \* Recycled material is defined here in line with ISO 14021 using the following two categories as specified and covers both mechanical and chemical recycling.

The definition of chemical recycling used here includes processes in which the end product is either monomers, oligomers or higher hydrocarbons. Chemical recycling processes where the end product of the chemical process is naphtha or pyrolysis oils (energy production) are not covered by the definition of "recycled material". Here, the process itself is considered a recovery rather than recycling.

"Pre-consumer/commercial" is defined as material that is recovered from the waste stream during a manufacturing process. Materials that are reworked or reground, or waste that has been produced in a process, and can be recycled within the same manufacturing process that generated it, are not considered to be pre-consumer recovered material.

Nordic Ecolabelling considers reworked, reground or scrap material that cannot be recycled directly in the same process, but requires reprocessing (e.g., in the form of sorting, re-melting and granulating) before it can be recycled, to be preconsumer/commercial material. This is irrespective of whether the processing is done in-house or externally.

- "Post-consumer/commercial" is defined as material generated by households or commercial, industrial, or institutional facilities in their role as end-users of a product that can no longer be used for its intended purpose. This includes materials from the distribution chain.
- \*\* In line with Commission Regulation (EC) No 282/2008 of 27 March 2008 on recycled plastic materials and articles intended to come into contact with foods.
- \*\*\* In line with the Code of Federal Regulations Title 21: Food and Drugs, PART 177 INDIRECT FOOD ADDITIVES: POLYMERS.
- \*\*\*\* Defined according to the Ganz-Griesser Whiteness Index as the following spectrum: 200-220 GG, Tint 0-3 or equivalent according to the CIE Whiteness Index.
- Declaration from the producer of the recycled raw material that the raw material is not EFSA or FDA approved, see requirement.
- a) Certificate from an independent certifier of the supply chain (e.g., Global Recycled Standard or Recycled Claim Standard).

b) Documentation from the producer, showing that the feedstock used in the raw material is 100% recycled material, see definition in requirement.

## O29 Synthetic fibre – bio-based origin

Synthetic fibres of bio-based origin must contain at least 90% bio-based raw material, documented by testing in accordance with ISO 16620, ASTM D6866 or equivalent standard.

Raw materials used in the production of bio-based polymer fibres (e.g., polyester and polyamide) must meet the following requirements.

## Palm oil, soybean oil and soy flour

Palm oil, soybean oil and soy flour must not be used for bio-based polymer fibre in the textile.

## Specific conditions for sugar cane

The raw materials must meet either a) or b):

- a) Waste\* or residual products\*\* defined in accordance with (EU) Renewable Energy Directive 2018/2001. There must be traceability back to the production/process where the residual production occurred.
- b) Sugar cane must not be genetically modified\*\*\*. Sugar cane must also be certified to Bonsucro standard, version 5.1 or later version or certified to a standard that meets the requirements described in appendix 3.

The producer of the bio-based polymer must have a chain of custody (CoC) certification according to the standard by which the raw material is certified. Traceability must at least be ensured by mass balance. Book and claim systems are not accepted.

The producer of the bio-based polymer must document its purchase of certified raw materials for polymer production, for example in the form of specifications on an invoice or delivery note.

#### Other raw materials

The name (in Latin and a Nordic or English) and supplier of the raw materials used must be stated.

The raw materials must meet either c) or d):

- c) Waste\* or residual products\*\* defined in accordance with (EU) Renewable Energy Directive 2018/2001. There must be traceability back to the production / process where the residual production occurred.
- d) Primary raw materials (e.g., corn), not genetically modified\*\*\*. Here geographical origin (country / state) must be stated.
- \* Waste as defined by EU Directive 2018/2001/EC.
- \*\* Residual products as defined by EU Directive 2018/2001/EC. Residues come from agriculture, aquaculture, fisheries, and forestry, or they can be processing residues. A processing residual product is a substance that is not one of the end products that the production process directly strives for. Residues must not be a direct target of the process and the process must not be changed to intentional production of the residual product. Examples of residual products are e.g., straw, husks, pods, the non-edible part of maize, manure and bagasse. Examples of processing residues are e.g. raw glycerine or brown lye from paper production. Palm Fatty Acid Distillate (PFAD) from palm oil is not considered a residual/waste product and can therefore not be used.
- ☐ Test according to ISO 16620, ASTM D6866 or equivalent standard showing content of bio-based raw material.

- Declaration by the producer of the polymer, that palm oil (incl. PFAD (Palm Fatty Acid Distillate)) soybean oil and soy flour are not used as raw materials for the bio-based polymer.
- For waste and residual products: Documentation from the polymer producer which shows that the requirement's definition of waste or residual products is met, as well as traceability which shows where the waste or residual product comes from.
- Sugar cane: Indicate which certification system sugar cane is certified for. A copy of a valid CoC certificate or a certificate number. Documentation such as an invoice or delivery note from the producer of the bio-based polymer, showing the purchase of bio-based polymer from certified raw material in at least the same annual quantity as is used in the production of the bio-based polymer. Declaration stating that the sugar cane has not been genetically modified.
- For primary raw materials: Declaration by the producer of the polymer stating that raw materials have not been genetically modified according to the definition in the requirement. Name (in Latin and English) and geographical origin (country/state) of the primary raw materials used.

# 3.4.6 Recycled fibres

## O30 Recycled fibres, test for environmentally harmful substances

Recycled fibres/raw materials for fibre production shall not contain the following substances above the limits stated in the table below.

This requirement applies to all recycled fibres – both synthetic and natural and must be documented annually with either a) or b):

- a) an Oeko-Tex standard 100 class I certificate, or
- b) test report showing that the requirement is complied with.

#### Exemption to the requirement:

- Material from PET bottles original approved for food contact
- Fibres from chemically recycled\* polymers, if it can otherwise be documented that the process ensures, that the requirement limits are complied with.
- Fibres used in the production of regenerated cellulose.
- Fibres, where it can be documented that they originate from type I ecolabelled products.
- \* The definition of chemical recycling used here includes processes in which the end product is either monomers, oligomers or higher hydrocarbons. Chemical recycling processes where the end product of the chemical process is naphtha or pyrolysis oils (energy production) are not covered by the definition of "recycled material". Here, the process itself is considered a recovery rather than recycling.

The requirement must be documented on application, with subsequent annual checks via self-assessment.

Substance/substance group	Max. limit		
Extractable metals			
Chromium total	1.0 mg/kg		
Lead	0.1 mg/kg		
Mercury	0.02 mg/kg		
Cadmium	0.1 mg/kg		
Antimony	30.0 mg/kg		
Organic tin compounds			
TBT and TPhT	0.5 mg/kg		

Total of DBT, DMT, DOT, DPhT, DPT, MOT, MMT, MPhT, TeBT, TeET, TCyHT, TMT, TOT, TPT	1.0 mg/kg
Chlorophenols	
Pentachlorophenol	0.05 mg/kg
Tetrachlorophenol	0.05 mg/kg
Trichlorophenol	0.2 mg/kg
Dichlorophenpol	0.5 mg/kg
Monochlorophenol	0.5 mg/kg
Per- and polyfluorinated compounds	1
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Me-FOSE, N-Et-FOSE	Total <1.0 μg/m2
PFOA	<1.0 µg/m2
PFHpA, PFNA, PFDA, PFUdA, PFDoA, PFTrDA, PFTeDA	0.05 mg/kg for each
Other stated per- and polyfluorinated compounds as set out in Oeko- Tex 100 Annex 5.	0.05 or 0.5 mg/kg for each as stated in Oeko-Tex 100
Phthalates	
BBP, DBP, DEP, DMP, DEHP, DMEP, DIHP, DHNUP, DCHP, DHxP, DIBP, DIHxP, DIOP, DINP, DIDP, DPP, DHP, DNOP, DNP, DPP	Total 0.1 weight%
Flame retardants	1
Flame retardants, with the exception of flame retardants approved by Oeko-Tex	<100 mg/kg for each
Formaldehyde	16 mg/kg
Arylamines with carcinogenic properties stated in Oeko-Tex 100 Annex 5	Total 20 mg/kg
Surfactant, wetting agent residues	
Nonylphenol, octylphenol, heptylphenol, pentylphenol	Total 10 mg/kg
Nonylphenol, octylphenol, heptylphenol, pentylphenol, nonylphenol ethoxylate and octylphenol ethoxylate	Total 100 mg/kg
Dyes	
Cleavable, classified as carcinogenic in Oeko-Tex Annex 5	Total 20 mg/kg
Cleavable aniline as listed in Oeko-Tex Annex 5	Total 100 mg/kg
Classified as carcinogenic in Oeko-Tex Annex 5	50 mg/kg
Dyes classified as allergenic in Oeko-Tex Annex 5	50 mg/kg
Other dyes listed in Oeko-Tex Annex 5	50 mg/kg
Pesticides (for recycled natural fibre)	
Pesticides listed in Oeko-Tex 100 Annex 5	Total 0.5 mg/kg
For acrylic, elastane, polyeruthane and polyamide	
DMAC	0,1 weight% solvent residue

Test methods: as stated in Testing Methods Standard 100 by Oeko-Tex.

Test reports or Oeko-Tex 100 class I certificate showing fulfilment of the requirement. A written procedure showing how an annual test is performed in line with the requirement, along with annual in-house checks of compliance with the requirement. Alternatively, a procedure for annual requisition of Oeko-tex 100 class I certificate. Test results/certificate are to be archived and kept available for inspection by Nordic Ecolabelling.

When using chemically recycled polymers documentation showing that the recycling process ensures that the requirement is complied with.

When using the exemption for material from PET bottles, this must be documented by the fibre supplier.

When using an exemption for fibres from earlier type in eco-labelled textiles, this must be documented by the fibre supplier.

#### 3.4.7 Additives and fibre treatment

The requirement relates to any additives and coatings applied to the fibre. The requirement concerns all fibre types.

## O31 Treatment and coating of fibre and yarn

Any fibre treatment or coating must meet the following requirements: O33 Classification of chemical products, O34 Prohibition of CMR substances, O35 Prohibited substances\* and O41 Chemicals that contains silicone.

Specific for treatment or coating of wool to prevent felting:

- o Chlorine and fluorine compounds are prohibited.
- Wool fibres shall only be coated with biodegradable\*\* coating
- \* An exception is made for added nano titanium dioxide in the production of regenerated cellulose.
- \*\* Coating must be aerobically degradable according to OECD 301 A-F or OECD 310 (readily biodegradable) or 302 A-C (inherently biodegradable).
- Declaration from the fibre producer/supplier that requirement is fulfilled, and description of and safety data sheet for additives and coatings applied to the fibre.
- For coating of the wool fibre: Documentation showing that the coating is degradable in accordance with the requirement.

# 3.5 Chemicals used in textile production

The requirements in this section apply to all chemicals used in the production of textiles, unless otherwise is specified in the requirement. Examples of chemicals include softeners, bleaching agents, pigments and dyes, stabilisers, dispersants, sizing agents, enzymes, and other auxiliary chemicals.

The chemicals are used in a variety process in textile production, including carding, spinning, weaving, knitting, washing, bleaching, dyeing, printing, and finishing. The requirements apply irrespective of whether the textile producer or their supplier uses the chemicals.

Chemicals used in water treatment plants or for the maintenance of production equipment are exempted from the requirements.

## 3.5.1 General chemical requirements

#### O32 Overview of chemicals

All chemical products shall be stated and documented with a safety data sheet. A collective list or separate lists shall be drawn up for each production process and/or supplier, including for printing on textiles and products.

The following information shall be submitted for each chemical product:

- trade name
- the function of the chemical
- the process step in which the chemical product is used
- the supplier/producer using the chemical product
- ☐ List of chemicals for every production process and/or supplier.
- Safety data sheet for every chemical product, in line with Annex II of REACH 1907/2006.

## O33 Classification of chemical products

Chemical products shall not be classified as any of the hazard categories set out in the table below.

CLP Regulation 1272/2008			
Hazard class	Hazard category	Hazard code	
Toxic to aquatic life	Aquatic Acute 1	H400	
	Aquatic Chronic 1	H410	
	Aquatic Chronic 2	H411	
Hazardous to the ozone layer	Ozone	H420	
Carcinogenicity*	Carc 1A or 1B	H350	
	Carc 2	H351	
Germ cell mutagenicity*	Muta. 1A or 1B	H340	
	Muta. 2	H341	
Reproductive toxicity*	Repr. 1A or 1B	H360	
	Repr. 2	H361	
	Lact.	H362	
Acute toxicity	Acute Tox 1 or 2	H300, H310, H330	
	Acute Tox 3	H301, 311, 331	
Specific target organ toxicity with single or	STOT SE 1	H370	
repeated exposure	STOT RE 1	H372	
Sensitising on inhalation or skin contact	Resp. Sens. 1, 1A or 1B	H334**	
	Skin Sens. 1, 1A or 1B	H317**	

Note that responsibility for correct classification lies with the manufacturer.

If manual filling of automatic dosing systems is used, the manual handling must be carried out using the correct personal protective equipment in accordance with the safety data sheet (SDS) and/or using technical measures such as local extraction/ventilation.

- Declaration from the chemical manufacturer that the requirement is fulfilled.
   For exempted non-disperse dyes: Declaration that non-dusting formulations of these are used or that automatic dosing is used.
- Routine for the use of personal protective equipment when manually handling dusty colours or a description of technical measures.

#### O34 Prohibition of CMR substances

Chemical products shall not contain any ingoing substances\* that have any of the classifications in the table below.

\* See the definition of ingoing substances and impurities in section 1.

CLP Regulation 1272/2008	P Regulation 1272/2008				
Hazard class	Hazard category	Hazard code			
Carcinogenicity*	Carc. 1A or 1B	H350			
	Carc. 2	H351**			
Germ cell mutagenicity*	Muta. 1A or 1B	H340			
	Muta. 2	H341			
Reproductive toxicity*	Repr. 1A or 1B	H360			
	Repr. 2	H361			
	Lact.	H362			

<sup>\*</sup> Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i.

<sup>\*\*</sup> Non-disperse dyes are exempt from the prohibition of H334 and H317, provided that non-dusting formulations are used or that automatic dosing is used.

- \* Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i.
- \*\* **Exemption**: Titanium dioxide (TiO<sub>2</sub>) which is added in powder form during raw material production.
- Declaration from the chemical producer, that the requirement is fulfilled.

#### O35 Prohibited substances

The following substances shall not be an ingoing substance\* in chemical products:

- \* See the definition of ingoing substances and impurities in section 1.
- Substances on the Candidate List (<a href="https://echa.europa.eu/candidate-list-table">https://echa.europa.eu/candidate-list-table</a>) Siloxanes D4, D5 and D6 have their own documentation requirement, see requirement O41.
- Substances that are PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) as set out in the criteria of REACH Annex XIII
- Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists", List I, II and III\*\*\*.
   See the following links:
  - https://edlists.org/the-ed-lists/list-i-substances-identified-asendocrine-disruptors-by-the-eu
  - https://edlists.org/the-ed-lists/list-ii-substances-under-euinvestigation-endocrine-disruption
  - https://edlists.org/the-ed-lists/list-iii-substances-identifiedasendocrine-disruptors-by-participating-national-authorities
- Flame retardants (e.g., short chain chlorinated paraffins)
- Per- and polyfluoroalkyl substances (PFASs), e.g., PFOA and PFOS
- Nanomaterials/-particles\*
- Heavy metals in dyes and pigments\*\*
- Azo dyes that may release carcinogenic aromatic amines (see Appendix 2)
- Phthalates
- Chlorinated solvents and carriers, including chlorotoluenes, chlorophenols and chlorobenzenes
- Alkylphenol ethoxylates (APEO) and other alkylphenol derivatives
- Organotin compounds
- Linear alkylbenzene sulphonates (LAS)
- Quaternary ammonium compounds such as DTDMAC, DSDMAC and DHTDMAC
- EDTA (ethylene diamine tetra acetic acid) and DTPA (diethylene triamine pentaacetate)
- \* The definition of nanomaterial follows the European Commission's definition of nanomaterial of 18 October 2011 (2011/696/EU). Pigments are exempted from the requirement.
- \*\* Heavy metals are the metals listed in point 2 below. Exemptions from the requirement are granted for:
- 1) copper in metal complex dyes, see requirement O37.
- 2) metal impurities in dyes and pigments up to the amounts set out in ETAD, Annex 2 "Heavy metal limits for dyes": antimony (50 ppm), arsenic (50 ppm),

cadmium (20 ppm), chromium (100 ppm), lead (100 ppm), mercury (4 ppm), zinc (1500 ppm), copper (250 ppm), nickel (200 ppm), tin (250 ppm), barium (100 ppm), cobalt (500 ppm), iron (2500 ppm), manganese (1000 ppm), selenium (20 ppm) and silver (100 ppm)

3) exception for iron used for colour depigmenting before printing.

\*\*\* A substance which is transferred to one of the corresponding sub lists called "Substances no longer on list", and no longer appears on any of List I-III, is no longer excluded. The exception is those substances on sub list II which were evaluated under a regulation or directive which doesn't have provisions for identifying EDs (e.g., the Cosmetics Regulation, etc.). For those substances, ED properties may still have been confirmed or suspected. Nordic Ecolabelling will evaluate the circumstances case-by-case, based on the background information indicated on sub list II.

Declaration from the chemical manufacturer or chemical supplier that the requirement is fulfilled.

# 3.5.2 Specific chemical requirements

#### O36 Biocides and antibacterial substances

The following substances, which may have a biocidal and/or antibacterial effect in fibre, fabric, or the finished textile, are not permitted:

- Antibacterial substances (incl. silver ions, nano silver and nano copper) and/or
- Biocides in the form of pure active ingredients or as biocidal products.

Naturally occurring antibacterial effects in materials are not subject to the prohibition.

Declaration from the textile manufacturer that the requirement has been fulfilled.

# O37 Metal complex dyes and pigments

Only metal complex dyes and pigments based on copper that make up a maximum of 5% by weight may be used, and only for the following fibres and processes:

- when dyeing wool fibre
- when dyeing polyamide fibre
- when dyeing a blend of wool and/or polyamide with regenerated cellulose fibre
- ☐ Technical datasheets or test reports showing fulfilments of the requirement.

# O38 Degradability of detergents, softeners, and complexing agents

Chemical products that are used as detergents, softeners and complexing agents shall be either readily aerobically biodegradable or inherently aerobically biodegradable, in accordance with test methods OECD 301 A-F, OECD 310, OECD 302 A-C or equivalent test methods.

Softeners and complexing agents referred to as "chelating agents" and "sequestering agents" are also covered by the requirement.

The chemical manufacturer must submit safety data sheets or test reports showing fulfilment of the requirement.

# O39 Sizing agents

This requirement only applies to weaving processes.

At least one of the alternatives below shall be fulfilled and documented:

- 1. Sizing agents must be either readily aerobically biodegradable or inherently aerobically biodegradable, in accordance with test methods OECD 301 A-F, OECD 310, OECD 302 A-C or equivalent test methods, or
- 2. Over 80 weight% of the sizing agents used must be recovered from the wastewater.
- Alternative 1: Safety data sheet for sizing agents used, showing fulfilment of the requirement.
- Alternative 2: Declaration from the weaving unit that the requirement is fulfilled, plus brief description of the recovery process at the weaving unit.

# O40 Bleaching agents

Chlorinated substances shall not be used as bleaching agents. The requirement applies to all types of textile processes, including bleaching of fibres, yarn, fabric and the finished textile.

Declaration from the producer of the fibres, yarn, fabric and finished textile that the requirement is fulfilled.

#### O41 Chemicals that contain silicone

D4 (CAS no. 556-67-2), D5 (CAS no. 541-02-6) and D6 (CAS no. 540-97-6) shall only be present in the form of residues from the raw material production, and each shall only be present in amounts up to 1000 ppm in the silicone raw material (the chemical).

Test from the chemical manufacturer showing that the requirement is met.

## O42 VOC in printing paste

Printing paste may not contain more than 5% VOC (volatile organic compounds with a steam pressure exceeding 0.01kPa at 20°C).

Declaration from the producer or supplier of the printing paste that the requirement is fulfilled.

# 3.6 Coatings, laminates, and membranes

# O43 Textiles as substrate (e.g., in laminates)

Textiles used as substrate/carrier material in coatings, laminates and membranes shall fulfil the requirements for the respective fibres in section 3.4. See the definition of coatings, laminates, and membranes in section 1 Definitions.

Documentation as described in the relevant fibre requirement.

# O44 Raw material in the polymer

The requirement covers polymers used for coatings, laminates and membranes of textiles which constitute more than 5% by weight of the finished fabric.

The polymer must comply with the requirements set out in either Part A or Part  $\mathbf{R}$ .

#### Part A Recycled material:

Synthetic fibre of fossil origin must comprise 100% recycled material (see definition in section 1). This must not include recycled plastic from plants that are EFSA\* or FDA\*\* approved as food contact material or marketed as compatible with these.

The polymer or finished fabric must at the same time comply with requirement O30 for testing for harmful substances.

The traceability of the recycled raw material must be documented with either a) or b) below:

- a) Global Recycled Standard certificate or Recycled Claim Standard certificate showing that the raw material is recycled, or other equivalent certification approved by Nordic Ecolabelling.
- b) By stating the producer of the recycled raw material and documenting that the feedstock used in the raw material is 100% recycled material, see definition in requirement.
- \* In line with Commission Regulation (EC) No 282/2008 of 27 March 2008 on recycled plastic materials and articles intended to come into contact with foods.
- \*\* In line with the Code of Federal Regulations Title 21: Food and Drugs, PART 177 INDIRECT FOOD ADDITIVES: POLYMERS.

## Part B Biobased raw material:

Used raw materials must contain at least 90% bio-based raw material, documented by testing in accordance with ISO 16620, ASTM D6866 or equivalent standard.

Raw materials used in the production of bio-based polymer fibres (e.g., polyester and polyamide) must meet the following requirements.

## Palm oil and soybean oil

Palm oil and soybean oil and soy flour must not be used for bio-based polymer fibre in the textile.

## Specific conditions for sugar cane

The raw materials must meet either a) or b):

- a) Waste\* or residual products\*\* defined in accordance with (EU) Renewable Energy Directive 2018/2001. There must be traceability back to the production / process where the residual production occurred.
- b) Sugar cane must not be genetically modified\*\*\* and must be certified to a standard that meets the requirements described in appendix 3.

The producer of the bio-based polymer must have a chain of custody (CoC) certification according to the standard by which the raw material is certified. Traceability must at least be ensured by mass balance. Book and claim systems are not accepted.

The producer of the bio-based polymer must document its purchase of certified raw materials for polymer production, for example in the form of specifications on an invoice or delivery note.

#### Other raw materials

The name (in Latin and a Nordic or English) and supplier of the raw materials used must be stated.

The raw materials must meet either c) or d):

- c) Waste\* or residual products\*\* defined in accordance with (EU) Renewable Energy Directive 2018/2001. There must be traceability back to the production/process where the residual production occurred.
- d) Primary raw materials (e.g., corn), not genetically modified\*\*\*. Here geographical origin (country/state) must be stated.
- \* Waste as defined by EU Directive 2018/2001/EC.

\*\* Residual products as defined by EU Directive 2018/2001/EC. Residues come from agriculture, aquaculture, fisheries, and forestry, or they can be processing residues. A processing residual product is a substance that is not one of the end products that the production process directly strives for. Residues must not be a direct target of the process and the process must not be changed to intentional production of the residual product. Examples of residual products are e.g., straw, husks, pods, the non-edible part of maize, manure, and bagasse. Examples of processing residues are e.g., raw glycerine or brown lye from paper production. Palm Fatty Acid Distillate (PFAD) from palm oil is not considered a residual/waste product and can therefore not be used.

#### Part A:

- Declaration from the producer of the recycled raw material that the raw material is not EFSA or FDA approved, see requirement.
- a) Certificate from an independent certifier of the supply chain (e.g., Global Recycled Standard or Recycled Claim Standard).
- b) Documentation from the producer, showing that the feedstock used in the raw material is 100% recycled material, see definition in requirement
- Test according to ISO 16620, ASTM D6866 or equivalent standard showing content of bio-based raw material.
- Declaration by the producer of the polymer, that palm oil (incl. PFAD (Palm Fatty Acid Distillate)) soybean oil and soy flour are not used as raw materials for the bio-based polymer.
- For waste and residual products: Documentation from the polymer producer which shows that the requirement's definition of waste or residual products is met, as well as traceability which shows where the waste or residual product comes from.
- Sugar cane: Indicate which certification system sugar cane is certified for. A copy of a valid CoC certificate or a certificate number. Documentation such as an invoice or delivery note from the producer of the bio-based polymer, showing the purchase of bio-based polymer from certified raw material in at least the same annual quantity as is used in the production of the bio-based polymer. Declaration stating that the sugar cane has not been genetically modified.
- For primary raw materials: Declaration by the producer of the polymer stating that raw materials have not been genetically modified according to the definition in the requirement. Name (in Latin and English) and geographical origin (country/state) of the primary raw materials used.

# O45 Coatings, laminates, and membranes

Halogenated polymers are prohibited (e.g., PVC (polyvinylchloride) in impregnation, coatings, laminates, and membranes.

Additives in polymers used in impregnation, coatings, laminates, and membranes must meet the following requirements (e.g., added in master batch):

- O33 Classification of chemical products
- O34 Classification of ingoing substances
- O35 Prohibited substances
- O37 Metal complex dyes and pigments
- Declaration from the producer of impregnation, coatings, laminates, and membranes that halogenated polymers are not used.
- Declaration from the producer of impregnation, coatings, laminates and membranes as described in requirement O33, O34, O35 and O37.

# 3.7 Specific chemical requirement for adhesives

#### O46 Adhesives

The requirement covers adhesives used to glue textiles, coatings, membranes, laminates, or other materials.

Adhesive used for small info labels such as care labels is not covered by the requirement.

The adhesive:

- must not have any added colophony resin, and
- must meet requirements O33 Classification of chemical products, O34 Prohibition of CMR substances and O35 Prohibited substances.
- Safety data sheet and declaration from the chemical manufacturer that the requirement is fulfilled.

# 3.8 Discharges from wet processes

# O47 COD, temperature, and pH in wastewater from wet processes

Discharges of COD (chemical oxygen demand) in wastewater from wet processes which is discharged to surface water after treatment shall not exceed 150 mg/L. Wastewater that is sent to municipal or other regional treatment plants is exempted.

Test method: COD content shall be tested in accordance with ISO 6060 or equivalent.

The pH value of the wastewater released to the surface water shall be between 6 and 9 (unless the pH value in the recipient lies outside this interval).

The temperature of the wastewater released to the surface water shall be lower than 40°C (unless the temperature in the recipient is higher).

A test report shall be submitted with the application. Thereafter, the applicant must have a procedure in place for annual testing in line with the requirement and for ensuring compliance with the requirement. Nordic Ecolabelling must be informed if the requirement is not fulfilled.

- Report submitted with application, showing average monthly calculations of COD, pH, and temperature for at least three of the past 12 months. (For COD, measurement of PCOD, TOC or BOD may be used if a correlation to COD is evident).
- Description of how the wastewater from the wet process is treated and if the wastewater is sent to municipal or other regional treatment.
- A written procedure showing how an annual test is performed in line with the requirement, along with in-house checks of compliance with the requirement.

# 3.9 Energy and water consumption

#### O48 Implementation of BAT for energy and water consumption

The applicant shall demonstrate that the energy used for e.g. washing, drying, bleaching and curing associated with dyeing, printing and finishing the textile is measured and compared with BAT levels or own figures from before implementing efficiency techniques.

This shall be done as a part of an energy management system or a system for the management of  $\mathrm{CO}_2$  emissions. The requirement may be documented per process.

The applicant shall demonstrate that the water consumption associated with wet processes such as dyeing, printing, and finishing the textile is measured

There shall also be documentation for that the production facilities have implemented a minimum of BAT water and energy efficiency techniques or measures for in-house production of solar energy, see the table and the extra information about BAT themes below. This applies to the total production volume for the individual production facility.

BAT themes	Production volume	
	<10 tonnes per day	>10 tonnes per day
General energy management	Two techniques	Three techniques
2. Washing and rinsing	One technique	Two techniques
3. Drying and curing using stretchers	One technique	Two techniques

#### **BAT themes**

#### General techniques:

- Measuring how much is consumed and where
- Process monitoring and automatic control systems for flow control, filling volumes, temperatures, and timings
- Insulating pipes, valves, and flanges
- · Frequency-controlled electric motors and pumps
- Closed design of machines to reduce evaporation losses
- Reuse of water and liquids in batch processes
- · Combining multiple wet treatments into one process
- Heat recovery, e.g., from washing, steam condensate, exhaust air from processes, exhaust gases from combustion
- Solar thermal panels, solar photovoltaic panels, or a heat recovery system for used hot
  water, installed within the operation, and generating energy amounting to 30% of what the
  process requires

#### Washing and rinsing:

- Using cooling water as process water
- Replacing overflow tanks with drainage/inlet tanks
- Using "intelligent" rinsing technologies with water flow control and counter flow
- Installing a heat exchanger

#### Drying and curing using stretchers:

- · Optimising air circulation
- Insulating the premises
- Installing effective burner systems
- · Installing heat recovery systems
- The applicant must compile and submit reports from energy management systems for the individual dyeing, printing, and finishing facilities. ISO 50001 or equivalent systems for energy management or management of CO<sub>2</sub> emissions are accepted as documentation of the energy management system.
- The applicant must compile and submit measurements of water consumption for the individual dyeing, printing, and finishing facilities.
- The applicant must submit an overview of the dyeing, printing, and finishing facilities, stating the production volume per day for each process.
- For each implementation of a BAT technique or process using solar energy produced in-house, the applicant must submit images of the facility, technical descriptions of the individual technologies and assessments of the energy savings achieved, along with a statement of the process and operation in which the technology has been implemented.

## 3.10 Fillings, stuffing materials, and padding

The following requirements concern fillings, stuffing materials, and padding that individually account for more than 1 weight % of the total filling, stuffing material or padding in the final product.

#### O49 Fibres in filling and stuffing materials

Fillings, stuffing materials, and padding made from fibre must meet the following fibre requirements:

- Cotton fibre: requirement O14
- Flax (linen), ramie, sisal, hemp, jute and other bast fibres: requirement O16
- Wool fibre: requirements O18, O19 and O22
- Regenerated cellulose fibre: requirement O23
- Synthetic fibre: requirements O28
- Recycled fibres: O30
- All fibres: requirement O31
- Here the same documentation is required as stated in the requirements referred to.

#### O50 Feathers and down – ethical requirements

Use of feathers and down plucked from live birds is prohibited.

Forced feeding of birds is prohibited.

Recycled\* down and feathers are exempt from the requirement, but documentation for traceability shall be provided to confirm that the down and feathers are recycled.

- \* Recycled down and feathers are defined here as post-consumer recycled down and feathers in line with standard ISO 14021.
- Responsible Down standard or a certificate from another standard that fulfils the requirement.
- Recycled down and feathers: Recycled Global Standard certificate. Alternatively, documentation from the supplier, confirming that the down/feathers are post-consumer recycled down or feathers.

#### O51 Feathers and down – microbial cleanliness

Feathers and down must document microbial purity in accordance with the standard EN 12935 and comply with the following:

- oxygen index number of max. 10 in accordance with the standard EN 1162.
- fat content must lie within the range 0.5% to 2.0% in accordance with the standard EN 1163.
- Microbial cleanliness: Test report showing compliance with the requirement.

#### O52 Feather and down - Labelling of filling materials

Feather and down filling materials in duvets and pillows must be labelled in accordance with standard EN 12934 "Feather and down – Composition labelling of processed feathers and down for use as sole filling material".

Declaration that the labelling of the filling material complies with EN 12934.

#### O53 Additives and treatments

Fillings, stuffing materials, and padding (except for fibres which have their own requirement O49) must not be added or treated\* with:

- Substances on the REACH Candidate List. Link to the REACH Candidate List: http://echa.europa.eu/web/guest/candidate-list-table
- PVC (polyvinylchloride)
- Organic chlorinated compounds

- Flame retardants (e.g., short chained chlorinated paraffins)
- Halogenated bleaching chemicals
- Aziridines and polyaziridines
- Carcinogenic, mutagenic and reprotoxic compounds (categories 1A, 1B and 2 in accordance with CLP Regulation 1272/2008)
- Phthalates
- Fluorinated organic compounds such as PFOA (perfluorooctanoic acid and its salts/esters), PFOS (perfluorooctane sulphonate and its compounds), and PTFE (polytetrafluoroethylene), etc.
- Organotin compounds
- Biocides or biocidal products intended to add a disinfecting or antibacterial effect in the product.
- \* See the definition of impurities and ingoing substances in section 1 Definitions.
- <sup>3</sup> Note that the requirement also prohibits the use of phthalates on the EU's Candidate List.
- Declaration from the producer/supplier of the filling/stuffing material showing that the requirement is fulfilled.

For natural fillings and stuffing materials such as down, feathers or ones with no chemical additives or treatments: Declaration from the producer/supplier that no chemical additives or treatments have been used.

#### O54 Emission requirements for foamed synthetic materials

For foamed synthetic materials such as PU foam, latex foam and expanded polystyrene, emissions of the following substances and substance groups shall not exceed the levels stated in the table below.

Emission of volatile organic compounds mg/m³		
Substance or substance group	Requirement limit (mg/m³)	
Formaldehyde (50-00-0)	0,1	
Toluene (108-88-3)	0.1	
Styrene (100-42-5)	0.005	
Vinylcyclohexene (100-40-3)	0.002	
4-Phenylcyclohexene (4994-16-5)	0.03	
Vinyl chloride (75-01-4)	0.002	
Aromatic hydrocarbons	0.3	
Volatile organic compounds	0.5	

Emission testing must be performed according to the ISO 16000 standard, parts 3, 6, 9, & 11.

☐ Test reports showing that the requirement is fulfilled.

Alternatively, a certificate from either Oeko-Tex class I Baby or CertiPUR may be used as documentation for the requirement.

#### O55 Polycyclic aromatic hydrocarbons (PAHs):

For foamed synthetic materials such as PU foam, latex foam, and expanded polystyrene the content of each individual PAH stated in the requirement shall be below  $0.5~\rm mg/kg$ .

The requirement concerns the following PAHs:

Substance name	CAS-no
Benzo[A]Pyrene	50-32-8
Benzo[E]Pyrene	192-97-2

Benzo[A]Anthracene	56-55-3
Dibenzo[A,H]Anthracene	53-70-3
Benzo[B]Fluoranthene	205-99-2
Benzo[J]Fluoranthene	205-82-3
Benzo[K]Fluoranthene	207-08-9
Chrysene	218-01-9

Must be tested in accordance with ISO 18287 or ZEK 01.2-08 (GC/MS).

- ☐ Test report showing that the requirement is fulfilled.
- A certificate from Oeko-Tex 100 class I Baby can also be used as documentation.

#### O56 Polyurethane foam (PU foam)

Fillings, stuffing materials, and padding made from polyurethane foam shall meet the following requirements:

CFC, HCFC, HFC, methylene chloride or other halogenated organic compounds shall not be used as blowing agents in the production of the material.

Declaration from the foam manufacturer/-supplier about which blowing agent has been used.

#### O57 Latex

Fillings, stuffing materials, and padding made from synthetic latex or natural latex shall meet the following requirements:

- The butadiene content in synthetic latex shall be lower than 1 mg/kg latex.
- The concentration of n-nitrosamines\* shall not exceed 0.0005 mg/m³, measured by the climate chamber test conducted in accordance with the standard ISO 16000-9.

Test method: Butadiene can be determined according to EN 13130-4 or similar method.

The latex producer must state test results in accordance with the requirement.

#### 3.11 Hides/skins and leather

The section for hides/skins and leather includes both tanning with chromium III salts, aldehydes, as well as vegetable or mineral tanning processes if the requirements are met. The definition of "leather" in this section follows the standard EN15987. Synthetic leather also called "vegan leather" is not covered by this requirement section but is included in the textile section of the criteria if both requirements for the fibre and chemicals incl. polymer for coating as well as quality requirements for textiles can be complied with.

#### O58 Origin of hides/skins and leather

Only raw hides and skins from the following animals are permitted: fish\*, sheep, goats, cows, horses, pigs, elk, deer, and reindeer.

\* Fish skin from fish red-listed by IUCN as critically endangered or endangered is not accepted. Se the list here her https://www.iucnredlist.org/

<sup>\*</sup> n-nitrosodimethylamine (NDMA), n-nitrosodiethylamine (NDEA), n-nitrosomethylethylamine (NMEA), n-nitrosodiisopropylamine (NDIPA), n-nitrosodi-n-propylamine (NDPA), n-nitrosodi-n-butylamine (NDBA), n-nitrosopyrrolidine (NPYR), n-nitrosopiperidine (NPIP), n-nitrosomorpholine (NMOR).

The applicant must submit a declaration from the leather producer or leather supplier, confirming that the raw hides/skins used derive from animals stated in the requirement.

#### O59 Chromium content in leather and hides/skins

The extractable chromium content of the finished skin or leather (incl. finishing) must be less than 200 mg/kg (mass of chromium per total dry weight of leather or hide/skin) according to EN ISO 17072-1.

There shall be no chromium (VI) present in the final treated leather or hide/skin (including finishing), in accordance with EN ISO 17075 (detection limit of 3 ppm) or equivalent.

The applicant shall submit a test report for both total chromium and chromium (VI), demonstrating fulfilment of the requirement.

#### O60 Cadmium and lead

Cadmium and lead shall not be found in processed hides/skins or leather.

The content of cadmium and lead shall be tested according to the methods AAS, ICP-OES or ICP-MS (detection limit 10 ppm).

A test report from the tannery showing that the requirement is fulfilled.

#### O61 Chemical overview for leather and hides/skin production

All chemical products used in the various processes during the production of hides/skins or leather shall be stated, with safety data sheets as documentation.

The following information must be submitted for each chemical product:

- trade name
- the function of the chemical
- the process step in which the chemical product is used
- supplier, that uses the chemical product

The requirement also applies to all chemical products used for coatings or other finishing.

✓ Overview providing the required information for all the chemical products used.
 ✓ Safety data sheet for every chemical product, in line with Annex II of REACH 1907/2006.

#### O62 Classification of chemical products

The chemical product used shall not be classified as any of the hazard categories set out in the table below. The requirement applies to all chemical products used in every step of manufacturing leather and hides/skins (including finishing).

An exception is made for the requirement for the use of biocidal products in the tanning process if the active substance is permitted for skins and leather in EU Regulation (EU) No 528/2012.

CLP Regulation 1272/2008		
Hazard class	Hazard category	Hazard code
Toxic to aquatic life	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2	H400 H410 H411
Hazardous to the ozone layer	Ozone	H420
Carcinogenicity*	Carc 1A or 1B Carc 2	H350 H351

Germ cell mutagenicity*	Muta. 1A or 1B Muta. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact.	H360 H361 H362
Acute toxicity	Acute Tox 1 or 2 Acute Tox 3	H300, H310, H330 H301, 311, 331
Specific target organ toxicity with single or repeated exposure	STOT SE 1 STOT RE 1	H370 H372
Sensitising on inhalation or skin contact	Resp. Sens. 1, 1A or 1B Skin Sens. 1, 1A or 1B	H334** H317**

<sup>\*</sup> Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i.

- Declaration from the chemical manufacturer that the requirement is fulfilled.
- Exception for non-disperse dyes: Declaration that these are used as non-dusty formulations or that automatic dosing is used.
- Routine for the use of personal protective equipment when manually handling dusty colours or explaining technical measures.
- When using the exemption for biocidal products, a list of the biocidal products with associated active substances used must be submitted, including the corresponding H-phrases for the chemical biocidal products.

#### O63 Classification of ingoing substances in chemical products

Chemical products shall not contain any ingoing substances\* that have any of the classifications stated in the table below. The requirement applies to all chemicals used in every step of manufacturing leather and hides/skins (including finishing).

\* See the definition of ingoing substances and impurities in section 1 Definition.

CLP Regulation 1272/2008		
Hazard class	Hazard category	Hazard code
Carcinogenicity	Carc. 1A or 1B	H350
	Carc. 2	H351*
Germ cell mutagenicity	Muta. 1A or 1B	H340
	Muta. 2	H341
Reproductive toxicity	Repr. 1A or 1B	H360
	Repr. 2	H361
	Lact.	H362

Including all combinations of stated exposure route and stated specific effect. For example, H350 also covers the classification H350i.

Declaration from the chemical manufacturer that the requirement is fulfilled.

#### O64 Prohibited substances

The following substances shall not be present as ingoing substance\* in chemical products used to produce hides/skins and leather. The requirement applies to all

 $\bowtie$ 

<sup>\*\*</sup> Non-disperse dyes are exempt from the ban on H334 and H317, provided that non-dusty formulations or automatic dosing is used. If manual filling of automatic dosing systems is used, the manual handling must be carried out using the correct personal protective equipment in accordance with the safety data sheet (SDS) and/or using technical measures such as local extraction/ventilation.

<sup>\*</sup> **Exemption**: *Titanium dioxide* ( $TiO_2$ ) which is added in powder form during the raw material production.

chemicals used in every step of manufacturing leather and hides/skins (including finishing).

- \* See definition of ingoing substances in section 1 Definitions.
- Substances on the Candidate List (<a href="https://echa.europa.eu/candidate-list-table">https://echa.europa.eu/candidate-list-table</a>). The siloxanes D4, D5 and D6 have their own documentation requirements, see requirements O41.
- Substances that are PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) as set out in the criteria of REACH Annex XIII
- Potential or identified endocrine disruptors according to any of the EU member state initiative "Endocrine Disruptor Lists", List I, II and III. See following links:
  - https://edlists.org/the-ed-lists/list-i-substances-identifiedasendocrine-disruptors-by-the-eu
  - https://edlists.org/the-ed-lists/list-ii-substances-under-euinvestigation-endocrine-disruption
  - https://edlists.org/the-ed-lists/list-iii-substances-identifiedasendocrine-disruptors-by-participating-national-authorities

A substance which is transferred to one of the corresponding sub lists called "Substances no longer on list", and no longer appears on any of List I-III, is no longer excluded. The exception is those substances on sub list II which were evaluated under a regulation or directive which doesn't have provisions for identifying EDs (e.g., the Cosmetics Regulation, etc.). For those substances, ED properties may still have been confirmed or suspected. Nordic Ecolabelling will evaluate the circumstances case-by-case, based on the background information indicated on sub list II.

- Flame retardants (e.g., short chain chloroparaffins)
- Per- and polyfluoroalkyl substances (PFASs), e.g., PFOA and PFOS
- Nanomaterials/-particles\*
- Heavy metals in dyes and pigments \*\*
- Azo dyes that may release carcinogenic aromatic amines (see Appendix 2)
- Phthalates
- Organotin compounds
- Chlorinated solvents, including chlorotoluenes, chlorophenols and chlorobenzenes
- APEO and APD (alkylphenol ethoxylates) and other alkylphenol derivatives
- Linear alkylbenzene sulphonates (LAS)
- Aziridines and polyaziridines
- EDTA (ethylene diamine tetraacetic acid) and DTPA (diethylene triamine pentaacetate)
- \* The definition of nanomaterial follows the European Commission's definition of nanomaterial of 18 October 2011 (2011/696/EU). Pigments are exempted from the requirement.
- \*\* Heavy metals include metals listed in this section. Exemptions from the requirement are granted for metal impurities in dyes and pigments up to the amounts set out in ETAD, Annex 2 "Heavy metal limits for dyes": antimony (50 ppm), arsenic (50 ppm), cadmium (20 ppm), chromium (100 ppm), lead (100 ppm), mercury (4 ppm), zinc (1500 ppm), copper (250 ppm), nickel (200 ppm), tin (250 ppm), barium (100 ppm), cobalt (500 ppm), iron (2500 ppm), manganese (1000 ppm), selenium (20 ppm) and silver (100 ppm).

Declaration from the chemical manufacturer or chemical supplier that the requirement is fulfilled.

#### O65 Biocides and antibacterial substances

The addition and/or integration of substances that may have a biocidal and/or antibacterial effect in the final hides/skins or leather product is not permitted.

An exemption is given for the use of biocidal substances in the tanning process itself if the active substance is permitted for skins and leather in EU Regulation (EU) No 528/2012.

Biocides/antibacterial substances include silver compounds, organotin compounds, chlorophenols, nano silver and nanogold.

- Declaration from the producer of the hide/skin or leather that the requirement is fulfilled.
- When applying the exemption for biocidal products, a list of the biocidal products with associated active substances used must be submitted.

#### O66 Discharges to wastewater

Wastewater from tanneries shall contain no more than 1 mg chromium (total) per litre of water tested according to ISO 6060 or equivalent.

The value for COD (chemical oxygen demand) in the wastewater from tanneries which is discharged to surface water after treatment must not exceed 200 mg/l. Wastewater discharged to municipal or other regional treatment is excluded.

The requirement covers both the tanning process itself and post-tanning.

Test report shall be submitted upon application and then the applicant shall have a routine to test annually according to the requirement as well as ensure compliance with the requirement. Nordic Ecolabelling shall be notified if the requirement is not complied with.

- ☐ Test report showing that the requirement is fulfilled.
- Description of how wastewater from wet process is treated and whether it is discharged to municipal or other regional treatment.

#### O67 Water consumption for hides/skins, and leather

The annual average water consumption for tanning leather shall not exceed the following limit values:

Type of skin and leather	Limit value
Raw hide	25 m³/ton
Vegetable tanned leather	35 m³/ton
Skin (from calf and goat)	45 m³/ton
Pigskin	80 m <sup>3</sup> /ton
Sheepskin	120 l/skin.

State the water consumption and submit documentation confirming consumption, for example from suppliers or copies of invoices. State the total amount in tonnes of hides/skins/leather that has been treated and a calculation showing water consumption per tonne of hides/skins/leather.

#### O68 Energy consumption

The amount of electricity (in kWh) and fuel consumed during tanning of hides/skins and leather shall be stated.

State the consumption of electricity (in kWh) and the purchase of fuel and attach confirmation from the supplier or a copy of the invoice to document this. State the total weight (in kg) of the hides/skins and leather processed.

#### 3.12 Quality and performance requirements

Nordic Ecolabelling sets requirements concerning the performance and durability of textiles, hides/skins, and leather. These requirements are important, since a Nordic Swan Ecolabelled product must offer good quality and seen from an environmental and resource perspective, products must be usable for a certain length of time before they wear out and a new replacement is required.

If the Nordic Swan Ecolabelled product is not in production at the time of application, the quality requirements may be documented with tests of a similar textile product. In such cases, this must be described.

#### 3.12.1 Quality and performance requirements for textiles

#### O69 Formaldehyde emissions from textiles

The amount of free and partly hydrolysable formaldehyde in the final textile shall not exceed 16 ppm.

Test method: The content of formaldehyde shall be tested in accordance with standard EN ISO 14184-1.

- Test report showing that the requirement is fulfilled.
- A certificate from Oeko-Tex 100 class I Baby or GOTS can also be used as documentation.

#### O70 Loss of fibre fragments from textiles

Fabrics, included with more than 10% by weight in the textile product and consist of at least 90% by weight of synthetic fibres, shall be tested for loss of fibre fragments according to either the TMC test method, standard ISO/DIS 4484-1 or AATCC TM212.

Nordic Ecolabelling can insert a limit value in the requirement when a relevant rating system with applicable limit values has been developed.

Nordic Ecolabelling encourages that test results to be sent to TMC (The Microfiber Consortium) as a basis for developing a rating system.

☐ Test report showing that the requirement is fulfilled.

#### O71 Dimensional changes during washing and drying

Dimensional changes after washing and drying shall not exceed:

- ± 2% for curtains and upholstery covers that are removable and can be washed.
- $\pm$  5% for woven textiles for duvets and pillows, in accordance with EN 13186.
- $\pm$  5% for bedding, tablecloths, and napkins
- $\pm$  7% for terry towels and washcloths
- ± 2% for woven products of wool blend and synthetic fibres
- $\pm$  3% for woven textiles not covered by the categories above.
- ± 5% for knitwear/hosiery
- $\pm 10\%$  for 100% wool knitwear (after 10 washes)

The requirement does not apply to fibres or yarns, products clearly labelled "dry clean only" or equivalent (if the product in question is normally labelled in this way), nor upholstery that is not intended for removal and washing.

#### The following testing procedure must be followed:

• 10 washes for 100% wool textiles and 1 wash for other textiles

• Temperature, laundry program and detergent as stated on the care label

039 & 112 /5

- Drying as stated on the care label
- 100% wool textiles should be stretched back into shape after each wash

#### Test method:

The tests should be carried out in accordance with EN ISO 6330 "Textiles – Domestic washing and drying procedures for textile testing", combined with ISO 5077 "Textiles – Determination of dimensional change in washing and drying".

**For professional textiles** intended for industrial laundry, the standard ISO 15797 Textiles – "Industrial washing and finishing procedures for testing of workwear", combined with EN ISO 5077.

**Woven products for duvets and pillows** with feathers and down filling are to be tested in accordance with EN 13186 – "Specification of feather and down filled bedding articles".

☐ Test report showing that the requirement is fulfilled.

#### O72 Tear strength

Woven fabrics must comply with the levels specified table below for tear strength according to the ISO 13937-1 standard. The requirement must be documented for a representative samples of the whole Nordic Swan Ecolabelled collection.

The test must be performed on the outer fabric and thus does not include any inner lining in the product.

Product type	Tear Strength
Trousers, shorts, skirts	1,5 daN
Jackets and coats	1,2 daN
Sportswear, ski clothing and other outdoor wear	1,2 daN
Lingerie, pyjamas, and other nightwear	0,8 daN
T-shirts, blouses, shirts, and dresses	0,8 daN
Swimwear	1,0 daN
Bed linen and sheets	0,8 daN
Towels	0,8 daN

Test reports according to ISO 13937-1, which shows that the requirement is met.

#### O73 Tensile strength

Woven fabrics must comply with the levels specified in the table below for tensile strength according to the ISO 13934-2 standard. The requirement must be documented for a representative samples of the whole Nordic Swan Ecolabelled collection.

The test must be performed on the outer fabric and thus does not include any inner lining in the product.

Product type	Tensile strength
Trousers, shorts, skirts	18 daN
Jackets and coats	15 daN
Sportswear, ski clothing and other outdoor wear	18 daN
Lingerie, pyjamas, and other nightwear	12 daN
T-shirts, blouses, shirts, and dresses	12 daN
Swimwear	15 daN

Bed linen and sheets	12 daN
Towels	12 daN

Test reports in accordance with ISO 13934-2, which show that the requirement  $\bowtie$ is met.

#### 074 Seam strength – woven fabrics

Woven fabrics must at a minimum comply with the levels specified in the table below for the determination of maximum force to seam rupture in accordance with the ISO 13935-2 standard. The requirement must be documented for a representative samples of the whole Nordic Swan Ecolabelled collection.

Product type	ISO 13935-2
The seam in the lining	80N
Textile with fabric weight <220g/m2	150N
Textile with fabric weight >220g/m2	200N
Backpacks and bags	200N

 $\bowtie$ Test reports showing that the requirement is met.

#### 075 Seam slippage resistance – woven fabrics

Woven fabrics listed in the table below must comply with the seam slippage resistance indicated in the table below. Testing can either be in according to EN-ISO 13936-1 or EN-ISO 13936-2. The requirement must be documented for representative samples of whole the Nordic Swan Ecolabelled collection.

Product type	EN-ISO 13936-1	EN-ISO 13936-2
Trousers, shorts, skirts	4 mm at 14 daN load	12 daN load at 3 mm
Jackets and coats	4 mm at 14 daN load	12 daN load at 4 mm
Sportswear, ski clothing and other outdoor wear	4 mm at 14 daN load	12 daN load at 4 mm
Lingerie, pyjamas, and other nightwear	4 mm at 10 daN load	6 daN load at 3 mm
T-shirts, blouses, shirts, and dresses	4 mm at 11 daN load	6 daN load at 3 mm
Swimwear	4 mm at 14 daN load	6 daN load at 3 mm
Bed linen and sheets	4 mm at 10 daN load	6 daN load at 3 mm

 $\bowtie$ Test reports showing that the requirement is met.

#### 076 Colour fastness to light

Colour fastness to light must be tested according to EN ISO 105 B02 or equivalent and meet the following levels:

- $\bowtie$ For textiles for outerwear, swimwear, and UV protective clothing: level 5  $\bowtie$ 
  - For textiles for furniture, curtains, and drapery: level 5

Level 4 is permitted for textiles for furniture, curtains, or drapery, if the textile is both lightly dyed (standard depth <1/12 in accordance with 105 A06) and consists of blends with more than 20% wool or other keratin fibres, or of blends with more than 20% linen or other bast fibres.

The requirement does not apply to white textiles, mattress covers and mattress protectors.

 $\bowtie$ Test report showing that the requirement is fulfilled.

#### 077 Colour fastness to washing

Colour fastness to either wash or dry cleaning shall meet the following conditions as a minimum:

- $\bowtie$ For colour change: level 3-4
- $\bowtie$ For discolouration: level 3-4

The requirement does not concern white products and products that are neither dyed nor printed, nor furniture textiles that are not intended for removal and washing or dry cleaning.

Test method for wash: The tests shall be performed in accordance with ISO 105 C06 (a single wash at the temperature stated on the product), or equivalent.

Test method for dry cleaning: The test must be carried out in accordance with ISO  $105\ \mathrm{D}01$ 

☐ Test report showing that the requirement is fulfilled.

#### O78 Colour fastness to perspiration and saliva

Underwear, sportswear, and t-shirts must as a minimum meet the following levels for colour fastness to perspiration.

and

Baby clothes (0-36 months) must as a minimum meet the following levels for colour fastness to saliva.

#### Levels for colour fastness:

- For discolouration: level 4
- For staining: level 4

Level 3 is, however, permitted for textiles that are dark in colour (standard depth >1/1 according to ISO 105-A06) and/or made from recycled wool.

The requirement does not cover white textile products or textile products that are neither dyed nor printed.

Test method: Tests must be performed in accordance with ISO 105 E04 (both acid and alkaline, plus comparison with textile of blended fibres) or equivalent.

Test report showing that the requirement is fulfilled. If only level 3 is met, it must be declared that the standard depth is >1/1 according to ISO 105-A06.

#### O79 Colour fastness to rubbing (wet)

Colour fastness to wet rubbing shall be at least level 3-4.

The requirement does not concern white products or products that are neither dyed nor printed.

Dark and medium coloured denim are exempt from requirement level of 3-4. Dark coloured denim must instead document that level 1-2 is met.

Medium coloured denim must instead document that the level 2-3 is met.

When using this exemption, the product must be accompanied by information that the textile's dye may cause cross-staining.

**Test method:** Tests shall be performed in accordance with ISO  $105\ X12$  or equivalent.

☐ Test report showing that the requirement is fulfilled.

For dark and medium denim, documentation must be submitted to include information on the product that the fabric's colour may be contaminated.

#### O80 Colour fastness to rubbing (dry)

Colour fastness to dry rubbing shall be at least level 4.

The requirement does not apply to white textile products, textile products that are neither died nor printed, curtains or other equivalent home furnishing textiles.

Dark coloured denim is exempted from the requirement for a minimum of level 4. Dark coloured denim must instead achieve at least a level 3. When using this

exemption, the product must be accompanied by information that the textile's dye may cause cross-staining.

Test method: Tests shall be performed in accordance with ISO 105 X12 or equivalent.

☐ Test report showing that the requirement is fulfilled.

#### O81 Ban on fabricated fabric holes

The fabric shall not be made with "wear" holes, that are fabricated to look like wear.

Declaration by the textile manufacturer that the requirement is fulfilled.

#### O82 Abrasion resistance

The following textile products in the table below are subject to requirements concerning abrasion resistance, expressed as number of rubs/abrasions (Martindale).

The requirement must be documented for representative samples of whole the Nordic Swan Ecolabelled collection. Tests shall be performed in accordance with EN ISO 12947-2 or an equivalent standard.

Textiles for professional use	Limit value
Commercial upholstery	50.000
Work wear for outdoor use (only woven fabric)	30.000
Work wear for indoor use (only woven fabric)	20.000

Textiles for consumers	Limit value
Domestic upholstery	30.000
Trousers, shorts, skirts	20.000
Jackets and coats	16.000
Sportswear, ski clothing and other outdoor wear	20.000
Lingerie, pyjamas, and other nightwear	10.000
T-shirts, blouses, shirts, and dresses	12.000
Swimwear	20.000
Bed linen and sheets	10.000
Knit	8.000

Test report showing that the requirement is fulfilled.

#### O83 Pilling

The textile must have a durability against pilling at least corresponding to the level specified for the textile type in the table below.

Test method: Tests shall be performed in accordance with EN ISO 12945-2 or an equivalent standard.

Type of textile	Limit value
Clothing - woven fabric	4 (1000 rubs)
Clothing - woven fabric with raised surface	2-3 (1000 rubs)
Clothing - knit	2-3 (1000 rubs)
Fleece	4 (5000 rubs)
Upholstery for private use	3-4 (5000 rubs)
Upholstery for professional use	4 (5000 rubs)
Upholstery of wool or wool blends for professional use	3-4 (5000 rubs)

☐ Test report showing that the requirement is fulfilled.

# 3.12.2 Quality and performance requirements for hides/skins and leather

#### O84 Formaldehyde emissions from skin and leather

The amount of free and partly hydrolysable formaldehyde in the final skin and leather shall not exceed:

- 20 ppm in products for children
- 75 ppm in other products

Test method: The content of formaldehyde shall be tested in accordance with EN ISO 17226-1 or 2.

☐ Test report showing that the requirement is fulfilled.

#### O85 Tear strength for skin and leather

Tear strength must be tested in accordance with ISO 3377 or equivalent and must be more than 20 N.

☐ Test report showing that the requirement is fulfilled.

#### O86 Flexing test for leather

When testing leather's flexing resistance, the leather shall manage 20,000 test repetitions (20 kc) without sustaining visible damage. The requirement only applies to leather with a surface coating.

Test method: The test shall be performed in accordance with ISO 5402 or equivalent.

☐ Test report showing that the requirement is fulfilled.

#### O87 Colour fastness to water - leather

Colour fastness when exposed to water shall be at least level 3 for leather that is dyed or has a surface finish.

Test method: The test shall be performed in accordance with ISO 11642 or equivalent.

☐ Test report showing that the requirement is fulfilled.

#### O88 Colour fastness to wear - leather

Colour fastness during wet and dry wear shall be at least level 3 for leather that is dyed or has a surface finish.

For vegetable tanned leather where no finishing is carried out, colour fastness is accepted for wet and dry wear of at least 2.

Test method: The test shall be performed in accordance with ISO 11640 or equivalent, with 20 repetitions for wet wear and 50 repetitions for dry wear. The results are to be assessed using ISO 105-A02 and ISO 105-A03 or equivalent.

☐ Test report showing that the requirement is fulfilled.

#### 3.12.3 Unsold textiles, skins, and leather

#### O89 Unsold textiles, skins, and leather

For the Nordic Swan Ecolabelled production, unsold textiles, fabric, skins, and leather and nonconformity productions shall not be sent for incineration or dumped in landfill.

The manufacturer shall inform Nordic Ecolabelling about how unsold products and nonconformity productions are dealt with.

#### Exemption:

- In cases where contamination of the product is detected, which is either harmful to the environment or health, the product is exempt from this requirement. It must be possible to document the contamination by a test report that is archived at the company.
- Uniforms for the military and police are also exempt from this requirement,

For the manufacturing Licence, the requirement covers the company's Nordic Ecolabelled production until it is sold on to the next link in the value chain.

Description of procedure for how unsold products and nonconformity productions are dealt with.

#### 3.13 Packaging, storage, and transport

# O90 Chlorophenols, PCB and organotin compounds during transport and storage.

Chlorophenols (and salts and esters of chlorophenol), PCB (polychlorinated biphenyls) and organotin compounds shall not be used in connection with the transport or storage of products and semi-manufactures.

Declaration from the suppliers at every stage of the production chain that these substances or compounds are not used in the yarn, fabric and/or end product or a valid Licence certificate for the EU Ecolabel, issued in accordance with the Commission decision from 2014.

#### O91 Prohibition of PVC

PVC (polyvinyl chloride) must not be used in the packaging.

☐ Declaration from the manufacturer of plastic material.

#### O92 Recyclable packaging material

It shall be possible to recycle the main material\* in the primary packaging\*\* via the existing waste systems operating in the Nordic region today.

Biodegradable and oxo-degradable plastic must not be used, since they contaminate the other recycled plastics streams in the Nordic region.

- \* The main material is defined as the material that makes up 90 wt% or more of the total packaging.
- \*\* Primary packaging means the packaging that stays with the Nordic Swan Ecolabelled product all the way to the customer or individual packaging that accompanies the product to the retailer. Incineration with energy recovery does not count as material recycling.
- Description of the main material in the packaging and how the material can be recycled in existing waste and resource systems.

#### O93 Design of recyclable packaging

The requirement covers primary packaging\* for the Nordic Swan Ecolabelled product.

- Only monomaterials\*\* shall be used in the packaging. If various separate packaging elements are used, these may each be made of a separate monomaterials and shall be possible to separate in the waste sorting.
- Multi-material hangers are allowed if these are collected and reused in a textile manufacturer's take-back system.

#### Plastic packaging

- Plastic packaging shall be made from either polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET).
- Coloured plastic cannot be used for virgin plastic feedstock. Only if at least 50% by weight of the plastic is recycled material\*\*\*, colouring is permitted.
- \* Primary packaging is defined here as packaging from the manufacturer that accompanies the product all the way to the store or the consumer. Delivery packaging used by online retailers is not considered to be primary packaging.
- \*\* A monomaterial is defined as material components that are not composed of multiple material types. For example, the same plastic type and cardboard are monomaterials.
- \*\*\* Recycled material is defined as post-consumer/commercial recycled material defined in the requirement according to ISO 14021:2016:

"Post-consumer/commercial" is defined as material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

- Description of primary packaging documenting compliance with the requirement.
- Multi-material hangers: Textile manufacturer's procedure, describing the takeback system for hangers.

#### O94 Information on recycling

The packaging shall carry information on how it can be sorted for recycling. This information shall be stated using text or symbols.

Product label or artwork providing information on recycling.

### 3.14 Social and ethical requirements

#### O95 Mechanical and chemical distressing of denim

The following shall not be used:

- manual and mechanical sandblasting or sanding of denim.
- potassium permanganate (CAS no. 7722-64-7) for the treatment of denim fabrics/products, if used in open process.
- Declaration from the denim manufacturer stating the method used to treat the denim, plus a declaration that the requirement is fulfilled.

#### O96 Fundamental principles and rights at work

The licensee must ensure that all processes in the textile manufacturing and processing, such as all dyeing plants, tanneries and cut-make-trim (CMT) factories (e.g., sewing factories) used in the manufacture of the licenced product(s) comply with:

- Relevant national laws and regulations
- The International Labour Organisation (ILO) Conventions below:

#### **ILO Conventions:**

- 1. Prohibition of forced labour (ILO Conventions Nos. 29 and 105)
- 2. Freedom of association, and protection of the right to organise and to conduct collective bargaining (ILO Conventions Nos. 87, 98, 135 and 154)

- 3. Prohibition of child labour (ILO Conventions Nos. 138, 182 and 79 plus ILO Recommendation No. 146)
- 4. No discrimination (ILO Conventions Nos. 100 and 111, UN Convention on the Elimination of All Forms of Discrimination against Women)
- 5. No violent treatment Physical abuse or punishment, and threats of physical abuse are prohibited. The same applies to sexual or other forms of harassment.
- 6. Workplace health and safety (ILO Convention No. 155 and ILO Recommendation No. 164)
- 7. Fair pay (ILO Convention No. 131)
- 8. Working hours (ILO Conventions Nos.1 and 14)

**Certification at the manufacturing Licence:** The licensee of the manufacturing licence shall submit either a valid certificate of a SA8000 certification, or other third-party verification of compliance with the requirement. This may be a BSCI audit report.

If the manufacturer is in the process of becoming SA8000 certified, this may be accepted under the following conditions: Final report from the certification body, including action plan with stated deadlines, submitted for assessment.

**Product licence**: The licensee of the product licence shall have following:

- A code of conduct with its subcontractors
- A publicly available policy adopted by the Board of Directors, which at least covers the social and ethical obligations that the requirement covers. At least one person at management level must be responsible for policy compliance.
- A routine for internal communication and regular follow-up of this policy in own company and in the supply chain.
- A routine for performing regular risk analysis to identify and prioritize the risk of non-compliance of the requirements and perform risk-reducing measures.

Nordic Ecolabelling may withdraw the ecolabel licence, if the licensee no longer fulfils SA8000 (or other corresponding certification) or does not meet the stated deadlines in any action plans.

- Manufacturing licence: SA8000 certificate or other third-party verification of compliance with the requirement incl. latest audit report e.g., a BSCI audit rapport.
- Product licence: Shall submit description of code of conduct, policy and routine as required by the requirement.

### 3.15 Quality and regulatory requirements

#### O97 Control and assessment of suppliers

The requirement includes both the product licence and a manufacturing licence.

The licensee shall submit an annual follow-up of its own subcontractors to Nordic Ecolabelling, which contain the following, as a minimum:

Written documentation must be obtained annually showing that the
responsible person at subcontractors who perform all, or part of the textile
production is familiar with the Nordic Swan Ecolabelling's requirements for
the relevant processes and understands how the supplier can ensure
compliance with these.

 An annual confirmation shall be submitted describing that only subcontractors approved on the licence are used for the production of the Nordic Swan Ecolabelled textile. At the same time a list of the subcontractors used for the production of the Nordic Swan Ecolabelled textile shall be submitted.

Changes in the production such as replacement of subcontractors, fibre raw materials or chemicals shall be approved by Nordic Ecolabelling before the change is initiated in production. See requirement O101 Planned changes for procedure for this.

The licensee shall submit documentation stated in the requirement annually to Nordic Ecolabelling. Documentation for each year of the validity of the licensee must be kept by the licensee.

- The licensee shall submit documentation annually showing that the subcontractor's responsible person is familiar with the relevant Nordic Swan Ecolabelling requirements.
- Licensee must annually submit confirmation that only subcontractors and raw materials approved for the licence are used. As well as provide a list of the subcontractors used.

#### O98 Responsible person and organisation

The company (both the manufacturing licence and the product licence) shall appoint an individual who are responsible for ensuring the fulfilment of the Nordic Swan Ecolabelling requirements, for marketing and for finance, as well as a contact person for communications with Nordic Ecolabelling.

☐ Organisational chart showing who is responsible for the above.

#### O99 Documentation

The licensee (both the manufacturing licence and the product licence) shall archive the documentation that is sent in with the application, or in a similar way maintain information in the Nordic Ecolabelling data system.

P Checked on site, as necessary.

#### O100 Quality of the product

The licensee of the product licence must guarantee that the quality of the Nordic Swan Ecolabelled product does not deteriorate during the validity period of the Licence

- Procedures for archiving claims and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Swan Ecolabelled product.
- ? The claims archive is checked on site.

#### O101 Planned changes

Written notice must be given to Nordic Ecolabelling of planned changes in products and markets, that have a bearing on Nordic Ecolabelling requirements.

Procedures, of both the holder of the manufacturing licence and the holder of the product licence, detailing how planned changes in products and markets are handled.

#### O102 Unplanned nonconformities

The requirement includes both manufacturing licence and product licence. Unplanned nonconformities that have a bearing on Nordic Ecolabelling requirements must be reported to Nordic Ecolabelling in writing and journaled.

Procedures detailing how unplanned nonconformities are handled.

#### O103 Traceability

The licensee of the manufacturing licence shall be able to trace the Nordic Swan Ecolabelled product in the production. A manufactured/sold product should be able to trace back to the occasion (time and date) and the location (specific factory) and, in relevant cases, also which machine/production line where it was produced. In addition, it should be possible to connect the product with the actual raw material used.

Description of/procedures for the fulfilment of the requirement.

#### O104 Legislation and regulations

The licensee (both the production licence and the product licence) shall ensure compliance with all applicable local laws and provisions at all production facilities for the Nordic Swan Ecolabelled product, e.g., with regard to safety, working environment, environmental legislation and site-specific terms/permits.

□ Duly signed application form.

# Regulations for the Nordic Ecolabelling of products

When the Nordic Swan Ecolabel is used on products the licence number shall be included.

More information on graphical guidelines, regulations and fees can be found at <a href="https://www.nordic-swan-ecolabel.org/regulations">www.nordic-swan-ecolabel.org/regulations</a>

# Follow-up inspections

Nordic Ecolabelling may decide to check whether the textile, skin or leather fulfils Nordic Ecolabelling requirements during the licence period. This may involve a site visit, random sampling, or similar test.

The licence may be revoked if it is evident that textile, skin, or leather does not meet the requirements.

Random samples may also be taken in-store and analysed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licensee.

# Criteria version history

Nordic Ecolabelling adopted version 5.0 of the criteria for Nordic Swan Ecolabelled Textiles, skins/hides, and leather on 15 November 2021. The criteria are valid from 1 March until 1 May 2026.

On 14 June and 6 September 2022 Nordic Ecolabelling decided to adjust requirement O70 regarding introduction of tests according to standard ISO/DIS 4484-1 and AATCC TM212. On the 14 June 2022 it was also decided to adjust requirement O14 by adding OCS 100 and OCS blended. On 23 August 2022 Nordic Ecolabelling decided to adjust requirement O13 by adding Leather standard by Oeko-Tex, requirement O29 by adding Bonsucro standard, and requirement O93 where requirements for labels on plastic packaging have been deleted. The new version is called 5.1.

On 18 April 2023 Nordic Ecolabelling decided to adjust requirement O57, where it was clarified that tests for 1,3-butadiene must only be carried out for synthetic latex. In addition, the product type rugs were removed from the criteria, as these product types are now covered by the criteria for textile floor coverings and carpets. The new version is called 5.2.

On 20 June 2023 Nordic Ecolabelling decided to adjust requirement O8, where embroidery area of a total of max. 50 cm<sup>2</sup> is exempt from the requirements. The new version is called 5.3.

On 14 November 2023 Nordic Ecolabelling decided to prolong the criteria to the 31 December 2026. The new version is called 5.4.

## Appendix 1 Analysis and test laboratories

#### Requirements on the analysis laboratory (all)

The analysis laboratory/test institute must be competent and impartial.

The analysis laboratory used shall fulfil the general requirements of standard EN ISO 17025 or have official GLP status.

The applicant's analysis laboratory/test procedure may be approved for analysis and testing if:

- sampling and analysis are monitored by the authorities, or
- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 9001, or
- the manufacturer can demonstrate agreement between a first-time test conducted at the manufacturer's own laboratory and testing carried out in parallel at an independent test institute, and the manufacturer takes samples in accordance with a fixed sampling schedule.

#### Zinc

Analytical methods for measuring the zinc content of wastewater: SS 28152 T1, NS 4773, SFS 3047, EN ISO 11885, EN ISO 15586 or ISO 17294-2. Analyses may be performed regularly using photometric or similar methods, provided that the analysis results are checked regularly and comply with the above methods of analysis.

Emissions of zinc to water are calculated as an annual average and based on at least one representative 24-hour sample per week unless the emission permit of the authorities prescribes some other method of calculation.

# Appendix 2 Azo dyes and Carcinogenic aromatic amines

Carcinogene aromatic amines	CAS-no
4-aminodiphenyl	92-67-1
Benzidine	92-87-5
4-chlor-o-toluidine	95-69-2
2-naphthylamine	91-59-8
o-amino-azotoluene	97-56-3
2-amino-4-nitrotoluene	99-55-8
p-chloraniline	106-47-8
2,4-diaminoanisol	615-05-4
4,4´-diaminodiphenylmethane	101-77-9
3,3´-dichlorbenzidine	91-94-1
3,3´-dimethoxybenzidine	119-90-4
3,3´-dimethylbenzidine	119-93-7
3,3´-dimethyl-4,4´-diaminodiphenylmethane	838-88-0
p-cresidine	120-71-8
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
o-toluidine	95-53-4
2,4-diaminotoluene	95-80-7
2,4,5-trimethylaniline	137-17-7
4-aminoazobenzene	60-09-3
o-anisidine	90-04-0
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4
2-amino-5-nitroanisole	97-52-9
m-nitroaniline	99-09-2
2-amino-4-nitrophenol	99-57-0
m-phenylenediamine	108-45-2
2-amino-5-nitrothiazole	121-66-4
2-amino-5-nitrophenol	121-88-0
p-aminophenol	123-30-80
p-phenetidine	156-43-4
2-methyl-pphenylenediamine; 2,5diaminotoluene	615-50-9
2-methyl-pphenylenediamine; 2,5diaminotoluene	95-70-5
2-methyl-pphenylenediamine; 2,5diaminotoluene	25376-45-8
6-chloro-2,4-dinitroaniline	3531-19-9

# Appendix 3 Guidelines for standard, renewable commodities

Nordic Ecolabelling sets requirements on the standards to which cultivated commodities are certified. These requirements are described below. Each individual national sustainability standard and each certification system is reviewed by Nordic Ecolabelling to ensure that the requirements are fulfilled.

#### Requirements on standards

- The standard must balance economic, ecological, and social interests and comply with the Rio Declaration's principles, Agenda 21 and the Forest Principles, and respect relevant international conventions and agreements.
- The standard must contain absolute requirements and promote and contribute towards sustainable cultivation. Nordic Ecolabelling places special emphasis on the standard including effective requirements and that the requirements protect the biodiversity.
- The standard must be available to the public. The standard must have been developed in an open process in which stakeholders with ecological, economic, and social interests have been invited to participate.

The requirements related to the sustainable standards are formulated as process requirements. The basis is that if stakeholders agree on the economic, social, and environmental aspects of the standard, this safeguards an acceptable requirement level.

If a sustainability standard is developed or approved by stakeholders with ecological, economic, and social interests, the standard may maintain an acceptable standard. Accordingly, Nordic Ecolabelling requires that the standard balances these three interests and that representatives from all three areas are invited to participate in development of the sustainable standard.

The standard must set absolute requirements that must be fulfilled for the certification. This ensures that the agriculture management fulfils an acceptable level regarding the environment. Since Nordic Ecolabelling requires that the standard must promote and contribute towards sustainable cultivation, the standard must be assessed and revised regularly for process improvement and successively reduce environmental impact.

#### Requirements on certification system:

 The certification system must be open, have significant national or international credibility and be able to verify that the requirements in the sustainable standard are fulfilled.

#### Requirements on certification body:

• The certification body must be independent, credible, and capable of verifying that the requirements of the standard have been fulfilled. The certification body must also be able to communicate the results and to facilitate the effective implementation of the standard.

The certification system must be designed to verify that the requirements of the standard are fulfilled. The method used for certification must be repeatable and applicable so the requirements can be verified. Certification must be in respect to a specific sustainable standard. There must be inspection prior to certification.

#### Requirements on Chain of Custody (CoC) certification:

- Chain of Custody certification must be issued by an accredited, competent third party.
- The system shall stipulate requirements regarding the chain of custody that assure traceability, documentation, and controls throughout the production chain.

#### **Documentation**

Copy of cultivation standard, name, address, and telephone number to the organisation who has worked out the standard and audit rapports.

References to persons who represents stakeholders with ecological, economic and social interests who have been invited to participate.

Nordic Ecolabelling may request further documents to examine whether the requirements of the standard and certification system in question can be approved.