Nordic Ecolabelling for

Supplies for microfibre based cleaning

Version 3.0 • date – date

CONSULTATION

Nordic Ecolabelling

Content

Addresses

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:

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What is Nordic Swan Ecolabelled Supplies for microfibre based cleaning?

Nordic Swan Ecolabelled supplies for microfibre based cleaning have a reduced environmental impact throughout its life cycle and have a first-rate cleaning performance without the use of cleaning chemicals. There are requirements for textile fibres, for constituent materials of the cleaning tools, chemicals used in production of textiles, production of textile, packaging, and circular aspects such as quality and material recycling. Also, 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: Supplies for microfibre based cleaning with the Nordic Swan Ecolabel must be durable (have a long service life) and have a high cleaning quality, which must be tested and documented. A high proportion of the textile fibres and of the materials in the cleaning tools must be recycled or based on renewable resources. At the same time several of the Nordic Swan Ecolabel requirements support that the materials of the cleaning tool and of the packaging can be recycled in new resource loops after use.

Nordic Swan Ecolabelled supplies for microfibre based cleaning:

- Offer a first-rate cleaning performance without the use of cleaning chemicals.
- Are durable which promote a long service life and resource efficiency.
- Are tested for loss of fibre fragments (e.g., microplastic).
- Are gentle on the surface being cleaned.
- Minimum 30% of the polyester fibres are recycled or based on renewable resources complying with specific environmental requirements.
- Meet strict environmental and health requirements for chemicals used in textile manufacturing - this is important for wastewater, the people who manufacture the textiles and those who use them.
- Are manufactured with water and energy efficient technology, which saves water and reduces CO_2 emissions.
- Are manufactured under proper working conditions, where the conventions from UN's International Labour Organizations (ILO) on workers' rights has been complied with.

Why choose the Nordic Swan Ecolabel?

- The licensee 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 supplies for microfibre based cleaning 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?

Nordic Swan ecolabelled supplies for microfibre based cleaning includes cloths, mops, pads, and other cleaning products containing microfibres (i.e., fibres less than 1 decitex (Dtex) thick) that are designed for dry and/or damp cleaning without the use of cleaning chemicals. There is no requirement for the amount of microfibre in a product, because fulfilment of the requirement for cleaning efficiency is the important part here. The product group includes both products for private and for professional use.

Supplies for microfibre based cleaning may contain textile fibres other than microfibres, both synthetic and natural fibres. The cleaning products must be washable.

Also cleaning tools, such as mop handles and stands, are included but only if they are to be used and sold together with the microfibre product in the same packaging. It must be possible to remove the cleaning fabric from the cleaning tool. Cleaning tools cannot be ecolabelled separately.

Products that can be ecolabelled in accordance with other Nordic Swan Ecolabelling criteria are not covered by the Supplies for microfibre based cleaning. Most relevant are:

- Textiles that do not contain microfibres and have a cleaning purpose (criteria for textiles)
- Wet wipes (criteria for cosmetic products)
- Disposable products made from non-woven material that cannot be washed or reused, for example paper towels (criteria for tissue paper).

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. For addresses see page 3.

What is required?

The application consists of a 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:

✉ Enclose

Upload

State data in electronic application

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 page 3 or 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

Ingoing substances	All substances in the chemical product regardless of amount, including additives (e.g., preservatives and stabilizers) in the raw materials. Substances known to be released from ingoing substances (e.g., formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.
Impurities	Residuals, pollutants, contaminants etc. from production, incl. production of raw materials, that remain in the chemical product in concentrations less than 100 ppm. Impurities in the raw materials exceeding concentrations of 1000 ppm are always regarded as ingoing substances, regardless of the concentration in the chemical product. Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and

	detergents for production equipment and carry-over from other or previous production lines.
Recycled material	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.
Chemical recycling	The definition of chemical recycling used here includes processes in which the final product 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.
Nanomaterials	The European Commission's definition from 18 October 2011 (2011/696/EU): Nanomaterials: A natural, incidental, or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions are in the size range of 1–100 nm.
Genetically modified organisms (GMO)	Genetically modified organisms are defined in EU Directive 2001/18/EC.
Textile finishing	All the processes through which fabric is passed after bleaching and dyeing. Meaning processes such as printing, impregnating, or coating, as well as any other application of chemicals that change the property of the fabric (smoothness, drape, lustre, water repellence, flame retardancy or crease resistance. etc.).
Additive	Chemical products added to improve the performance, functionality, and ageing properties of the polymer. Examples of additives are plasticisers, flame retardants, antioxidants, light/heat/thermal stabilisers, pigments, antistatic agents, and acid scavengers.

2 Description of the product and the production chain

The product, material composition, manufacturing process, suppliers, production chain etc. must be described to aid the assessment of which requirements need to be met.

O1 Description of the product, material composition and limits

The applicant must submit the following information for each product:

- State product type (e.g., cloth, mop, pad), if cleaning tool is included, trade name/ item number, if the product is for consumer or professional.
- Confirmation that the product is not a single-use product.
- If cleaning tool is included: Illustration/photo of the product and a description of how it is possible to remove the cleaning fabric from the cleaning tool.
- For textile part: Have any of the textile parts been further processed after bleaching and dyeing and undergone finishing (see section 1 for definition) such as printing, impregnated or coated?

- Overview of materials and composition: Overview of all ingoing materials (e.g., polyester, cotton, aluminium, plastic etc.), including the following information for each material:
  a) Trade name/item number and material type.
  b) Supplier of the material.
  c) State if the material is for the textile part or the cleaning tool.
  d) Specify which textile fibres are microfibres and the thickness in decitex (Dtex).
  e) State if material is recycled* or biobased.
  f) For cleaning tool material: State if surface is treated or not, and type of surface treatment.
  g) Weight in g of the material in the product.
  h) % by weight of the material in the textile part and in the cleaning tool, respectively.

A material type that are present with a total amount of maximum 5% by weight of the product are exempt from the requirements**.

Material types that are not subject to any requirements in these criteria may account for no more than total 5% by weight of product**.

UHF (ultra-high frequency) and RFID (radio frequency identification) chips/tags are allowed and are not subject to any requirements in these criteria.

* *See definition in section 1.*

** *Calculated separately for the textile part and for the cleaning tool, respectively.*

Overview of the materials, which must include the information required above.

If cleaning tool is included: Illustration or photo of the product.

O2 Description of the production chain and the manufacturing processes

The production and supply chain can be described using a flow chart, for example as shown in Appendix 1.

Manufacturing processes must be described. For each process the following information must be submitted:

- The manufacturing processes performed, e.g., textile fibre production, textile dyeing, textile finishing or powder coating
- The company name of the supplier who perform the process
- Production site (full address and country)

Submit a description of the production chain and the manufacturing processes (preferably in a flow chart), and state which suppliers perform each process. See the example in Appendix 1.

Submit an overview of manufacturing processes with information on the type of process, the company name, production location and contact person for each process performed. See the example in Appendix 1.

3 Textile

This section covers requirements regarding the fibres, chemicals, and production of textile parts.

O3 Textiles certified with the Nordic Swan Ecolabel

If a textile part is certified with the Nordic Swan Ecolabel for textile, hide/skins, and leather (generation 5 or later), it is exempted from requirements in section 3.

The textile must not have been treated with chemicals after certification.

Trade name and licence number for the Nordic Swan Ecolabelled textile.

Declaration from the applicant that the textile has not been treated with chemicals after certification.

3.1 Textile fibres

The criteria cover the most common fibre types used in supplies for microfibre based cleaning.

A fibre type that are present with a total amount of maximum 5% by weight of the textile part are exempt from the requirements in section 3.1.

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

O4 Recycled fibres: Synthetic fibre – fossil origin

The recycled material* must not include recycled plastic from plants that are EFSA** or FDA*** approved as food contact material or marketed as compatible with these.

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.

** See definition in section 1. However, for 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.*

*** 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.*

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.

O5 Recycled fibres/raw materials: 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 II certificate

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 eco-labelled 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	2.0 mg/kg
Lead	1.0 mg/kg
Mercury	0.02 mg/kg
Cadmium	0.1 mg/kg
Antimony	30.0 mg/kg
Organic tin compounds	
TBT and TPhT	1.0 mg/kg
Total of DBT, DMT, DOT, DPhT, DPT, MOT, MMT, MPhT, TeBT, TeET, TCyHT, TMT, TOT, TPT	2.0 mg/kg
Chlorophenols	
Pentachlorophenol	0.5 mg/kg
Tetrachlorophenol	0.5 mg/kg
Trichlorophenol	2.0 mg/kg
Dichlorophenpol	3.0 mg/kg
Monochlorophenol	3.0 mg/kg
Per- and polyfluorinated compounds	
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Me-FOSE, N-Et-FOSE	Total 1.0 µg/m^2
PFOA and salts	0.025 mg/kg
PFHpA, PFNA, PFDA, PFUdA, PFDoA, PFTrDA, PFTeDA	0.1 mg/kg for each
Phthalates	
BBP, DBP, DEP, DMP, DEHP, DMEP, DIHP, DHNUP, DCHP, DHxP, DIBP, DIHxP, DIOP, DINP, DIDP, DPrP, DHP, DNOP, DNP, DPP	Total 0.05 weight%
Flame retardants	
Flame retardants, except for flame retardants approved by Oeko-Tex	10 mg/kg for each Total 50 mg/kg

Formaldehyde	75 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 50 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 1.0 mg/kg
For elastane, polyurethane, and polyamide	
DMAc	0.05 weight% solvent residue

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

Test reports or Oeko-Tex 100 class II 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 II 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 I ecolabelled textiles, this must be documented by the fibre supplier.

O6 Synthetic fibre: Bio-based origin

Synthetic fibres from 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 and soy

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

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 according 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.*

**** See definition in section 1.*

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.

O7 Polyamide

Polyamide must meet either a) or b):

a) Minimum 20 % by weight of the polyamide fibres must comprise of recycled material (see definition of recycled material in O4).

   Recycled material must also fulfil requirement O4 and O5.

b) For nylon 6 and nylon 6,6 the emissions to air of N_2O during monomer production, expressed as an annual average, must not exceed 9,0 g N_2O/kg.

a: Documentation as described in requirement O4 and O5. And calculation showing that minimum 20 wt% of the polyamide fibres are recycled.

or

b: A declaration from the producer of the polyamide fibre or a test report (test method: ISO 11564 or equivalent method) showing that the requirement for max. 9.0 g N_2O/kg as an annual average is fulfilled. The analysis laboratory must fulfil the requirements in Appendix 2.

or

Alternatively, a valid EU Ecolabel (Commission's decision from 2014) or Blue Angel (DE-UZ 154, 2017) certificate may be used as documentation.

O8 Polyester

Minimum 30 % by weight of the polyester fibres must either be composed of recycled material* (see definition of recycled material in O4) or be bio-based. Recycled material must fulfil requirement O4 and O5. Bio-based material must fulfil requirement O6.

For the remaining part of the polyester fibres the amount of antimony in the polyester fibre must not exceed 260 ppm.

Recycled fibres: Documentation as described in requirement O4 and O5.

Bio-based fibres: Documentation as described in requirement O6.

A declaration from the producer of the polyester fibre that antimony is not used or a test report showing that the antimony requirement is fulfilled. Test method: Direct determination by atomic absorption spectrometry (AAS) or equivalent test method. The analysis laboratory must fulfil the requirements in Appendix 2.

O9 Polypropylene

The use of lead-based pigments is prohibited.

A declaration from the producer of the polypropylene fibre that lead-based pigments is not used.

O10 Polyurethane

The fibres must comprise of 100% recycled material (see definition in O4) and must fulfil requirement O4 and O5.

Exception:

For fibres that are STANDARD 100 by OEKO-TEX (annex 4 class II) certified, an exception is given for up to 10% polyurethane fibres in the textile part.

See requirement O4 and O5.

If exception is used: STANDARD 100 by OEKO-TEX (class II) certificate for the polyurethane fibres.

O11 Cotton fibres

The requirement applies if cotton and other natural seed fibres of cellulose are included with more than 10% by weight in the textile part.

Cotton and other natural seed fibres of cellulose (including kapok) shall not come from GMO (genetically modified organisms)* and must be one of the following:

- recycled*
- organically cultivated**
- cultivated according to standard BCI (Better Cotton Initiative)
- cultivated according to standard CmiA (Cotton made in Africa)
- cultivated according to standard Fairtrade 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.

** See definition in section 1.*

*** 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 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: 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 pre-consumer) 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.

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.

BCI, CmiA or Fairtrade cotton: Documentation showing that the cotton is grown within one of the three standards BCI, CmiA or Fairtrade cotton. All documentation shall reference the Control Body or certifier of the different forms of cotton and be documented:

- 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.

O12 Regenerated cellulose fibre: Recycled textile fibre

The requirement applies if regenerated cellulose fibres are included with more than 10% by weight in the textile part.

Raw materials for regenerated cellulose fibres must meet either requirement O12 for recycled textile fibre or O13 for wooden fibre materials, respectively. A fibre which is based on raw materials from a combination of requirements O12 and O13 can also be approved if the different raw materials each meet their own requirements.

Recycled raw materials to produce 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).

* *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 O12 or O13.

O13 Regenerated cellulose fibre: Limitation of tree species

The requirement applies if regenerated cellulose fibres are included with more than 10% by weight in the textile part.

Raw materials for regenerated cellulose fibres must meet either requirement O12 for recycled textile fibre or O13 for wooden fibre materials, respectively. A fibre which is based on raw materials from a combination of requirements O12 and O13 can also be approved if the different raw materials each meet their own requirements.

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.
- 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: http://www.nordic-ecolabel.org/certification/paper-pulp-printing/pulp--paper-producers/forestry-requirements-2020/*

Details Declaration from the applicant/manufacturer/supplier that tree species listed on a-d) are not used,

or

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.

O14 Regenerated cellulose fibre: Traceability and certified raw materials

The requirement applies if regenerated cellulose fibres are included with more than 10% by weight in the textile part.

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, calculated using the following formula:

   Requirement for the percentage of fibre raw material from certified forestry in the pulp (Y):

   $Y\ (\%) \geq 50 - 0.67\ x$

   where x = percentage of recycled material.

The remaining percentage of wood/bamboo 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.

* *See definition in section 1.*

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.

O15 Regenerated cellulose fibre: 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 2014.

O16 Regenerated cellulose fibre: Process

The requirement applies if regenerated cellulose fibres are included with more than 10% by weight in the textile part.

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.*

Documentation showing that the production of the regenerated cellulose fibres is produced with "closed loop" processes in accordance with the requirement.

3.2 Textile chemicals: General requirements

The requirements in this chapter apply to all chemical products used in wet processes during the production of textiles (excluding fibre production), as well as chemical products used for finishing. Examples of chemicals include softeners, solvents, bleaching agents, pigments and dyes, stabilisers, dispersants, enzymes, and other auxiliary chemicals. Examples of processes covered by the requirements are washing, bleaching, and dyeing as well as finishing. Examples of finishing processes are printing, impregnating, or coating. The requirements apply regardless of whether it is the textile producer or their supplier that uses the chemicals.

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

O17 Overview of chemical products

All chemical products shall be stated and documented with a safety data sheet. A combined list or separate lists shall be drawn up for each production process and/or supplier, including finishing such as 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 chemical products for every production process and/or supplier.

Safety data sheet for every chemical product, in line with Annex II of REACH 1907/2006.

O18 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 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**

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

Note that responsibility for correct classification lies with the manufacturer.

*** 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. 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 product manufacturer/supplier 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. The dyehouse must send

routines for the use of personal protective equipment when manually handling dusty colours or a description of technical measures.

O19 Prohibition of CMR substances

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

** See definition in section 1.*

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

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

*** Exemption: Titanium dioxide (TiO2) which is added in powder form during raw material production.*

Declaration from the chemical product manufacturer/supplier, that the requirement is fulfilled.

O20 Prohibited substances

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

** See definition in section 1.*

- Substances on the Candidate List (https://echa.europa.eu/candidate-list-table). Siloxanes D4, D5 and D6 have their own documentation requirement, see requirement O23.
- Substances that are PBT (Persistent, Bio accumulative, and Toxic) or vPvB (very Persistent and very Bio accumulative) 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-eu-investigation-endocrine-disruption
  - https://edlists.org/the-ed-lists/list-iii-substances-identified-asendocrine-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**
- Metal complex dyes
- Azo dyes that may release carcinogenic aromatic amines (see Appendix 4)
- 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 1 below. Exemptions from the requirement are granted for:*

1) 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), chromium VI (10 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)

2) 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 product manufacturer/supplier that the requirement is fulfilled.

3.3 Textile chemicals: Specific requirements

These requirements concern groups of chemical products used under specific wet processes. For instance, detergents used for cleaning processes.

The chemical products must also fulfil requirements in chapter 3.2.

O21 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 product manufacturer/supplier must submit safety data sheets, in line with Annex II of REACH 1907/2006, or test reports showing fulfilment of the requirement.

O22 Bleaching agents

Chlorinated substances shall not be used as bleaching agents. The requirement applies to bleaching of the textile.

Declaration from the dyehouse that the requirement is fulfilled.

O23 Chemicals containing 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 product manufacturer/supplier showing that the requirement is met. The analysis laboratory must fulfil the requirements in Appendix 2.

3.4 Textile chemicals: Additional requirements on finishing processes

These requirements concern all chemicals used in finishing processes, meaning the processes after bleaching/dyeing of the fabric, such as printing, impregnating, or coating, as well as any other application of chemicals that change the property of the fabric (smoothness, drape, lustre, water repellency, flame retardancy or crease resistance etc.).

The chemicals must also fulfil requirements in chapter 3.2.

O24 Biocides and antibacterial substances

The following substances, which may have a biocidal and/or antibacterial effect in the 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 chemical product manufacturer/supplier that the requirement has been fulfilled.

O25 Polymers and their additives in finishes

Halogenated polymers are prohibited (e.g., PVC (polyvinylchloride) in finishes such as impregnation and coatings.

Additives* in polymers (e.g., added in master batch) used in finishes such as impregnation and coatings must meet the following requirements:

- O18 Classification of chemical products
- O19 Classification of ingoing substances
- O20 Prohibited substances

** See definition in section 1.*

Declaration from the chemical product manufacturer/supplier that halogenated polymers are not used.

Declaration from the chemical/additive manufacturer or supplier, as described in requirement O18, O19 and O20.

3.5 Textile production

O26 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.

O27 Implementation of Best Available Techniques (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 of 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 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 of 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
1. 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_2 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.

4 Cleaning tools

This section covers requirements for cleaning tools, such as mop handles, stands and other fixtures.

Cleaning tools cannot be ecolabelled separately. However, if cleaning tools are used and sold together with the microfibre product in the same packaging, they can be part of the ecolabelling and must fulfil requirements in section 4.

It must be possible to remove the cleaning fabric from the cleaning tool.

4.1 Materials used in cleaning tools

A material type that are present with a total amount of maximum 5% by weight of the cleaning tool are exempt from the requirements in chapter 4.1.

Material types that are not subject to any requirements in chapter 4.1 may account for no more than a total of 5% by weight of the cleaning tool.

If a material type account for more than a total of 5% by weight of the cleaning tool and are not subject to any requirements in chapter 4.1, Nordic ecolabelling can be contacted for assessment of whether the material and requirements for it shall be included in the criteria.

O28 Material recovery

It must be possible to separate different types of materials (incl. different types of plastic) from each other for recycling (not applicable to surface treatments). This must not require the use of special tools.

It must be possible to remove the cleaning fabric from the cleaning tool.

Specification by the applicant of how materials can be separated from each other and description of how it is possible to remove the cleaning fabric from the cleaning tool.

O29 Aluminium: Recycled content

The requirement applies if aluminium is included with more than 30% by weight in the cleaning tool.

A minimum of 50% by weight of aluminium must be recycled*.

The supply chain must be specified, and there must be traceability through the supply chain from the smelter to the finished product, so that the amount of recycled aluminium is secured through the supply chain.

** See definition in section 1.*

The proportion of recycled aluminium in the product must be stated.

The producer of aluminium must declare the amount of recycled aluminium in the production. Annual average for production is approved. The traceability of the supply chain must be documented, e.g., in the form of a flow chart, so that the amount of recycled aluminium is secured through the supply chain. This can be done e.g., by information on invoices or accounts from the supplier of Al which shows the amount of recycled that is purchased and how much is sold. The requirement can be documented with a valid Hydro Circal certificate.

O30 Plastic: Information on polymer type and surface treatment

For each plastic part please state:

- Polymer type.
- Whether the polymer is fossil or biobased.
- Whether the plastic raw material is recycled*.
- Whether the plastic part has a surface treatment.

** See the definition in section 1.*

An overview of the polymer materials used, including the information set out in the requirement.

O31 Plastic: Polymer types and plastic composites – Ban

The following polymer/plastic types and blends must not be present in the cleaning tool:

- Chlorinated plastic, e.g., polyvinyl chloride (PVC) and polyvinyl dichloride (PVDC)
- Biodegradable plastic
- Oxo-degradable plastic
- Plastic composites*. Calcium carbonate (CaCO3) is allowed in plastic in quantities so that the density of the plastic does not exceed 0.995 g/cm3

** Plastic composites are here defined as plastic mixed with/added to other substances or materials that are insoluble in the plastic and that disturb/"contaminate" today's Nordic plastic recycling systems, e.g., wood fibres or bamboo.*

Declaration from the cleaning tool manufacturer that the requirement is fulfilled.

O32 Plastic: Marking for recycling sorting

Plastic parts heavier than 50 g must be clearly marked in compliance with the ISO 11469 and ISO 1043 standards.

Photo of plastic parts heavier than 50 g that demonstrate compliance with the requirement.

O33 Plastic: Recycled contents

The requirement applies if plastic is included with more than 10% by weight in the cleaning tool.

At least 30 wt% of the plastic in the cleaning tool must consist of recycled plastic*.

The recycled plastic must not be PVC or PVDC.

** See definition in section 1.*

Manufacturer of recycled must be stated.

Description and documentation from manufacturers of recycled raw materials showing that the plastic is recycled in compliance with the requirement's definition or has Global Recycle Standard certification or EuCertPlast certification, showing that the raw materials are recycled, or other equivalent certification approved by Nordic Ecolabelling.

Calculation that shows that the proportion of recycled plastic is met.

O34 Plastic: Chemicals in recycled plastic

Recycled plastic must not contain:

- brominated and chlorinated flame retardants
- phthalates
- cadmium
- lead
- mercury
- chromium (VI)
- arsenic

Impurities up to 100 ppm are permitted.

In addition, there must be a procedure in place to ensure that the recycled plastic does not risk exceeding the limit value in future deliveries.

Documentation in the form of a test report (method XRF, X-ray) from the supplier of the recycled plastic, showing that the requirement is fulfilled. The analysis laboratory/test institute must meet the requirements in Appendix 2. Alternatively, the requirement can be documented by traceability to the source, showing that these substances are not present.

Description/procedure indicating how it is ensured that the recycled plastic does not risk exceeding the limit value in future deliveries.

O35 Plastic: Raw materials for bio-based polymers

If bio-based plastic is used the raw materials used in the production of bio-based polymers must meet the following requirements.

Palm oil and soy

Palm oil, soybean oil and soybean flour must not be used as raw materials for bio-based polymers.

Sugar cane

Raw materials from sugar cane must meet either a) or b):

a) Raw materials from sugar cane shall be waste* or residual products**. There must be traceability to the production/process where the residual production occurred.

b) Sugar cane must not be genetically modified (GMO)***.

Sugar cane must also be certified according to a standard that meets the requirements in Appendix 3.

The manufacturer of the bio-based polymer must be traceability certified (CoC, Chain of Custody Certified) according to the standard sugar cane is certified according to. Traceability must as a minimum be ensured by mass balance. Book- and Claim systems are not accepted.

The producer of the bio-based polymer must document that certified raw materials have been purchased for the polymer production i.e., in the form of a specification on the invoice or delivery note.

Other raw materials

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

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

c) Be waste* or residual products**. There must be traceability to the production/process, where the residual production occurred.

d) Primary raw materials i.e., maize must not be genetically modified (GMO)***. Geographical origin (country/state) must be stated.

** Waste in accordance with EU Directive 2018/2001/EC.*

*** Residual products as defined in EU Directive 2018/2001/EC. Residual products come from agriculture, aquaculture, fishing and forestry, or there may be treatment of residues. A treatment of residual product means a substance that is not the end product(s) that a production process directly seeks to produce; it is not a primary aim of the production process, and the process has not been deliberately modified to produce it. Examples of residual products are, for example, straw, bait, the non-edible part of maize, livestock manure and bagasse. Examples of processing residues are, for example, raw glycerol or brown lye from paper production. PFAD (Palm Fatty Acid Distillate) from palm oil is not considered a residual product and can therefore not be used.*

*** *Genetically modified organisms are defined in EU Directive 2001/18/EC.*

- Test according to ISO 16620, ASTM D6866 or equivalent standard showing content of bio-based raw material.

- Declaration by the polymer manufacturer that palm oil (incl. PFAD (Palm Fatty Acid Distillate)), soybean oil and soybean 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 followed, as well as traceability which shows where waste or residual product comes from.

- For sugar cane: Indicate which certification system sugar cane is certified according to. Copy of valid CoC certificate or certificate number for the current traceability standard. Documentation as an invoice or delivery note from the producer of bio-based polymer which shows that certified raw material has been purchased to produce the polymer. Declaration that sugar cane is not genetically modified.

- For primary raw materials: Declaration from the polymer manufacturer that raw materials have not been genetically modified according to the definition in the requirement.

4.2 Chemicals used on and in cleaning tools

The requirements apply to chemicals used on and in materials that make up more than 5% by weight of the cleaning tool.

Requirements O36 and O37 apply for surface treatment of the cleaning tool, regardless of the materials it consists of. In addition, for surface treatment of metals requirement O38 applies and for surface treatment of plastics requirement O39 applies.

Requirement O40 applies to additives in plastic.

O36 Surface treatment: Antibacterial substances

Chemical products and nanomaterials* with antibacterial or disinfectant properties must not be used in surface treatment.

The term antibacterial means chemical products that prevent or inhibit growth of microorganisms, such as bacteria or fungi. Silver ions, silver nanoparticles, gold nanoparticles and copper nanoparticles are considered antibacterial substances.

* *In accordance with the definition of a nanomaterial adopted by the European Commission on 18 October 2011 (2011/696/EU), see definition in section 1.*

- A declaration from the manufacturer of the cleaning tool stating that no chemical products and nanomaterial with antibacterial or disinfectant properties have been used on the surface of the finished cleaning tool.

O37 Surface treatment: Nanomaterials

The chemical product used for surface treatment must not have nanomaterials* as ingoing substances*.

Exemption is made for pigments**.

** See definition in section 1.*

*** This exception does not include pigments added for purposes other than colour.*

A declaration from the chemical manufacturer that the chemical product does not include nanomaterials as ingoing substance.

O38 Surface treatment of metals: Coating/plating/galvanizing

Metals must not be coated/plated/galvanized with cadmium, chromium, lead, nickel, zinc, or compounds of these.

A declaration from the manufacturer of the cleaning tool.

O39 Surface treatment of plastic: Type of surface treatment

No surface treatment other than printing and painting is allowed.

A declaration from the manufacturer of the cleaning tool.

O40 Additives in plastic

Additives* in the list below must not be added to plastic (both virgin and recycled plastic). The requirement applies to additives actively added to the polymer raw material in the master batch or compound in production of plastic.

- Pigments and additives based on lead, tin, cadmium, chromium VI and mercury, and their compounds
- Halogenated organic compounds with the following exception:
  - Halogenated organic pigments that comply with the Council of Europe recommendation "Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food", point 2.5
- Phthalates
- Bisphenols

** See section 1 Definitions.*

A declaration from the plastic producer.

5 Quality and performance requirements

The requirements in this section apply for the finished textile part.

O41 Dimensional changes after washing and drying

The requirement only applies for microfibre products that are to be fitted on a cleaning tool, e.g., a mop.

The textile part must not change more than 6% in dimension after washing and drying.

Test method: EN ISO 6330, combined with ISO 5077: Three washes at the temperature specified on the product and tumble drying after each wash cycle unless the product specifies another method of drying.

Information regarding dimensional changes (%) must be provided on the packaging and/or in other product information.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

Copy of information on the packaging and/or in other product information regarding dimensional changes (%).

O42 Colour fastness to washing

Colour fastness to washing shall at a minimum be level 3-4 for change in colour and at least level 3-4 for staining. Tests shall be performed on the colour(s) in a series that are anticipated to be least colour fast. This requirement does not apply to uncoloured and/or white products.

Test method: ISO 105-C06.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

O43 Durability

The textile part must be durable and have a long service life. This means that after the number of washes states below the product must still be effective and live up to requirement O44 and if relevant requirement O45.

Products for professional use - durable after at least 500 washes.

Products for domestic use - durable after at least 200 washes.

Test method: Washing and reporting according to guideline in Appendix 5. Hereafter documentation according to requirement O44 and if relevant requirement O45.

Information regarding durability (number of washes that the product minimum can last and retain cleaning performance) must be provided on the packaging and/or in other product information, see requirement O49.

Report according to Appendix 5.

Declaration from the applicant that the washed products are those that are sent to testing according to requirement O44 and if relevant requirement O45.

O44 Removal of dust and dirt

It must be demonstrated that a microfibre cloth or pad removes at least 85% of dust and dirt and a microfibre mop at least 70% of dust and dirt after at least 200/500 washes, see requirement O43..

The use method (damp or dry use) of the product shall be used when testing. If a product is designed for both damp and dry use, its performance must be tested for both. No cleaning or disinfectants chemicals must be used.

For other products than cloth, pad or mop Nordic Ecolabelling shall be contacted regarding which level of dust and dirt removal that shall be fulfilled.

Test method: See recommendations on testing in Appendix 6. Standard INSTA 800 or EN 13549 may, for example, be used as a starting point for designing tests. Washing according to requirement O43.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

O45 Assessment of hygienic conditions (measurement of quantities of micro-organisms)

This requirement applies only to products marketed as possessing the ability to reduce the presence of micro-organisms under various conditions.

It must be demonstrated that the product reduces the number of micro-organisms by at least 99% (cfu = colony forming units) after at least 200/500 washes, see requirement O43.

The use method (damp or dry use) of the product shall be used when testing. If a product is designed for both damp and dry use, its performance must be tested for both applications. No cleaning or disinfectants chemicals must be used.

Test method: See recommendations on testing in Appendix 6. Standard INSTA 800, EN 13549 or EN 16615 may, for example, be used as a starting point for designing tests. Washing according to requirement O43.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

O46 Abrasion

The product, when used as recommended, must not cause any type of damage to the cleaned surface.

The qualitative results of gloss measurements must not exceed the following gloss differential limits:

- Semi-hard and hard surfaces: <30 gloss differential
- Soft and fragile surfaces: <20 gloss differential

Test method: According to ISO 12947-1 and gloss measurement according to DIN 67530 or ISO 2813, or equivalent test methods.

Or guarantee that the use of the supplies for microfibre based cleaning does not cause surface damage during recommended usage. The information about the guarantee shall be presented on the packaging, instruction, or product data sheet.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

or

Copy of information on the packaging, instruction or product data sheet that guarantees that the product will not cause surface damage during recommended usage.

O47 Absorption

This requirement applies only to products that are marketed for uses requiring absorption properties, for example damp cleaning.

The test shall be performed on the newly produced microfibre textile.

If several different types of microfibre textile are contained in the end product, then the requirement is to be met by the particular type of microfibre intended for use in absorption.

The absorption capacity of the microfibre textile shall be expressed as:

DAC (Demand absorption capacity) in g/g – minimum 2.50 g/g and MAR (Maximum absorption rate) in g/s – minimum 0.6 g/s.

Test method: According to EN ISO 9073-12, or equivalent test methods.

Test report and results according to requirement. The analysis laboratory must fulfil the requirements in Appendix 2.

O48 Loss of fibre fragments

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

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 be sent to TMC (The Microfibre Consortium) as a basis for developing a rating system.

Test report showing that the requirement is fulfilled. The analysis laboratory must fulfil the requirements in Appendix 2.

6 Instructions and labelling

The requirements of this section apply to the final product that are sold to the customer.

O49 Instructions

The instructions shall contain:

- Information on the surfaces for which the products are designed
- Information on the correct use without cleaning chemicals
- Statement of guaranteed service life (number of washes that product can withstand without impairing function) when used according to recommendations
- Laundry instructions with directions regarding care as well as recommended and maximum washing temperatures

Instructions according to the requirement.

O50 Labelling

Supplies for microfibre based cleaning shall be labelled so that they are easily identifiable and distinguishable from other cleaning products. The product must be labelled as containing microfibre materials. Clear laundry instructions with specific directions for care and washing temperature must also be supplied with the product.

A description or similar stating both laundry instructions and the labelling that clearly identifies the product as containing microfibre.

7 Social and ethical requirements

O51 Fundamental principles and rights at work

The applicant must ensure that all dyeing plants and cut-make-trim (CMT) factories (e.g., sewing factories) used in the manufacture of the licensed 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 No. 29 and 105)
2. Freedom of association, and protection of the right to organise and to conduct collective bargaining (ILO Conventions No. 87, 98, 135 and 154)
3. Prohibition of child labour (ILO Conventions No. 138, 182 and 79 plus ILO Recommendation No. 146)
4. No discrimination (ILO Conventions No. 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 No.1 and 14)

Certification: The applicant 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.

Procedure: The applicant must have:

- 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.

SA8000 certificate or other third-party verification of compliance with the requirement incl. latest audit report e.g., a BSCI audit rapport.

Description of code of conduct, policy and routine as required by the requirement.

8 Licence maintenance

The purpose of the licence maintenance is to ensure that fundamental quality assurance is dealt with appropriately.

O52 Control and assessment of suppliers

The licensee shall do an annual follow-up of its own suppliers, who perform relevant processes (e.g., textile dyeing, textile finishing, surface treatment of tool) during the textile and cleaning tool production. The follow-up shall be documented in writing and shall contain the following, as a minimum:

- List of used suppliers, who perform relevant processes.
- Check that the supplier's responsible person is familiar with Nordic Ecolabelling's requirements and understands how the supplier can ensure compliance with these.
- Check that procedures at the supplier have been implemented to ensure that changes are only made to the production of the Nordic Swan Ecolabelled product (e.g., changes to raw materials) once the licensee has obtained approval from Nordic Ecolabelling.

- If any of the requirements in the criteria are documented via certification schemes (e.g., Oeko-Tex 100, Global Recycled Standard certificate, EU Ecolabel or similar) or yearly tests, checks are to be carried out to ensure that certificates and tests are up to date and remain valid.

Changes in the production such as replacement of suppliers or additional suppliers, fibre raw materials or chemicals shall be approved by Nordic Ecolabelling before the change is initiated in production.

If deviations are found at the annual follow-up, the Nordic Ecolabelling must be contacted.

The licensee shall keep written documentation for each year of the validity of the license. If requested documentation must be send to Nordic Ecolabelling.

A draft of the annual follow-up document, which shows how it is set up. The document shall show which points for each supplier are going to be followed up, how it can be seen when they have been checked and how they have been assessed (e.g., approved, not approved). For each suppliers the name of the company and which process they preform must also be stated.

Confirmation that follow-up of suppliers will be done each year of the validity of the license.

O53 Customer complaints

The licensee must guarantee that the quality of the Nordic Swan Ecolabelled product does not deteriorate during the validity period of the licence. Therefore, the licensee must keep an archive over customer complaints.

Note that the original routine must be in one Nordic language or in English.

Upload your company's routine for handling and archiving customer complaints.

O54 Traceability

The licensee must be able to trace the Nordic Swan Ecolabelled products 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.

You can upload your company's routine or a description of the actions to ensure traceability in your company.

Please upload your routine or a description.

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 www.nordic-ecolabel.org/regulations/

Follow-up inspections

Nordic Ecolabelling may decide to check whether supplies for microfibre based cleaning 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 supplies for microfibre based cleaning fulfils 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 3.0 of the criteria for XX on DAY MONTH YEAR. The criteria are valid until DAY MONTH YEAR.

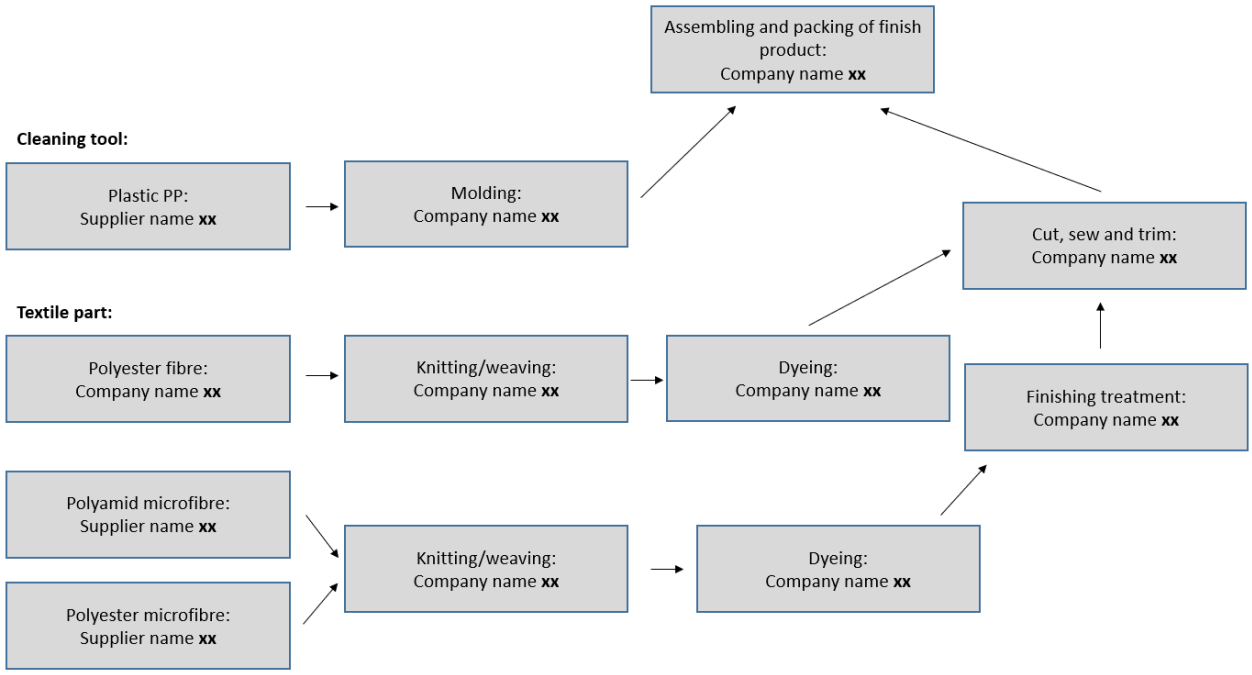
New criteria

In the next generation of the criteria, it is possible that the following areas i.e., will be revised or included:

- Specific requirements for energy and water consumption during textile production
- Amount of recycled textile fibres in the product
- Amount of loss of fibre fragments from the product

Appendix 1 Manufacturing process and suppliers

Example of flow chart:



Suppliers:

Company name	Production site (Full address)	Contact person (Name, e-mail, and phone)	Manufacturing process (e.g., dyeing, surface treatment, etc.)

Appendix 2 Laboratories for testing, sampling, and analysis

General requirements

The laboratory/institute must be competent and impartial.

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

The applicant's own laboratory can be approved if it is accredited and complies with the requirements of the standard EN ISO 17025.

When testing quality and performance properties, the applicant's own laboratory can be approved even if it is not accredited. The following applies:

- testing, sampling, and analysis is monitored by the authorities, or
- the manufacturer's quality assurance system covers testing, 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.

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.

Appendix 4 Azo dyes and aromatic amines

Carcinogen 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 5 Guideline for washing and report

This guideline shall be used for washing of the products.

The washing and reporting may be performed by the applicant, the manufacture of the product, a laundry, or an analysis laboratory**.**

Washing machine type:
For products for professional use: Washing machine that are designed for professional washing or are according to ISO 15797 must be used.
For products for domestic use: Washing machine types according to EN ISO 6330 must be used.

Washing detergents:
Use detergents with a pH between 4 and 10. Use detergents without soap and zeolites.
Dose according to specified for the detergent used and according to the water hardness used for washing.
Do not use fabric softeners.

Tumble drying:
Tumble drying between washing cycles may be used but is not a requirement.

Washing procedure:
Wash at the maximum temperature specified for the product.
Use a washing program which include minimum 20 minutes of washing followed by minimum 3 rinsing cycles with spin drying between each.

- Products for professional use: 500 washing cycles.
- Products for domestic use: 200 washing cycles.

Reporting:
A report must be submitted to Nordic Ecolabelling containing:

- Information about who has performed the washing.
- The trade name/ item number of the washed products.
- Confirming the use of washing machine type according to EN ISO 6330 or ISO 15797/for professional washing, respectively.
- Information about the detergent used and the dosage.
- Stat if tumble drying has been used or not.
- Describe the washing procedure including information about washing temperature and washing program.
- State the numbers of washing cycles.

Appendix 6 Removal of dust and dirt and measurement of reduction in micro-organisms

Removal of dust and dirt

The Nordic cleaning standard “INSTA 800” or the European standard “EN 13549 Cleaning services Basic requirements and recommendations for quality measuring systems” may, for example, be used as a starting point for designing tests.

- Measurement of degree of dust and dirt removal shall be performed with a test instrument, e.g., Dust Detector (or similar instrument with equivalent scale and accuracy). The instrument must be calibrated in accordance with the supplier’s instructions.
- Measurements shall be performed on a suitable test service. The applicant must state the test surface that has been used and specify why this test surface has been chosen.
- If the supplies for microfibre based cleaning is designed for both damp and dry use, its performance regarding dust and dirt removal must be documented for both applications. Only water may be used, no cleaning or disinfectants chemicals.
- The test results must be presented for each surface category and the date of testing stated.
- A representative quantity and composition of dirt for the floor or surface shall be used in testing. The applicant shall describe and justify the type and quantity of dirt that is used.
- A relevant test method must be used, such as wiping/mopping with 50% overlap. The applicant shall describe and justify the test method that is employed.
- The reproducibility of results must be documented.

Measurement of quantities of micro-organisms

The Nordic cleaning standard “INSTA 800”, the European standard “EN 13549 Cleaning services Basic requirements and recommendations for quality measuring systems” or "EN 16615 Chemical disinfectants and antiseptics – Quantitative test method for the evaluation of bactericidal and yeasticidal activity on non-porous surfaces with mechanical action employing wipes in the medical area (4- field test) – Test method and requirements (phase 2, step 2)" may, for example, be used as a starting point for designing tests.

- Hygiene measurements shall be used to measure the quantity of micro-organisms on all flat, hard, and semi-hard surfaces. The purpose of testing is to check that the cleaning result is acceptable regarding hygiene requirements.
- Measurements only apply to total bacteria counts (number of colonies of microorganisms that develop through cultivation of a swab or impression

sample on trypton-glycose-yeast extract agar). If the applicant wishes to measure the type and number of a specific type of microorganism, the method and limit value must be justified.

- Measurement shall be performed using contact plate or agar strips with nutrient (TGA) or equivalent. Other growth cultures may be used.
- Measurements shall be performed on a suitable test service. The applicant must state the test surface that has been used and specify why this test surface has been chosen.
- If supplies for microfibre based cleaning are designed for both damp and dry use, their performance in reducing the presence of micro-organisms must be documented for both uses. Only water may be used, no cleaning or disinfectants chemicals.
- The test results must be presented for each surface category and the date of testing stated.
- The reproducibility of results must be documented.