

Swedish Society for Nature Conservation | Good Environmental Choice

Chemical products

Criteria 2018:4

Updated 2025-12-05



Good Environmental Choice

NOTE: This text is a translation. The original Swedish version always prevails.

Good Environmental Choice Ecolabelling by the Swedish Society for Nature Conservation

The Swedish Society for Nature Conservation (SSNC) is a non-profit organisation that is independent of political and religious affiliations. We are driven by an ambition to preserve the environment and protect people's health. It is partly due to us that seals, sea-eagles and peregrine falcons are no longer endangered species in Sweden. We promote biological diversity, and strive to prevent climate change, acidification, eutrophication, the spread of dangerous chemicals and much more.

However, it is not enough to protect nature in reserves or stop individual polluters. We need to reduce our total environmental impact. Companies that adapt their production methods and products to reduce the burden on the environment play a vital role in this work.

Good Environmental Choice is SSNC's own ecolabel and one of the tools we use to drive development towards a sustainable society. Good Environmental Choice places demanding environmental requirements on the products and services that it approves for labelling.

Good Environmental Choice is an example of so-called Type-I labelling: a third-party certification independent of the partners involved. Good Environmental Choice is a member of GEN (the Global Ecolabelling Network), which is an international network of environmental labelling organisations. To ensure that Good Environmental Choice meets quality assurance demands, the ecolabel has been reviewed by GENICES (the Global Ecolabelling Network's Internationally Coordinated Ecolabelling System).

Thanks to Good Environmental Choice, hundreds of products have been revised and made environmentally friendly. Labelling has led to concrete results. Thanks to Good Environmental Choice, phosphates were phased out from laundry detergents and eventually banned within the EU. Good Environmental Choice Grocery shops pushed for the first ecolabelled, mercury-free button-cell batteries and convinced producers of self-playing greetings cards to switch to such batteries for the entire Swedish market.

Another example is that electricity labelled with Good Environmental Choice has established demands on water flow through hydropower plants and thereby benefited plants and animals in river environments. The ecolabel also creates incentives for improving energy efficiency and for building fish ladders around dams. Good Environmental Choice also aids consumers in choosing the transportation method that has the lowest environmental impact. Good Environmental Choice's criteria for insurance companies include environmental demands on the license holders asset management.

Public procurement is a powerful tool for driving sustainable development. When municipalities, regions and government agencies choose eco-labelled products and services in their procurements, it can have a major impact. Good Environmental Choice serves as a support in this work – by setting high and independent environmental requirements, the label makes it easier for procuring entities to make sustainable decisions. The eco-label also facilitates the follow-up of whether set environmental requirements are actually met, which contributes to increased transparency and quality assurance in the procurement process.

In the eyes of the consumer, the Good Environmental Choice label is a trustworthy symbol. For the license holder, labelling provides a competitive advantage.



Good Environmental Choice

Read more about Good Environmental Choice and download the criteria and other documents at www.bramiljoval.se

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Preface

The Good Environmental Choice label for chemical products is one of the tools used by the Swedish Society for Nature Conservation (SSNC) to promote the development of a sustainable society.

To reach the, by the Swedish parliament set, environmental objective Non-toxic environment, strong measures are required both nationally and internationally. In addition to political decisions, there is a need for innovative environmentally conscious companies, as well as consumers who make conscious decisions. The ecolabel Good Environmental Choice guides consumers and purchasers to the best environmental choices. By doing so, the label contributes toward reaching the environmental objective of a Non-toxic environment.

The aim of the ecolabel is to reduce the use of substances that are hazardous to the environment or human health and encourage the substitution to better alternatives. SSNC's policy for environmental pollutants has been the basis for the design of the criteria. As a result, substances suspected to cause cancer or affect reproductive capacity are not permitted. Chemicals should have a low toxicity to aquatic organisms and fulfil strict requirements on biodegradability. In addition, strict requirements are placed on endocrine disrupting substances as well as sensitising substances. In some cases, groups of structurally similar substances have been banned e.g. phthalates and cyclic siloxanes. The aim of the ecolabel is to favour the phasing out of hazardous substances, regardless of what sort of product they are used in. The criteria, therefore, allow the labelling of a wide range of chemical products.

The requirements placed on the products' packaging are designed to minimise climate impact and promote efficient use of resources. To minimise the environmental impact of the products there are also requirements for user information and dosage. In addition, the license holder must have a policy stating that they aim to increase the proportion of ingredients originating from renewable sources.

The criteria are designed to be directly applicable in public procurement, by reference to the ecolabel.

The criteria for Good Environmental Choice Chemical products have been ratified by the secretary-general of the Swedish Society for Nature Conservation. Many license holders, individuals and companies have contributed with valuable information and comments during their preparation, and we would like to thank them here.

Sofie Munteanu
Chef för Bra Miljöval

Aim

- To minimise the negative impact of chemical products on the environment and health
- To promote the phasing out of substances that are hazardous to the environment or human health, and to encourage the substitution to better alternatives
- To make it easy for consumers to choose products with as little negative impact on the environment and human health as possible
- To offer public procurers a tool to easily set relevant environmental and health requirements for chemical products

Scope of the criteria

The Good Environmental Choice criteria apply from 2018-03-01 until the next version is introduced. After a criteria review, 2025-12-01, Good Environmental Choice decided that the criteria are still relevant. Revised criteria can enter into force earliest by 2027-03-01.

Most chemical products can be labelled according to these criteria. The criteria are open to consumer products as well as products intended for professional users. The criteria also include microorganism-based products. However, the criteria do not include cosmetic products, which instead can be labelled according to the criteria for Good Environmental Choice Cosmetics. In addition, fuel products cannot be labelled according to these criteria, but are instead covered by Good Environmental Choice Biofuels. The Swedish Society for Nature Conservation also reserves the right to not label product groups that are contradictory to the organisation's work and policy.

The criteria impose requirements on all ingredients. In addition, requirements are set on the product's packaging, as well as dosage and user information. The General requirements, requirements 1.1 - 1.30, apply to all ingredients and the final product. For each ingredient there are also additional requirements, depending on its function in the product. Some ingredients, such as solvents and perfumes, have their own section in the criteria document. Other ingredients must meet the requirements of Other additives, requirements 14.1 - 14.10. In cases where SSNC considers it relevant to set more stringent requirements, or allow exceptions for specific product groups, such have been included in the criteria. The product groups that are subject to product-specific requirements are listed below.

Definitions of product groups

All-purpose cleaners:	Products that are used for routine cleaning of floors, walls, interiors, kitchens, stairs, etc.
Bathroom and sanitary cleaners:	Products that are used for routine cleaning of toilet seats, sanitary ware, bathroom tiles, shower cubicles, etc.
Bleaching agents:	Products that remove stains or discolouration by bleaching.
Dishwasher detergents:	Products that are used in dishwashers. Drying agents used in the dishwasher are not included in the definition.
Fabric softeners:	Products that are added to textiles to make these softer and to reduce any static properties.
Heavy-duty cleaning agents:	Products that are used to clean heavily soiled surfaces. Products specifically intended for the food industry, restaurant kitchens and similar areas of use are not included in the definition.
Laundry detergents:	Products that are used for hand washing and machine washing of textiles.
Microorganism-based products:	Products with intentionally added microorganisms.
Soft soaps:	Products based on saponified vegetable oils.

Stain removers:	Products that remove stains or discolouration from textiles.
Textile and leather impregnation:	Spray products used to protect products of textiles or leather from dirt and grease.
Washing-up liquids:	Products that are used for hand washing porcelain, glass, kitchen utensils and similar.

1 General requirements

- 1.1** All added ingredients must be listed in the recipe. This requirement also applies to synthetic residues, reaction products and traces present in a concentration higher than 0.01 % by weight of the ingredient. Where an ingredient consists of a mixture, all chemical substances in the mixture must be specified, with each substance meeting the requirements.

Ingredient refers to a pure chemical substance or a mixture of several chemical substances.

Product requirements

- 1.2** The product must not contain lead, cadmium, cobalt, chromium, mercury, cocamide DEA, benzophenone, tartazine, organic halogen compounds (e.g. perfluorinated and polyfluorinated compounds), phthalates, parabens, cyclic siloxanes or endocrine disrupting substances. Endocrine disrupting substances are defined as
- substances classified as ED HH category 1 and category 2 (endocrine disruption for human health)
 - substances classified as ED ENV category 1 and 2 (endocrine disruption for the environment)
 - endocrine disrupting substances on the SIN list (sinsearch.chemsec.org/)

- 1.3** The product must not contain nanomaterials.

Exceptions from the requirement may be granted for individual nanomaterials if an independent party has evaluated the specific use and found that it is safe from a health and environmental perspective. Examples of independent parties are the committees Scientific Committee on Consumer Safety (SCCS) and Scientific Committee on Health, Environment and Emerging Risks (SCHEER).

Nanomaterials refers to a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 1 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm – 100 nm.

- 1.4** The product must not contain microplastics.

- 1.5** The product must not contain substances that are classified as PBT or vPvB, meet the criteria for PBT or vPvB substances in accordance with Annex XIII of the REACH Regulation (EC) No. 1907/2006, or substances included on the Candidate list, (<http://echa.europa.eu/en/candidate-list-table>).

Microplastics refers to plastic particles in a solid form, insoluble in water, less than 5 mm in at least one dimension, and not readily biodegradable according to OECD 301, OECD 310 or an equivalent test.

- 1.6** The product must not contain any of the sensitising substances/extracts listed in the table below.

Name (according to SCCS/1459/11)	CAS number
Hydroxyisohexyl 3-Cyclohexene Carboxaldehyde	31906-04-4, 51414-25-6
Atranol	526-37-4
Chloroatranol	57074-21-2
<i>Evernia furfuracea</i> Extract	90028-67-4
<i>Evernia prunastri</i> Extract	90028-68-5

- 1.7** Ingredients that contain phosphorus must not be added to the product intentionally.

Tetrasodium etidronate (CAS number 3794-83-0) contains phosphorus but may be used as processing aid in the synthesis of ingredients at a maximum concentration of 0.2 % by weight, provided that the concentration in the final product does not exceed 0.02% by weight. The substance must not be used as and ingredient of the final product.

- 1.8** The nitrogen content of the product must not exceed 1.0 % by weight.
- 1.9** The product must not be acutely toxic according to the following classifications:
- | | |
|---|---|
| <p>H300, Fatal if swallowed</p> <p>H310, Fatal in contact with skin</p> <p>H330, Fatal if inhaled</p> <p>H301, Toxic if swallowed</p> <p>H311, Toxic in contact with skin</p> <p>H331, Toxic if inhaled</p> | <p>Classification refers to harmonised classification or self-classification in accordance with the CLP Regulation (EC) No 1272/2008. Self-classification means that the manufacturing company determines if an ingredient should be assigned to one or more hazard statements in accordance with the classification system. If a hazard statement covers more than one category, e.g. H300 which covers both acute toxicity category 1 and category 2, and the criteria does not explicitly state otherwise, all categories are included. For certain hazard statements, there are subvariants, stating the specific effect and/or route of exposure, if those are known. One example is "H360Df, May damage the unborn child. Suspected of damaging fertility". Another example is "H350i, May cause cancer by inhalation". Note that if a hazard statement is prohibited, the prohibition also includes all subvariants.</p> |
|---|---|
- 1.10** The product must not show aspiration toxicity according to the following classification
- H304, May be fatal if swallowed and enters airways
- 1.11** The product must not be sensitising according to the following classifications:
- H317, May cause an allergic skin reaction
- H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled
- 1.12** The product must not be subject to additional labelling requirements with the phrase "Contains (name of sensitising substance). May produce an allergic reaction" (EUH 208). Exempt from this requirement are products where the supplementary labelling is caused by the content of enzymes in the product. Enzyme stabilisers are however not exempted.
- 1.13** The product must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
- H371, May cause damage to organs
- H372, Causes damage to organs through prolonged or repeated exposure
- H373, May cause damage to organs through prolonged or repeated exposure
- 1.14** The product must not be hazardous to the environment according to the following classifications:
- H400, Very toxic to aquatic life
- H410, Very toxic to aquatic life with long lasting effects
- H411, Toxic to aquatic life with long lasting effects
- H412, Harmful to aquatic life with long lasting effects
- H413, May cause long lasting harmful effects to aquatic life
- H420, Harms public health and the environment by destroying ozone in the upper atmosphere
- 1.15** Products that are corrosive to the skin with classification H314 Category 1A, Causes severe skin burns and eye damage, must be dispensed automatically. Exempted from this requirement are products with classification H314 Category 1A that are dosed, e.g. using a foam gun, in such a way that the user will not get in contact with concentrated product and for which the ready for use preparation is not classified H314 Category 1A.
- | |
|---|
| <p>Products dispensed automatically refers to products that are dispensed by a technical unit meaning that the product does not come in direct contact with the user.</p> |
|---|

Ingredient requirements

1.16 Ingredients or their known degradation products must not be, or be suspected of being, carcinogenic according to the following classifications:

H350, May cause cancer

H351, Suspected of causing cancer

1.17 Ingredients or their known degradation products must not be, or be suspected of being, mutagenic according to the following classifications:

H340, May cause genetic defects

H341, Suspected of causing genetic defects

1.18 Ingredients or their known degradation products must not be, or be suspected of being, toxic to reproduction according to the following classifications:

H360, May damage fertility or the unborn child

H361, Suspected of damaging fertility or the unborn child

H362, May cause harm to breast-fed children

The substance hexyl salicylate, with CAS number 6259-76-3, is permitted in perfumes that are assessed and accepted before 2026-05-01, when the harmonized classification H361d of the substance enter into force. After 2026-05-01 hexyl salicylate is not allowed in new perfumes.

1.19 Ingredients that are prohibited since they are specific target organ toxicants and have the classification H370, H371, H372 or H373, and where the exposure route is specified in the classification, may be approved on an individual basis. This requires that the SSNC finds the exposure route irrelevant to the particular use for which the application refers and that the product is not classified with any of the hazard statements mentioned above.

1.20 Biocides must only be used to preserve the product, including its ingredients, during storage and use.

1.21 Individual substances listed in the table below and the 26 fragrances which are subject to mandatory declaration under the Detergent Regulation (EC) No 648/2004 may, provided that the general requirements are met, be used in a concentration not exceeding 0.01 % by weight in the product. If the product's use is such that contact with the skin is prolonged, the limit of restriction is 0.001 % by weight. This requirement applies irrespective of the function of the substance in the product.

A biocide is a substance that prevents the growth and harmful effects of microorganisms, fungi and pests.

An example of a product where “contact with the skin is prolonged” is cleaning wipes.

Name	CAS number
<i>Cananga odorata</i> and Ylang-ylang oil	83863-30-3, 8006-81-3
<i>Eugenia carophyllus</i> Leaf/Flower oil	8000-34-8
<i>Jasminum grandiflorum/officinale</i>	84776-64-7, 90045-94-6, 8022-96-6
<i>Myroxylon pereirae</i>	8007-00-9
<i>Santalum album</i>	84787-70-2, 8006-87-9
Turpentine oil	8006-64-2, 9005-90-7, 8052-14-0
<i>Cinnamomum cassia</i> leaf oil/ <i>Cinnamomum zeylanicum</i> extract	84961-46-6, 8007-80-5, 84649-98-9

Requirements on renewable raw materials

1.22 If the product contains ingredients from fossil raw materials the license holder must have a, by the management established, policy (or equivalent) with the aim to increase the proportion of renewable raw materials over time. The requirement concerns the product for which the company is applying.

1.23 The license holder must have knowledge of the proportion of renewable raw materials for each ingredient consisting of one or more organic substances. In addition, the license holder must know the total share of renewable raw materials in the product and the origin of the raw materials (e.g. coconut). Perfumes are exempt from this requirement.

If there is a secrecy agreement between the Licence holder and the producing company, we accept that it is the producing company that has the required knowledge of renewable raw materials.

1.24 Oils, fats and other substances extracted from the oil palm (*Elaeis guineensis*), with CAS numbers 8002-75-3 or 8023-79-8, must come from organic production.

1.25 Ingredients that contain raw material obtained from the oil palm (*Elaeis guineensis*) and are not covered by requirement 1.24 must be certified in accordance with RSPO Mass Balance, Segregated or Identity Preserved.

Organic production refers to production being conducted in accordance with Regulation (EU) 2018/848, and which has been certified in accordance with it..

Other requirements

- 1.26** In the sections where the criteria require toxicity values for acute or chronic aquatic toxicity, the result from algae, crustacean and fish tests should be attached to the application. Acute aquatic toxicity should primarily be specified by using existing data from OECD 201 - 203 or an equivalent test. If there is no data from OECD tests, tests performed according e.g. EU Method C.1-C.3 can be used. For chronic aquatic toxicity OECD 201, OECD 210, OECD 211, OECD 215 or an equivalent test should be used. Secondary, in vitro tests, (Q)SAR or other alternative tests validated by the European Union Reference Laboratory for alternatives to animal testing (EURL-ECVAM) or other international body should be used. As a last option, the ingredient can be assessed by using test data from structurally similar substances. If data for chronic toxicity is missing, an assessment factor should be used, as described in Appendix 2: Assessment factor.
- 1.27** Chemical substances that are not harmonised classified must be self-classified. Where possible, existing results from prior classifications should be used. Otherwise, in vitro tests, (Q)SAR or other alternative tests validated by the European Union Reference Laboratory for alternatives to animal testing (EURL-ECVAM) or other international body should be used. As a last option, animal tests are to be carried out.
- 1.28** The directive on Good Laboratory Practice (2004/10/EC) must be applied whenever chemicals are tested. The requirement applies to testing of chemicals included in the product for which the company is applying.
- 1.29** The precautionary principle should be applied in the evaluation of the ingredients and the product.
- 1.30** When the criteria places requirements on consumer information on the packaging or the product information sheet, such information should be in all official languages, or equivalent, in the countries where the product is sold. Exceptions may be permitted provided that a large majority of the population has good knowledge of the language used to communicate the information. In the the table below languages that must be used (alone or together with other languages) are listed for a selection of countries.

Existing data and existing results refers to tests carried out by the manufacturing company, or by another company, authority or organisation. To compensate for lack of data, an assessment factor can be applied to existing data. The more data available, the lower the assessment factor

The precautionary principle is enshrined in the Swedish Environmental Code and the REACH Regulation. This means that, for example, when conflicting test data exists, the endpoint value indicating the highest degree of toxicity should be applied. It also means that substances may be banned if there is reason to believe that they can cause serious harm, even though they meet the criteria in this document.

Language on the packaging and product information sheet

Country	Language
Sweden	Swedish
Norway*	Norwegian
Finland	Finnish
Iceland	Icelandic
Denmark*	Danish
Faroe Islands	Faroese and Danish
Greenland	Greenlandic and Danish
Estonia	Estonian
Latvia	Latvian
Lithuania	Lithuanian
Germany	German
Italy	Italian
Singapore	English
Great Britain	English

* In Norway and Denmark it is accepted to use a common text, where only the words that differ, or cannot be understood between the countries, have been translated.

Reasons for requirements

[1.1] All substances added to a product must meet the specified requirements in order to protect the environment and human health. Substances present in very low concentrations can also have undesirable effects.

[1.2] These substances may cause unwanted and serious environmental and health effects. Many of them are prohibited by other requirements in the criteria document; they are included here for clarity.

[1.3] There is considerable uncertainty about the effects of nanomaterials on health and the environment. In accordance with the precautionary principle, they are not permitted.

[1.4] Microplastics have well-documented negative impacts on the aquatic environment and they are persistent.

[1.5] These substances have such properties that they can cause serious and permanent environmental and health effects.

[1.6] These sensitising substances/extracts are particularly problematic, according to the evaluation presented in SCCS/1459/11. Therefore, they must not be included in the product, regardless of concentration.

[1.7] Phosphorus contributes to eutrophication.

[1.8] Nitrogen contributes to eutrophication.

[1.9-1.13] The products must be safe to use and not pose a health risk to the user.

[1.14] The products must not pose a risk to the environment.

[1.15] If products are dispensed automatically, it is considered that there is little risk of the user suffering skin burns.

[1.16-1.18] Cancer, genetic damage and damage to the reproductive system are serious health effects. Since no safe levels can be determined, the requirements apply regardless of the concentration in the product.

[1.19] According to the CLP Regulation, the route of exposure must only be stated if it has been conclusively proven that the damage is not caused by some other route.

[1.20] Biocidal substances are typically associated with higher risks than other chemicals. To minimise the risks, biocidal substances are only permitted to preserve the product, including its ingredients, during storage and use.

[1.21] These substances, usually found in e.g. perfumes, have been identified as sensitising substances. To reduce the risk of sensitisation, the concentration of them in the product is limited. The Swedish Society for Nature Conservation considers it reasonable that the same limit applies regardless of the function of the substance in the product.

[1.22-1.23] For climate reasons, it is of great importance to shift from fossil-based resources to renewable ones. For it to be possible to evaluate whether the license holder's policy (or equivalent) has had the intended effect, it is necessary that the license holder knows the proportion of renewable raw materials in the ingredients.

[1.24-1.25]: Large-scale palm oil plantations are associated with serious consequences for both the people in its vicinity and the environment. While the RSPO certification has its flaws, it requires that several important basic criteria for palm oil production have been met. For certain ingredients it is possible to set stricter requirements and consequently such ingredients must come from organic production.

[1.26-1.27] All substances must be adequately tested in order to avoid damage to the environment. At the same time, as few animal tests as possible should be conducted.

[1.28] In order to ensure the quality of the test results, any new tests must be performed in accordance with good laboratory practice.

[1.29] The precautionary principle is enshrined in several different regulations and is applied in order to minimise the risk of future adverse effects on health and the environment.

[1.30] It is important that as many people as possible understand the information that the criteria demand. A country's official language(s) is the one/ones used in the country's official administration.

2 Surfactants

- 2.1** The surfactant must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 2.2** The surfactant must be anaerobically biodegradable to 60 % according to ECETOC No 28, ISO 11734, OECD 311 or an equivalent test.
- 2.3** The surfactant must have a very low residual content of organic halogen compounds, <100 mg/kg TOX.
- 2.4** The surfactant must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is >1mg/L.
- 2.5** The surfactant must have a chronic aquatic toxicity where $NOEC/EC_x$ is > 0.1 mg/L.
- 2.6** The surfactant must not be hazardous to the aquatic environment according to the following classifications:
H400, Very toxic to aquatic life
H410, Very toxic to aquatic life with long lasting effects
H411, Toxic to aquatic life with long lasting effects
H413, May cause long lasting harmful effects to aquatic life
- 2.7** The surfactant must not be acutely toxic according to the following classifications:
H300, Fatal if swallowed
H310, Fatal in contact with skin
H330, Fatal if inhaled
H301, Toxic if swallowed
H311, Toxic in contact with skin
H331, Toxic if inhaled
- 2.8** The surfactant must not show specific target organ toxicity according to the following classifications:
H370, Causes damage to organs
H371, May cause damage to organs
H372, Causes damage to organs through prolonged or repeated exposure
H373, May cause damage to organs through prolonged or repeated exposure
- 2.9** The surfactant must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation.
H317, May cause an allergic skin reaction
H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product-specific requirements

Soft soap

- 2.10** Only surfactants made from saponified vegetable fatty acids may be used. This requirement includes all products marketed as soft soap or whose product name contains the word "soft soap" or variants thereof.

Reasons for requirements

[2.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[2.2] Degradation in oxygen-free environment is an important characteristic for substances that accumulate in sewage sludge or sediment, otherwise there is a risk that these substances cause problems in the future.

[2.3] Organic halogen compounds have many undesirable serious environmental and health effects.

[2.4-2.5] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[2.6] To minimise the environmental risks, the substance must not be classified with any of these hazard statements.

[2.7-2.9] The products should be safe to use and not pose a health risk to the user.

[2.10] Soft soap should contain traditional ingredients in order to prevent consumers from being misled. Renewable raw materials reduce the climate impact of the product.

3 Complexing agents

- 3.1** The complexing agent must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 3.2** The complexing agent must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is > 1 mg/L.
- 3.3** The complexing agent must have a chronic aquatic toxicity where $NOEC/EC_x$ is >0.1 mg/L.
- 3.4** The complexing agent must not be hazardous to the aquatic environment according to the following classifications:
H400, Very toxic to aquatic life
H410, Very toxic to aquatic life with long lasting effects
H411, Toxic to aquatic life with long lasting effects
H413, May cause long lasting harmful effects to aquatic life
- 3.5** The complexing agent must not be acutely toxic according to the following classifications:
H300, Fatal if swallowed
H310, Fatal in contact with skin
H330, Fatal if inhaled
H301, Toxic if swallowed
H311, Toxic in contact with skin
H331, Toxic if inhaled
- 3.6** The complexing agent must not show specific target organ toxicity according to the following classifications:
H370, Causes damage to organs
H371, May cause damage to organs
H372, Causes damage to organs through prolonged or repeated exposure
H373, May cause damage to organs through prolonged or repeated exposure
- 3.7** The complexing agent must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation.
H317, May cause an allergic skin reaction
H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Product-specific requirements

All-purpose cleaners and bathroom and sanitary cleaners

- 3.8** The complexing agent must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is > 10 mg/L, and a chronic aquatic toxicity where $NOEC/EC_x$ is > 1 mg/L

Soft soaps

- 3.9** Complexing agents are not permitted.

Reasons for requirements

[3.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances. The requirement means that, for example, EDTA and DTPA are not permitted.

[3.2-3.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[3.4] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[3.5-3.7] The products should be safe to use and not pose a health risk to the user.

[3.8] There is less need for complexing agents in all-purpose cleaners and bathroom and sanitary cleaners.

[3.9] Complexing agents are not necessary in soft soaps.

4 Solvents

- 4.1** The solvent must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 4.2** The solvent must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is > 10mg/L.
- 4.3** The solvent must have a chronic aquatic toxicity where $NOEC/EC_x$ is > 1 mg/L.
- 4.4** The solvent must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW}$ < 4 according to OECD 107, OECD 117 or an equivalent test should be applied.
- Exceptions may be made if any of the following requirements are met:
- LC_{50} , EC_{50} and IC_{50} is > 100 mg/L or $NOEC/EC_x$ is > 10 mg/L.
 - it can be shown that the solvent is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - the solvent is not bioavailable (molar mass > 700 g/mol).
- 4.5** The solvent must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
H410, Very toxic to aquatic life with long lasting effects
H411, Toxic to aquatic life with long lasting effects
H413, May cause long lasting harmful effects to aquatic life
- 4.6** The solvent must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
H310, Fatal in contact with skin
H330, Fatal if inhaled
H301, Toxic if swallowed
H311, Toxic in contact with skin
H331, Toxic if inhaled
- 4.7** The solvent must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
H371, May cause damage to organs
H372, Causes damage to organs through prolonged or repeated exposure
H373, May cause damage to organs through prolonged or repeated exposure
- Ingredients containing the substance triethanolamine (CAS 102-71-6) are permitted given that the level of the contaminant diethanolamine (CAS 111-42-2, classified as H373) is below 50ppm in the final product.
- 4.8** The solvent must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation.
- H317, May cause an allergic skin reaction

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Reasons for requirements

[4.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[4.2-4.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[4.4] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[4.5] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[4.6-4.8] The products should be safe to use and not pose a health risk to the user.

5 Preservatives

- 5.1** The preservative must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 5.2** The preservative must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is $>1\text{mg/L}$.
- 5.3** The preservative must have a chronic aquatic toxicity where $NOEC/EC_x$ is $> 0.1 \text{ mg/L}$.
- 5.4** The preservative must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW} < 4$ according to OECD 107, OECD 117 or an equivalent test should be applied.

Exceptions may be made if any of the following requirements are met:

- a) LC_{50} , EC_{50} and IC_{50} is $> 100 \text{ mg/L}$ or $NOEC/EC_x$ is $> 10 \text{ mg/L}$.
 - b) it can be shown that the preservative is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - c) the preservative is not bioavailable (molar mass $> 700 \text{ g/mol}$).
- 5.5** The preservative must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
- H410, Very toxic to aquatic life with long lasting effects
- H411, Toxic to aquatic life with long lasting effects
- H413, May cause long lasting harmful effects to aquatic life

- 5.6** The preservative must be permitted under the Cosmetics Regulation (EC) No 1223/2009. The concentration of preservatives must not exceed the limits specified in the Cosmetics Regulation for rinse-off products. If the product's use is such that the product is in prolonged contact with the skin, the limitations in the Cosmetics Regulation regarding leave-on products will be applied.

- 5.7** The preservative must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
- H310, Fatal in contact with skin
- H330, Fatal if inhaled
- H301, Toxic if swallowed
- H311, Toxic in contact with skin
- H331, Toxic if inhaled

- 5.8** The preservative must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
- H371, May cause damage to organs
- H372, Causes damage to organs through prolonged or repeated exposure
- H373, May cause damage to organs through prolonged or repeated exposure

5.9 The preservative must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation:

H317, May cause an allergic skin reaction

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Reasons for requirements

[5.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[5.2- 5.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[5.4] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[5.5] To minimise the environmental risks, the substance must not be classified with any of these hazard statements.

[5.6] Preservatives permitted under the Cosmetics Regulation (EC) No 1223/2009 are considered to fulfil higher requirements with regard to human health than preservatives covered by other regulations.

[5.7-5.9] The products should be safe to use and not pose a health risk to the user.

6 Thickening agents and dissolving agents

- 6.1** The thickening agent/dissolving agent must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 6.2** The thickening agent/dissolving agent must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is > 10 mg/L.
- 6.3** The thickening agent/dissolving agent must have a chronic aquatic toxicity where $NOEC/EC_x$ is > 1 mg/L.
- 6.4** The thickening agent/dissolving agent must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW} < 4$ according to OECD 107, OECD 117 or an equivalent test should be applied.

Exceptions may be made if any of the following requirements are met:

- a) LC_{50} , EC_{50} and IC_{50} is > 100 mg/L or $NOEC/EC_x$ is > 10 mg/L.
 - b) it can be shown that the thickening agent/dissolving agent is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - c) the thickening agent/dissolving agent is not bioavailable (molar mass > 700 g/mol).
- 6.5** The thickening agent/dissolving agent must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
 H410, Very toxic to aquatic life with long lasting effects
 H411, Toxic to aquatic life with long lasting effects
 H413, May cause long lasting harmful effects to aquatic life
- 6.6** The thickening agent/dissolving agent must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
 H310, Fatal in contact with skin
 H330, Fatal if inhaled
 H301, Toxic if swallowed
 H311, Toxic in contact with skin
 H331, Toxic if inhaled
- 6.7** The thickening agent/dissolving agent must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
 H371, May cause damage to organs
 H372, Causes damage to organs through prolonged or repeated exposure
 H373, May cause damage to organs through prolonged or repeated exposure
- 6.8** The thickening agent/dissolving agent must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation:
- H317, May cause an allergic skin reaction

A dissolving agent is a substance that prevents an ingredient from precipitating during, for example, cold conditions or long-term storage.

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product-specific requirements

Soft soaps

6.9 Dissolving agents are not permitted. Thickening agents are permitted.

Reasons for requirements

[6.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[6.2-6.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[6.4] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[6.5] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[6.6-6.8] The products should be safe to use and not pose a health risk to the user.

[6.9] Soft soaps are traditionally based on saponified fatty acids and do not normally contain dissolving agents.

7 Bleaching agents

- 7.1** The bleaching agent must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 7.2** The bleaching agent must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is >1 mg/L.
- 7.3** The bleaching agent must have a chronic aquatic toxicity where $NOEC/EC_x$ is > 0.1 mg/L.
- 7.4** The bleaching agent must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW} < 4$ according to OECD 107, OECD 117 or an equivalent test should be applied.
- Exceptions may be made if any of the following requirements are met:
- LC_{50} , EC_{50} and IC_{50} is > 100 mg/L or $NOEC/EC_x$ is > 10 mg/L.
 - it can be shown that the bleaching agent is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - the bleaching agent is not bioavailable (molar mass > 700 g/mol).
- 7.5** The bleaching agent must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
 H410, Very toxic to aquatic life with long lasting effects
 H411, Toxic to aquatic life with long lasting effects
 H413, May cause long lasting harmful effects to aquatic life
- 7.6** The bleaching agent must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
 H310, Fatal in contact with skin
 H330, Fatal if inhaled
 H301, Toxic if swallowed
 H311, Toxic in contact with skin
 H331, Toxic if inhaled
- 7.7** The bleaching agent must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
 H371, May cause damage to organs
 H372, Causes damage to organs through prolonged or repeated exposure
 H373, May cause damage to organs through prolonged or repeated exposure
- 7.8** The bleaching agent must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation:
- H317, May cause an allergic skin reaction
 H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled

- 7.9** A maximum of 0.1 % by weight of complexing agents that do not meet requirements 3.1 - 3.3 may be included to stabilise oxygen-based bleaching agents.

Reasons for requirements

[7.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[7.2-7.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[7.4] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[7.5] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[7.6-7.8] The products should be safe to use and not pose a health risk to the user.

[7.9] Oxygen-based bleaching agents quickly lose effectiveness if they come into contact with metals. A small amount of strong complexing agents may therefore be needed to bind metals.

8 Acids

- 8.1** The acid must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test.
- 8.2** The acid must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is >10 mg/L.
- 8.3** The acid must have a chronic aquatic toxicity where $NOEC/EC_x$ is > 1 mg/L.
- 8.4** The acid must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW} < 4$ according to OECD 107, OECD 117 or an equivalent test should be applied.

Exceptions may be made if any of the following requirements are met:

- a) LC_{50} , EC_{50} and IC_{50} is > 100 mg/L or $NOEC/EC_x$ is > 10 mg/L.
 - b) it can be shown that the acid is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - c) the acid is not bioavailable (molar mass > 700 g/mol).
- 8.5** The acid must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
H410, Very toxic to aquatic life with long lasting effects
H411, Toxic to aquatic life with long lasting effects
H413, May cause long lasting harmful effects to aquatic life
- 8.6** The acid must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
H310, Fatal in contact with skin
H330, Fatal if inhaled
H301, Toxic if swallowed
H311, Toxic in contact with skin
H331, Toxic if inhaled
- 8.7** The acid must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs
H371, May cause damage to organs
H372, Causes damage to organs through prolonged or repeated exposure
H373, May cause damage to organs through prolonged or repeated exposure
- 8.8** The acid must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation:
- H317, May cause an allergic skin reaction
H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Reasons for requirements

[8.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[8.2-8.3] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[8.4] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[8.5] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[8.6-8.8] The products should be safe to use and not pose a health risk to the user.

9 Colouring agents

- 9.1** The colouring agent must be approved as a food additive (colour) in accordance to Regulation (EC) No 1333/2008 on food additives.
- 9.2** The colouring agent must not be classified with H317, May cause an allergic skin reaction, or be associated with data that indicates sensitisation:
- 9.3** The colouring agent must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
- H410, Very toxic to aquatic life with long lasting effects
- H411, Toxic to aquatic life with long lasting effects

Product-specific requirements

Laundry detergents, bleaching agents, dishwasher detergents and products designed for or specifically intended for children under 12 years of age

- 9.4** Colouring agents are not permitted.

Reasons for requirements

[9.1] Colouring agents may have negative effects on health. Food colouring agents have been approved in accordance with current EU legislation on food additives and are considered to fulfil high requirements with regard to human health.

[9.2] To reduce the risk of allergies, substances classified with H317, or associated with data that indicates sensitisation, are not permitted.

[9.3] Usually, food colouring agents are not hazardous to the environment. However, there are exceptions. For this reason, substances classified with H400, H410 or H411 are not permitted.

[9.4] To avoid allergies, colouring agents are not permitted in these products.

Products designed for or specifically intended for children under 12 years of age" refers to, for example, a laundry detergent specifically intended for children's clothing.

10 Perfume

10.1 No more than 0.25 % by weight perfume is permitted in the product.

Perfume in fragrance diffusers and refills for fragrance diffusers is exempted from the requirement provided that the perfumes is not classified as H317 and that measures are taken to avoid that the one who refills the diffuser is not exposed to concentrated perfume, e.g. by using gloves.

10.2 A declaration of all substances in the perfume that are classified with H317, May cause an allergic skin reaction, or belongs to the 26 fragrance allergens listed in the Detergent Regulation (EC) No 684/2004, or listed in the table in requirement 1.21 must be attached to the application and the exact concentration must be stated. Other substances included in the perfume must be declared if they exceed 1 % by weight. For these substances no exact concentration is required.

A fragrance is a substance in the perfume that has been added for its scenting properties.

10.3 Those substances in the perfume that are not fragrances must meet the requirements in the criteria that apply to their function.

10.4 Individual fragrances classified as H317, May cause an allergic skin reaction, must not exceed a concentration of 0.01 % by weight in the product. If the product's use is such that contact with the skin is prolonged, the limit of restriction is 0.001 % by weight. The concentration must be combined with any contributions from Biological substances, requirement 11.1.

10.5 Substances defined in requirements 1.21, 10.4 and 11.1 must not exceed a total concentration of 0.1 % by weight in the product. If the product's use is such that the contact with the skin is prolonged, a limit of 0.01 % by weight is applied.

10.6 The perfume must be used in accordance with the recommendations established by the International Fragrance Association (IFRA).

10.7 Nitromusk compounds and polycyclic musk compounds are not permitted in the perfume.

10.8 The perfume must not be hazardous to the aquatic environment according to the following classifications:

H400, Very toxic to aquatic life

H410, Very toxic to aquatic life with long lasting effects

H411, Toxic to aquatic life with long lasting effects

H413, May cause long lasting harmful effects to aquatic life

The requirement (10.8) refers to the perfume as such and not the individual substances in the perfume.

Product-specific requirements

Fabric softeners

10.9 No more than 0.5 % by weight perfume is permitted in the product.

Dishwasher detergents, stain removers, bleaching agents, and products designed for or specifically intended for children under 12 years of age

10.10 Perfumes are not permitted.

Reasons for requirements

[10.1, 10.9] Perfumes often contain substances that are sensitising and environmentally hazardous. The concentration is therefore limited in all product types.

[10.2-10.3] Substances present in very low concentrations can also have undesirable effects.

[10.4-10.5] These substances have been identified as sensitising substances. To reduce the risk of sensitisation, the concentration of these substances in the product is limited.

[10.6] IFRA is a member organisation for trade organisations in the perfume industry. IFRA recommends which perfumes are suitable and the concentrations in which they can be used.

[10.7] Nitromusk compounds and polycyclic musk compounds may pose a health risk, they have poor degradability and bioaccumulate.

[10.8] Perfumes often contain substances that are environmentally hazardous. Although perfumes, in comparison to other chemicals, are included in relatively low concentrations, SSNC considers it important to minimise the use and dissemination of substances with these properties.

[10.10] To avoid allergies, perfumes are not permitted in these products.

11 Biological substances

- 11.1** Individual biological substances classified with H317, May cause an allergic skin reaction, must not exceed a concentration of 0.01 % by weight in the product. If the product's use is such that the contact with the skin is prolonged, the limit of restriction is 0.001 % by weight. The content must be combined with any contribution from requirement 10.4.
- 11.2** Substances defined in requirements 1.21, 10.4 and 11.1 must not exceed a total concentration of 0.1 % by weight in the product. If the product's use is such that the contact with the skin is prolonged, a limit of 0.01 % by weight is applied.
- 11.3** The biological substance must be extracted with water or solvents that meet the requirements for solvents 4.1 - 4.8.
- 11.4** The biological substance must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
 - H410, Very toxic to aquatic life with long lasting effects
 - H411, Toxic to aquatic life with long lasting effects
 - H412, Harmful to aquatic life with long-lasting effects
 - H413, May cause long lasting harmful effects to aquatic life.

Product-specific requirements

Products designed for or specifically intended for children under 12 years of age

- 11.5** Biological substances are not permitted

Biological substances are substances extracted with or without solvents from biological materials that may have been purified but are not otherwise modified. They may be of plant or animal origin.

Reasons for requirements

[11.1-11.2] These substances have been identified as sensitising substances. To reduce the risk of sensitisation, the concentration of these substances in the product is limited.

[11.3] There is a risk that traces of the extraction medium may be present.

[11.4] To minimise the environmental risks the substance must not be classified with any of these hazard statements.

[11.5] To avoid allergies, these substances are not permitted in products for children.

12 Enzymes

- 12.1** Enzymes are permitted provided they are not used in spray products and are added as liquids or encapsulated granulates. Note that products that are not sold in a spray package but are intended for spray applications, are considered spray products.
- 12.2** Enzyme stabilizers classified with H317 (May cause an allergic skin reaction) must not exceed 0.01% by weight in the final product.

Reasons for requirements

[12.1] Enzymes are easily degradable and reduce the need for bleaching agents and surfactants. Enzymes are usually respiratory sensitisers, and consequently, they are not permitted in spray products.

13 Abrasives

- 13.1** Abrasives may only be added to products if their abrasive properties are essential to the performance of the product.
- 13.2** Abrasives, except hard organic material, must meet requirements 14.1-14.9. Hard organic material must meet requirements 11.1-11.4.
- 13.3** Steel wool is permitted as an abrasive.

Hard organic material refers to renewable organic material with a hard texture, such as ground walnut shells or apricot stones

Reasons for requirements

[[13.1] Abrasives may damage materials if used in products that are not expected to be abrasive.

[13.2] It is logical that the same high environmental and health requirements are imposed on abrasives as on other ingredients.

[13.3] Steel wool is permitted since it can be separated from the product and hence does not enter the sewage system.

14 Other additives

- 14.1** The ingredient must be readily biodegradable according to OECD 301, OECD 310 or an equivalent test. Ingredients that are not readily biodegradable according to the definition above, but inherently biodegradable according to OECD 302 or an equivalent test, may be included in the product at a total maximum concentration of 2 % by weight, including any contribution from non-biodegradable substances in requirement 14.10.
- Denatonium benzoate (CAS number 3734-33-6) has low biodegradability but is approved for denaturing in accordance with (EU) 2017/1112 (1.0 g /hL absolute ethanol).
- 14.2** The ingredient must be anaerobically biodegradable to 60 % according to ECETOC No 28, ISO 11734, OECD 311 or an equivalent test. Analogy-based reasoning may be accepted if no test results are available. Exceptions are made for substances for which there is no risk of accumulation in anaerobic environments, in which case adsorption must be less than 25 % and desorption greater than 75 %.
- 14.3** The ingredient must have an acute aquatic toxicity where LC_{50} , EC_{50} and IC_{50} is $>1\text{mg/L}$.
- 14.4** The ingredient must have a chronic aquatic toxicity where $NOEC/EC_x$ is $> 0.1 \text{ mg/L}$.
- 14.5** The ingredient must have a bioconcentration factor (BCF) of < 500 according to OECD 305 or an equivalent test. If no BCF data is available, $\log K_{OW} < 4$ according to OECD 107, OECD 117 or an equivalent test should be applied.
- Exceptions may be made if any of the following requirements are met:
- LC_{50} , EC_{50} and IC_{50} is $> 100 \text{ mg/L}$ or $NOEC/EC_x$ is $> 10 \text{ mg/L}$.
 - it can be shown that the ingredient is broken down very quickly into substances whose BCF or $\log K_{OW}$ satisfies the requirements.
 - the ingredient is not bioavailable (molar mass $> 700 \text{ g/mol}$).
- 14.6** The ingredient must not be hazardous to the aquatic environment according to the following classifications:
- H400, Very toxic to aquatic life
H410, Very toxic to aquatic life with long lasting effects
H411, Toxic to aquatic life with long lasting effects
H413, May cause long lasting harmful effects to aquatic life
- 14.7** The ingredient must not be acutely toxic according to the following classifications:
- H300, Fatal if swallowed
H310, Fatal in contact with skin
H330, Fatal if inhaled
H301, Toxic if swallowed
H311, Toxic in contact with skin
H331, Toxic if inhaled
- 14.8** The ingredient must not show specific target organ toxicity according to the following classifications:
- H370, Causes damage to organs

H371, May cause damage to organs

H372, Causes damage to organs through prolonged or repeated exposure

H373, May cause damage to organs through prolonged or repeated exposure

14.9 The ingredient must not be sensitising according to the classifications below, or be associated with data that indicates sensitisation.

H317, May cause an allergic skin reaction

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Product-specific requirements

Laundry detergents, dishwasher detergents, and textile and leather impregnation

14.10 Ingredients that do not meet requirements 14.1 and 14.2 may be included in the product at a total concentration of 2 % by weight.

Reasons for requirements

[14.1] Substances that degrade slowly accumulate in the environment and may pose a risk in the future. Such substances can also spread over long distances.

[14.2] Degradation in oxygen-free environments is an important characteristic for substances that accumulate in sewage sludge or sediment, otherwise there is a risk that these substances cause problems in the future.

[14.3-14.4] Substances that are acutely or chronically toxic to aquatic organisms affect the aquatic ecosystem negatively.

[14.5] Substances that bioaccumulate in the environment are stored in the food webs and can have adverse effects on animals and plants.

[14.6] To minimise the environmental risks, the substance must not be classified with any of these hazard statements.

[14.7-14.9] The products should be safe to use and not pose a health risk to the user.

[14.10] Some substances are not readily biodegradable but necessary for the function of the product. A low concentration of such substances is accepted.

15 Microorganisms

- 15.1** The product must only contain microorganisms from Risk Group 1 according to Directive 2000/54/EC.
- 15.2** The microorganisms must be identified via 16S ribosomal DNA sequencing or an equivalent method.
- 15.3** Genetically modified organisms (GMO) are not permitted.
- 15.4** The microorganisms must be tested for the pathogens listed in the table below, according to the specified or an equivalent test.

Microorganisms refers to organisms as defined in Directive 2000/54/EC on the protection of workers from risks related to exposure to biological agents at work: "a microbiological entity, cellular or non-cellular, capable of replication or of transferring genetic material".

Table 1. Test methods for pathogens

Pathogen	Test method
<i>E. coli</i>	ISO:16649-3
<i>Streptococcus (Enterococcus)</i>	ISO:21528-1
<i>Staphylococcus aureus</i>	ISO:6888-1
<i>Bacillus cereus</i>	ISO:7932 eller ISO:21871
<i>Salmonella</i>	ISO:6579 eller ISO:19250

- 15.5** Microorganisms are not permitted in spray products. Note that products that are not sold in a spray package, but are intended for spray applications, are considered spray products.

Product-specific requirements

Products intended for use in food production

- 15.6** Only microorganisms authorised for use in food by the European Food Safety Authority (EFSA) are permitted in products intended for use on surfaces or equipment that may come in contact with food.

Reasons for requirements

[15.1] Only microorganisms from Risk Group 1 are permitted as they are unlikely to cause human disease.

[15.2] In order to ensure that the microorganisms belong to the specified risk group, the microorganisms must be properly identified.

[15.3] The knowledge of the effects of GMO on the environment is limited and the use of GMO is, therefore, not permitted in accordance with the precautionary principle.

[15.4] The product should be safe to use and not pose a health risk to the user.

[15.5] Research on how exposure to microorganisms by inhalation affects health is missing and, for this reason as a precautionary measure, microorganisms are not permitted in spray products.

[15.6] Microorganisms that may come in contact with food must be approved for use in food by EFSA to ensure that no adverse health effects occur.

16 Water content

The water content of a product is its total water content including the water content of added ingredients.

Product-specific requirements

Liquid laundry detergents

16.1 The water content must not exceed 72 % by weight..

Washing-up liquids, all-purpose cleaners and heavy-duty cleaning agents

16.2 The water content must not exceed 75 % by weight.

16.3 No requirement is set for water content in products sold in the form of spray packages, refill packs to spray packages or wet wipes

Soft soaps

16.4 The water content must not exceed 78 % by weight.

16.5 In products without solvent, the water content must not exceed 80 % by weight.

In products sold in carton packaging, the water content must not exceed 83 % by weight.

16.6 No requirement is set for water content in products sold in the form of spray packages, refill packs to spray packages or wet wipes.

Stain removers and bleaching agents

16.7 The water content must not exceed 81 % by weight.

16.8 No requirement is set for water content in products sold in the form of spray packages, refill packs to spray packages or wet wipes.

Fabric softeners

16.9 The water content must not exceed 86 % by weight. In fabric softeners for consumer use a water content of up to 89% may be accepted provided that the dosage (regardless of water hardness) does not exceed 17ml, and that the license holder provide documentation indicating why a higher water content is preferable from an environmental point of view.

16.10 No requirement is set for water content in products that are automatically dispensed.

Microorganism-based products

16.11 No requirement is set for water content in microorganism-based products, regardless of product group.

Reasons for requirements

[16.1-16.10] Concentrated products reduce the need for packaging materials, transport and preservatives. The requirements have been set in line with the most highly concentrated products on the market containing the lowest water content.

[16.11] Microorganism-based products are usually heavily diluted before use, why no requirement is set for water content.

17 Dosage and user information

- 17.1** The recommended dosage must be stated on the packaging. Products for professional users may have dosage instructions on a product information sheet or similar. In such cases there must be a reference on the label that states that dosage instructions are available in the product information sheet.
- Products that are automatically dispensed, and where the dosage is set by the license holder's representative, are exempt from this requirement, provided it is clearly stated on the label and in any occurring product information sheet, that the dosage must be set by the license holder's representative.
- 17.2** For products sold in Sweden where the criteria stipulate that recommended dosage for different water hardness levels should be stated on the packaging/product information sheet, the following phrase (or similar text) must be stated: "I Sverige har majoriteten av befolkningen mjukt vatten. Är du osäker på vattenhårdenheten kontakta din kommun" For products sold abroad, the phrase "Adjust the dosage to the water hardness level. If you are unsure about the water hardness level, contact your local authority "(or similar text) should be used.
- 17.3** For multi-component systems of laundry detergents and dishwashing detergents, where the components together are necessary for the function, the criteria for dosing requirements apply to the mixture of the components.
- 17.4** For consumer products, the dosage must be stated in ml, dl or other commonly accepted units of measurement. In cases where the dosage cannot be expressed in units of measurement, the phrase "Consider the environment: Do not use more than necessary" or similar text must be stated on the packaging. Ready-to-use windscreen washer fluids are exempt from the requirement..
- 17.5** For professional products, other formulations than the ones described in requirement 17.4, such as percentages, are also accepted. If no dosage can be stated, the phrase "Consider the environment: Do not use more than necessary" or similar text must be stated on the packaging and in any occurring product information sheets.
- 17.6** If the dosage is stated as a range other than those mentioned in the criteria, for example the amount of laundry, the recommended dosage must correspond to the criteria requirements. To calculate the allowed dosage for another range than the one mentioned in the criteria document, one should use an average value. If, for example, the maximum dosage (according to the criteria) is 35 g for 4-5 kg laundry, the dosage must not exceed 35 g /4.5 kg, i.e. 7.78 g per kg of laundry. Hence, if the range on the label says 7-9 kg, the dosage must not exceed 8 x 7.78 g, i.e. 62.2 g.
- Powder laundry detergents for consumer use*
- 17.7** The product must provide good washing results at a dosage not exceeding 35 g for soft water and 70 g for hard water, in a machine for 4-5 kg normally soiled laundry.
- 17.8** The density must be at least 67 g/dl.
- 17.9** The recommended dosage for different water hardness levels must be clearly stated on the packaging.
- 17.10** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated on the packaging.
- For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.

Products for professional users refers to products for professional use, in companies, public institutions, hotels etc.

An example of a multi-component system is a laundry detergent where component 1 consists of alkali and component 2 consists of surfactants.

Soft water refers to 0-8 °dH and hard water refers to 14-20 °dH.

- 17.11** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Powder laundry detergents for professional users

- 17.12** Products intended for both consumers and professional users must meet the requirements for consumer use.
- 17.13** The product must provide good washing results at a dosage not exceeding 40 g for soft water and 80 g for hard water, in a machine for 4-5 kg normally soiled laundry.
- 17.14** The density must be at least 67 g/dl.
- 17.15** The recommended dosage for different water hardness levels levels must be clearly stated on the packaging or in the product information sheet (or similar).
- 17.16** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated together with the dosage instructions, either on the packaging or in the product information sheet. For detergents for delicate fibers it is accepted to use the phrase "Consider the environment: Do not wash more often than necessary and follow the dosage instructions".
- For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.

- 17.17** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Liquid laundry detergents for consumer use

- 17.18** The product must provide good washing results at a dosage not exceeding 40 ml (containing no more than 30 g of active laundry detergent) for soft water, in a machine for 4-5 kg normally soiled laundry. For hard water the product must provide good washing results at a dosage not exceeding 80 ml (containing no more than 60 g of active laundry detergent), in a machine for 4-5 kg normally soiled laundry.
- 17.19** Recommended dosage for different water hardness levels must be clearly stated on the packaging.
- 17.20** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated on the packaging. For detergents for delicate fibers it is accepted to use the phrase "Consider the environment: Do not wash more often than necessary and follow the dosage instructions".
- For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.
- 17.21** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Liquid laundry detergents for professional users

- 17.22** Products intended for both consumers and professional users must meet the requirements for consumer use.
- 17.23** The product must provide good washing results at a dosage not exceeding 50 ml dosage (containing no more than 35 g of active laundry detergent) for soft water in a machine for 4-5 kg normally soiled laundry. For hard water the product must provide good washing results at a dosage not exceeding 100 ml (containing no more than 70 g of active laundry detergent), in a machine for 4-5 kg normally soiled laundry.

- 17.24** The recommended dosage for different water hardness levels must be clearly stated on the packaging or in the product information sheet (or similar).
- 17.25** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated together with the dosing instructions, either on the packaging or in the product information sheet. For detergents for delicate fibers it is accepted to use the phrase "Consider the environment: Do not wash more often than necessary and follow the dosage instructions".
- For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.
- 17.26** Advice on increasing the dosage must be stated as a deviation from normal dosage.
- Stain remover and bleaching agents that are dosed in the washing machine*
- 17.27** The product must, regardless of water hardness, provide good results at a dosage not exceeding 40 ml in a machine for 4-5 kg laundry.
- 17.28** The phrase "Consider the environment: Follow the dosage instructions." or similar text must be stated on the packaging. Products for professional users may instead have the phrase in the product information sheet (or similar), if that is where the dosage instructions are found.
- Fabric softeners for consumer use*
- 17.29** The product must provide good results at a dosage not exceeding 20 ml for soft water and 30 ml for hard water in a machine for 4-5 kg laundry.
- 17.30** The recommended dosage for different water hardness levels must be clearly stated on the packaging. Fabric softeners where the dosage is the same for different water hardness levels and this is clearly indicated on the packaging, requirements are exempted from the requirement.
- 17.31** The phrase "Consider the environment: Follow the dosage instructions." or similar text must be stated on the packaging.
- 17.32** Advice on increasing the dosage must be stated as a deviation from normal dosage.
- Fabric softeners for professional users*
- 17.33** Products intended for both consumers and professional users must meet the requirements for consumer use.
- 17.34** The product must provide good results at a dosage not exceeding 25 ml for soft water and 37.5 ml for hard water in a machine for 4-5 kg laundry.
- 17.35** The recommended dosage for different water hardness levels must be clearly stated on the packaging or in the product information sheet (or similar). Fabric softeners where the dosage is the same for different water hardness levels and this is clearly indicated on the packaging, requirements are exempted from the requirement.
- 17.36** The phrase "Consider the environment: Follow the dosage instructions." or similar text must be stated together with the dosage instructions, either on the packaging or in the product information sheet (or similar).
- 17.37** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Dishwasher detergents for manual dosing

- 17.38** The product must provide good washing results at a dosage not exceeding 18 g for soft water and 36 g for hard water in a 12-15 setting dishwasher.
- 17.39** The recommended dosage for different water hardness levels must be clearly stated on the packaging. Products for professional users may instead have the dosage instructions in the product information sheet (or similar).
- 17.40** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated on the packaging. Products for professional users may instead have the phrase in the product information sheet (or similar), if that is where the dosage instructions are found. For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.
- 17.41** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Dishwasher detergents for automatic dosing

- 17.42** The product must provide good washing results at a dosage not exceeding 1 g of active substance per litre of dishwashing liquid for soft water and 2 g of active substance per litre of dishwashing liquid for hard water.
- 17.43** The recommended dosage for different water hardness levels must be clearly stated on the packaging or in the product information sheet (or similar).
- 17.44** The phrase "Consider the environment: Always wash a full load and follow the dosage instructions." or similar text must be stated together with the dosage instructions, either on the packaging or in the product information sheet (or similar). For products which are exempted from the dosing requirements according to 17.1, it is accepted to use the phrase "Consider the environment: Always wash a full load" or similar text.
- 17.45** Advice on increasing the dosage must be stated as a deviation from normal dosage.

Washing-up liquids

- 17.46** The product must provide good results at a dosage not exceeding 0.5 ml per litre of water, for normally soiled dishes. Products sold in spray packages are exempted to this requirement.
- 17.47** Advice on increasing the dosage must be stated as a deviation from normal dosage. Products sold in spray packages are exempted to this requirement.
- 17.48** The phrase "Consider the environment: Follow the dosage instructions." or similar text must be stated on the packaging. Products for professional users may instead have the phrase stated in the product information sheet (or similar), if that is where the dosage instructions are found. Products sold in spray packages are exempted to this requirement.

Microorganism-based products

- 17.49** The product must be labelled with the last date of use or equivalent.
- 17.50** Detailed instructions for use must be stated on the packaging. Products for professional users may instead have the instruction in any occurring product information sheet (or similar).

17.51 The phrase "Contains microorganisms" or similar text must be stated on the packaging and in any occurring product information sheet.

17.52 The phrase "Should not be used in locans where persons with an impaired immune system are residing" or similar text must be stated on the packaging and in any occurring product information sheet

Detergents for delicate fibers

17.53 It is accepted to use the phrase "Consider the environment: Do not wash more often than necessary and follow the dosage instructions".

Rinse aids

17.54 The dosage must not be stated in ml, dl or other commonly accepted units of measurement. Instead, it is accepted to refer to the dishwasher user manual, the manufacturers' programming instructions, or similar. The phrase "Consider the environment: Do not use more than necessary" or similar text must be stated on the packaging.

Reasons for requirements

[17.1-17.48] Requirements on dosage and user information are set to avoid overdosing and improper use of the product. The aim is to reduce the environmental impact of chemical products, packaging materials and transport. The dosage requirements have been set in line with the most concentrated products on the market.

[17.49-17.50] Microorganism-based products are relatively new on the market. It is, therefore, important that there are clear instructions on how to use the product in order to avoid overdosing and to ensure that the desired effect of the product is achieved.

[17.51] The consumer should be able to easily make an informed decision regarding whether or not he or she wants a product containing microorganisms.

[17.52] Risk categorisation is based on healthy people, and consequently, use of the product in places where more sensitive individuals are residing should be avoided.

18 Material in wet wipes

The requirements in this section refer to the cloth in wet wipes.

- 18.1** The wet wipe cloth must come from 100% bio-based raw material. Examples of permitted raw materials are cotton, viscose, lyocell and paper.
- 18.2** Recycled material may be used provided it is bio-based. Both pre-consumer waste and post-consumer waste may be used.
- 18.3** As for recycled raw material, the licensee must have knowledge about the raw materials origin in terms of country and supplier. Forest based virgin raw material must come from 100% FSC certified forestry. Virgin cotton material must be organically farmed and/or cultivated in transition and certified with IFOAM Family of Standards. Other types of certifications can be approved at the discretion of Naturskyddsforeningen. If this becomes relevant, it will be announced to the public by Naturskyddsforeningen which new tests or certifications that will be approved.
- 18.4** Fiber content and amount of recycled material must be visible on the packaging. It must be presented in percent based on the European regulation regarding textile fiber names and related labelling and marking requirements (EU 1007/2011).
- 18.5** If the wet wipes are sold/marked as biodegradable or compostable, this has to be verified with a test according to the European standard EN 13432. Other types of tests can be approved at the discretion of Naturskyddsforeningen. If this becomes relevant, it will be announced to the public by Naturskyddsforeningen which new tests or certifications that will be approved.
- 18.6** Bleaching with chlorine is not permitted.
- 18.7** Optical brighteners are not permitted.
- 18.8** The following substances may not be used at any stage of the production of the material: organic flourine compounds, substances on the Candidate list (echa.europa.eu/sv/candidate-list-table) as well as substances listed in Annex XIV and Annex XVII in the REACH regulation (EG 1907/2006).
- 18.9** The licensee must have an action plan for how the total emissions from the production of the cloth, i.e. from pulp to finished cloth, to air and water of chemical pollutants will be reduced over time. The action plan must contain a compilation of the five most environmentally harmful chemical pollutants that are released during production, as well as a justification for the choice of pollutants. Relevant pollutants are those mentioned in BAT. The plan should also contain at least three timed targets for how emissions are to be reduced. The licensee must annually follow up and, if necessary, update the action plan.
- 18.10** The licensee must have an action plan on how cloth waste material from production of wet wipes should be reduced over time. The amount of waste that the production of wet wipes produce should be calculated and there must be a plan regarding how the amount of waste should be reduced or be reused as raw material.

Bio-based raw materials refer to natural polymers as defined in the EU commission's guidance to the [directive](#) for certain plastics (EU 2019/904).

BAT refers to the conclusions regarding best [available practices](#) for the production in the textile industry that complied in accordance with the direction on industrial emission (EU 2010/75).

Motivation to the requirements

[18.1] Many disposable wet wipes contain synthetic fibers made from fossil raw material. Since it is possible to produce this type of product without synthetic fibers it is advised to do that. The risk of plastic materials polluting the nature can be avoided and production can be made from renewable raw materials.

[18.2] Recycled material is from a resource point of view the best option and should be chosen when possible.

[18.3] Recycled raw material is to prefer when possible. FSC certified forestry does not guarantee a sustainable forestry but gives a better traceability than uncertified forestry. Conventionally grown cotton has a big impact on the environment when you look at the amount of pesticides that are used. Organic farming prohibits these kinds of pesticides and artificial fertilizers.

[18.4-18.5] Accounting for fiber content gives the consumer full information about the product, as well as makes it easier to understand how it should be recycled. It is important to the consumer that it is clear what should happen to the product after it has been used. If you market the product as biodegradable or compostable this has to be tested so that the consumer can for example be sure that the product will degrade in the home compost.

[18.6] If chloride from for example bleaching in a pulp mill pollutes the environment with dioxins, they will be a threat to aquatic organisms as well as humans. Dioxins are toxic, fat-soluble and persistent. Today there are good alternatives to chlorine bleaching to be used.

[18.7] All chemicals have an impact on the environment, including dye and optical brighteners.

[18.8] These substances have such properties that they can cause serious and lasting environmental and health effects.

[18.9] The cloth production has a significant part in the entire product's environmental impact. The requirement aims for the licensee to have a continuous dialogue with its producers about which polluting substances that are released and take action for the pollution to decrease.

[18.10] A positive environmental gain that can be made in production of wet wipes is to get the waste to a minimum. The requirement aims for the licensee to move towards circularity in production.

19 Packaging

Packaging refers to the product's consumer packaging or equivalent for professional users. Transport packaging is not included.

- 19.1** Packaging must consist of parts that are easy to take apart and each part must consist of a single type of material. Spray nozzles, pump nozzles and packaging of soft plastic that consist of more than one plastic material, are exempt from this requirement.

Cardboard packaging intended for liquid chemical products is permitted to have a frame/thread for screw cap, which is not easy to disassemble from the cardboard, provided that this does not complicate the recycling of the paper fibers.

- 19.2** Fluorinated organic compounds, substances included in Annex XIV or XVII of the REACH Regulation (EC) No 1907/2006, and substances included on the Candidate list (<http://echa.europa.eu/sv/candidate-list-table>) must not exceed 0.1% by weight in the packaging or foil surrounding tablets and capsules. If the packaging partly consists of recycled materials, this part of the packaging is exempt from the requirement.

- 19.3** Plastic packaging must be made from polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET). Plastic packaging of PE or PP may have components (e.g. spray or pump nozzles) made of preferably PE, PP, TPO or TPS. Other plastic material may be approved, after an assessment by the Swedish Society for Nature Conservation, provided a density above 1 g/cm³. For PET packaging, other materials may be approved for components after an assessment by the Swedish Society for Nature Conservation, provided a density below 1 g/cm³. PCV and other halogenated plastics are not allowed regardless of density.

The license holder must know the proportion of recycled material as well as the proportion of renewable raw materials in the packaging. Renewable raw materials must not come from the oil palm (*Elaeis guineensis*).

- 19.4** Labels, sealants, foil surrounding tablets, and similar made of plastic, must be made of polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET). EVOH (ethylene vinyl alcohol) may be used as a sealants on cardboard packaging intended for liquid chemical products, provided that this does not complicate recycling. EVOH may not exceed 2 % by weight in the packaging.

- 19.5** Foils that surround tablets or capsules that are not removed before use, must consist of polyvinyl alcohol (PVA), alternatively of a material that meets requirements 14.1-14.9.

- 19.6** Plastic packaging must be labelled in accordance with DIN 6120 or American SPI. Corks, spray nozzles and pump nozzles are exempt from this requirement. For soft plastic packaging sold in the Nordic countries you can write information about the plastic in a text on the label, instead of using DIN 6120 or American SPI.

- 19.7** Paper and cardboard packaging and other materials made of paper or cardboard must be manufactured using at least 80 % wood fibers from recycled raw materials. If new raw material is used for the rest of the paper or cardboard packaging, at least 30% of this must be certified by FSC. Only completely chlorine-free bleaching methods are permitted.

Paper and cardboard packaging intended for laundry detergents with a package size of 10 kg and above may contain up to 50 % new wood fibers provided that both the new and the recycled raw materials are FSC certified. Paper labels consisting of 100% new raw material is accepted, provided that 100% of the raw material is FSC certified.

- 19.8** Metal must not be used in the packaging or foil surrounding tablets and capsules, except for springs in spray nozzles and pump nozzles. Metal may also be used in handles for buckets that hold 15 litres or more if the handle can be easily removed when the packaging is recycled. Exceptions to the requirement may also be granted for larger packaging that are to be reused.

- 19.9** Perfumes or other scenting substances are not permitted in the packaging or foil surrounding tablets and capsules.
- 19.10** Nanomaterials are not permitted in packaging or foil surrounding tablets and capsules.
- 19.11** The date of manufacture of the product must be traceable in form of a date stamp, batch number or equivalent on the packaging.
- 19.12** To the largest extent possible, the packaging should be adapted to NPA's (Näringslivets producentansvar, a Swedish producer organisation) recommendations in order to facilitate recycling. The packaging must carry instructions on how it should be separated for recycling according to NPA's recommendations for labelling of the packaging. If the product is sold in other countries than Sweden, each country's recycling policies should be applied. If the packaging consists of different materials, information on how the different components should be recycled must be provided. Packaging for wet wipes must carry a phrase or a symbol that makes it clear that the wipes must not be thrown in the toilet.
- 19.13** When sold to the customer, the product must consist of only one package unit. For example, a tube in a box is not permitted.

Nanomaterials refers to a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 1 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100

Reasons for requirements

[19.1] Packaging that consists of parts that are easily disassembled facilitates the recycling of the constituent materials. Pump bottles facilitate proper dosage of the product and packaging of soft plastic requires less packaging material than those of hard plastic material.

[19.2] These substances have such properties that they can cause serious and permanent environmental and health effects.

[19.3-19.4] For the plastic types PE, PP and PET there are well-established systems for recycling. In addition, SSNC does not consider PE, PP and PET to be problematic based on the constituent monomers. Compared to other types of plastics (such as PVC) few additives are used. As large scale palm oil plantations are associated with serious consequences for humans and the environment, it is important to not introduce new uses for raw materials derived from the oil palm.

[19.5] Tablets and capsules reduce the risk of overdosing. A protective foil provides safer handling of the product. Polyvinyl alcohol (PVA) is approved for use as tablet coating for pharmaceuticals and is thus deemed to fulfil high standards with regard to human health. PVA is one of the few synthetic polymers that is considered to be biodegradable in the environment, although the actual conditions usually limit its degradation.

[19.6] The DIN 6120 and American SPI systems facilitate the sorting of plastic materials at recycling plants.

[19.7] The use of recycled raw materials and chlorine-free bleaching methods reduce climate impact and the environmental impact from the pulp- and paper industry and logging.

[19.8] The use of metal is restricted since especially new production of aluminum is very energy consuming.

[19.9-19.10] SSNC believes that perfumes and other fragrance substances, as well as nanomaterials, have no essential function in packaging. In order to avoid unnecessary environmental impact they are not permitted in the packaging.

[19.11] Manufacturing date of the product must be traceable in order to verify compliance with the current criteria.

[19.12] Recycling conserves natural resources and reduces climate impact of products. The requirement is set in order to facilitate recycling. Flushing down wet wipes may cause severe problems for wastewater treatment plants.

[19.13] The requirement is set in order to reduce the use of packaging materia.

Appendix 1 Endocrine disrupting substances

For an updated definition of endocrine disrupting substances, see criterium 1.2.

Appendix 2 Assessment factor

For substances where no data is available for chronic aquatic toxicity for algae, crustaceans and fish, an assessment factor (AF) should be used. The lowest $LC_{50}/EC_{50}/IC_{50}$ value or $NOEC/EC_x$ value is divided by an assessment factor, which varies depending on the amount of data available.

For substances where no data is available for chronic aquatic toxicity, or where none of the requirements in the table below are met, an assessment factor of 100 must be applied to the lowest $LC_{50}/EC_{50}/IC_{50}$ value.

For substances with existing data for chronic aquatic toxicity, a lower assessment factor may be used provided that one of the conditions in the table below is met. The assessment factor must always be applied to the lowest $NOEC/EC_x$ value, provided that there is no $LC_{50}/EC_{50}/IC_{50}$ value lower than the lowest $NOEC/EC_x$ value. In that case, the lowest $LC_{50}/EC_{50}/IC_{50}$ value must be used:

Table 3. Instructions for using assessment factor

Existing data for chronic aquatic toxicity	AF
No existing data from chronic aquatic toxicity tests.	100
One $NOEC/EC_x$ from chronic aquatic toxicity tests (fish or crustaceans), where the data is from the trophic level that has the lowest $LC_{50}/EC_{50}/IC_{50}$ value.	10
Two $NOEC/EC_x$ from chronic aquatic toxicity tests (algae, fish or crustaceans), where the data is not from the trophic level that has the lowest $LC_{50}/EC_{50}/IC_{50}$ value.	10
Two $NOEC/EC_x$ from chronic aquatic toxicity tests (fish or crustaceans), where the data is from the trophic level that has the lowest $LC_{50}/EC_{50}/IC_{50}$ value.	5

Bra Miljöval (Good Environmental Choice) is an independent ecolabel by the Swedish Society for Nature Conservation (SSNC), which is the largest environmental NGO in Sweden with over 200 000 members. Bra Miljöval was launched in 1990 and the ecolabel is based on two fundamental ideas: that natural resources must be saved and that biodiversity and human health must not be threatened. Our requirements for licence holders are tough and constantly evolving. Products and services labelled with Bra Miljöval must therefore be continually developed in order to be more environmentally friendly.

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