

# **NATRUE Label: requirements to be met by natural and organic cosmetics**

Version 2.0 – 03.02.2011

*Updated text passages (in comparison to Version 1.9) are highlighted in yellow.*

## **Preface**

Man has conquered a variety of environments without being able to adapt his body. Architecture, clothing and cosmetics - all cultural achievements of civilization – are the substitute for adaptation by the human body. Beyond their purely technical functions, architecture and clothing also have an aesthetic function. The same is true for (decorative) cosmetics. Animals, by contrast, are perfectly adapted to their restricted environment. Scales, furs, carapaces or feathers cover and protect their bodies from the environment.

Recent developments, particularly in the food sector but also in other industries, have highlighted the growing importance of “naturalness” for consumers. Consumers have changed their habits and are paying increasing attention to “natural” aspects when buying cosmetics, too. This trend is very likely going to continue.

However, the assessment of the “naturalness” of food on the one hand and cosmetics on the other hand is not directly comparable. The most important aspects of “naturalness” in food include its occurrence in nature, forms of cultivation and traceability of production, as reflected in the multitude of “natural” and “organic” labels. Natural cosmetics, by contrast, are usually complex compositions of natural, mostly processed raw materials. Hence, they have to be evaluated differently.

A number of definitions and corresponding labels for natural cosmetics have been around for some time now on both the national and the international level. This raises the question: do we really need another definition? The biggest challenge facing the production of natural cosmetics – along with the selection of adequate raw materials – is to be able to offer consumers effective, safe and sensorily appealing high-quality products. However, products of this kind cannot always be manufactured exclusively from pure natural ingredients. If we look at clothing for example, appealing products – contrary to food – cannot be solely produced from pure, non-modified natural substances. The example of textiles made from fibres springs to mind.

For cosmetics, too, the question arises as to which natural ingredients can be used without being modified, where (physico-)chemical modifications seem to be necessary in a clearly defined framework, and how substances which are “close to natural substances” are to be evaluated. Compromises of this kind are necessary to a certain extent. However, care must be taken to ensure that they are transparent and comprehensible for the consumer and that the consumer is sufficiently informed. Nevertheless, these compromises should be limited to the absolutely necessary. The definition of “natural cosmetics” must not be rendered implausible by a multitude of seemingly arbitrary exceptions. The proposed criteria for the NATRUE Label are to go further than any definition of “natural cosmetics” so far established in Germany and Europe in terms of consistency and complete transparency. Only natural, some nature-identical and derived natural raw materials may be used in line with the requirements listed below.

The complete background information concerning the NATRUE Label is freely available on the Internet for all interested parties – consumers as well as manufacturers. At [www.natrue.org](http://www.natrue.org), criteria, lists of approved substances, a list of certified products **and raw materials** but also FAQs are readily accessible. Furthermore, questions can be asked and comments posted on this website.

Independently of the formulation of a natural cosmetic product, all products must comply first and foremost with the basic requirements of Directive 76/768/EEC (Cosmetics Directive of the European Union) **and regulation (EG Nr. 1223/2009)**, particularly with regard to their composition, safety, efficacy and labelling **requirements**.

Apart from *water*, which is the basis and therefore often the largest ingredient in cosmetic formulations, chemically unmodified *natural ingredients* (*natural substances*, e.g. fatty oils, hydro-alcoholic plant extracts) usually predominate in the finished product if it is claimed to be a “natural cosmetic product”. The chemically non-modified natural ingredients used should preferably be of organic grade.

*Nature-identical substances* may only be used when natural substances cannot be recovered from nature using reasonable technical effort. Nature-identical ingredients are dealt with in corresponding positive lists.

*Derived natural substances* are only justified if their function cannot be achieved using natural substances. Derived natural substances are always recovered from natural substances although mineral oil is excluded as a raw material. They should only be manufactured using processes which are modelled on physiological mechanisms (e.g. formation of partial glycerides by fat digestion). The number of chemical conversion steps should be kept to a minimum.

The natural starting materials for derived natural raw materials should preferably be of organic grade. The environmental compatibility of derived natural substances must be evaluated separately to ensure they can be returned without causing any problems to the natural circle. Thus, derived natural substances, which are used as surfactants, must meet particularly strict requirements regarding their biodegradability.

Aspects of sustainable development must also be taken into account along the entire value chain (submission of a sustainability report or an environmental impact assessment by the manufacturers).

The concrete requirements to be met by natural cosmetics listed below comprise

- open lists of derived natural substances and nature-identical substances which have been approved for use in natural cosmetics,
- descriptions of permitted manufacturing processes for natural cosmetics as well as for natural, derived natural and nature-identical raw materials,
- the required minimum levels of natural substances and substances of organic grade, and the maximum levels for derived natural raw materials in the three categories “natural cosmetics”, “natural cosmetics with an organic portion” and “organic cosmetics”,
- as well as criteria for packaging and certain carrier materials.

The certification of products on the basis of NATRUE criteria for natural and bio cosmetics is possible independent of membership of NATRUE or other institutions. In order to use the NATRUE label, it is necessary for at least 75 % of all finished cosmetic products (in terms of formulations) in a delimitable series of products of the same brand (along the lines of brand names and brand communication) to be certified as natural or organic cosmetics. These requirements do not apply for cosmetic raw materials.

In principle all legal references given in this catalogue of requirements are related to EU law in force at the moment. In non EU countries/regions these references must be adapted according to the corresponding national regulations in the countries in which the respective products will be marketed.

END of the Preface.

## **A. Definition of permitted ingredients and processes**

1. a) Natural cosmetics are products which – subject to nos. 2 and 3 – are produced exclusively from **natural substances**.

**Natural substances** are substances of botanic, inorganic-mineral or animal origin (except for dead vertebrates) and their mixtures and "reaction products" with each other. Only physical processes including extraction with the extraction and purifying agents listed in Annex 1a and the pH-adjusting agents listed in Annex 1b are permitted for recovery and further processing. Furthermore, enzymatic and microbiological methods are also permitted in so far as exclusively naturally occurring **enzymes or micro-organisms are used in the context of natural fermentation processes**. Raw materials of plant or animal origin as well as finished products may not be subjected to ionizing radiation. The bleaching of natural substances is only permitted when no chlorine is used (sodium hypochlorite). In terms of GMO, finished products as well as the used enzymes and microorganisms must comply with the criteria laid down in the EC eco-regulations [Regulation (EC) No 834/2007, former (until 31 December 2008) Regulation (EEC) No 2092/91].

b) In natural cosmetics, natural fragrances (essential oils) which correspond to ISO standard 9235 may be used. This includes isolates of essential oils and essential oils reconstructed from them. Synthetic nature-identical fragrances and chemically modified natural fragrances may not be used in natural cosmetics.

c) The origin of the water used in natural cosmetics is arbitrary. When calculating the portion of natural substances in the finished product (cf. section B), water is in either case only considered as natural substance if it derives directly from a vegetable source (directly obtained vegetable juices).

2. For the preservation of natural cosmetics, the **nature-identical preservatives** listed in Annex 2a may be used [in compliance with Annex VI (part one) of Directive 76/768/EEC]. The use of these substances has to be indicated by the wording "preserved with ..." on the product packaging.

The **nature-identical inorganic pigments and minerals** listed in Annex 2b may also be used in natural cosmetics.

3. **Derived natural substances** may only be used for the production of natural cosmetics if they are recovered using chemical reactions, **including biotechnological processes**, from natural substances as defined in section A.1.a (e.g. fats, oils, waxes, lecithins, mono-, oligo- and polysaccharides, proteins and lipoproteins).

The following chemical reactions are permitted: hydrolysis (including saponification), neutralisation, condensation with elimination of water, esterification, transesterification, hydrogenation, hydrogenolysis, dehydrogenation, glycosidation, phosphorylation, sulphatation, acylation, amidation, oxidation (with oxygen, ozone and peroxides) and pyrolysis.

**Necessary auxiliary materials and catalysts, including enzymes and micro-organisms, - if technically unavoidable or if used to have a better adapted energy efficiency in the context of improving sustainability – have to be removed, after use, completely or at least considered as technically unavoidable and technologically ineffective traces in the finished product.**

Derived natural substances also include further substances (besides those mentioned in 2) which do occur naturally but cannot be recovered in sufficient amounts from their natural sources using state-of-the-art technology.

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Annex 3 contains an open list of approved derived natural substances (INCI) which **may** comply with the above-mentioned requirements.

The detergent surfactants used must be completely biodegradable in accordance with the EC Regulation on Detergents [Regulation (EC) No 648/2004].

4. During all manufacturing, processing and filling processes it must be ensured that undesirable substances deriving from these processes, packages or storage containers materials do not migrate to the products.

**B. Minimum requirements to be met by levels of natural substances, natural substances of organic grade, and maximum levels of derived natural substances**

1. NATURAL COSMETICS

The minimum levels of natural substances and the maximum levels of derived natural raw materials (referring to the whole formulation) are presented by product group in Table 1 (Annex 4 does not apply here).

Water-containing natural substances are taken into account with the following percentage by weight: \*

- a) Vegetable juices: 100 % as natural substance
- b) Concentrated vegetable juices: only the 100 % concentrate (as a natural substance) but not the water used for dilution
- c) Aqueous extracts: only the plant portion
- d) Hydroalcoholic extracts: the plant and alcoholic portions (if this is a natural substance)

2. NATURAL COSMETICS WITH AN ORGANIC PORTION

Basic requirement:

Over and above the basic requirements laid down under 1., the following additional requirements have to be met: The product must contain (referred to the whole formulation) at least 15 % of chemically unmodified natural substances and maximum 15 % of derived natural substances (cf. Table 2).

Additional requirements:

- 1) At least 70 % of the natural substances of plant and animal origin and of derived natural substances (if applicable and as per § B2.2.) contained in the product must come from controlled organic farming and/or from controlled wild collection in line with the criteria laid down in the EC eco-regulations [Regulation (EC) No 834/2007, former (until 31 December 2008) Regulation (EEC) No 2092/91] or in the USDA *National Organic Program* (NOP).
- 2) In case derived natural substances contained in the product have been produced out of controlled organic starting material, the organic amount as defined in Annex 4 will be considered and added to the organic total amount. This list will be updated regularly, in order to take the increasing availability of such organic based derived natural raw materials into consideration.

3. ORGANIC COSMETICS

Basic requirement:

Over and above the basic requirements laid down under 2., the following additional requirements have to be met: The product must contain (referred to the whole formulation) at least 20 % of chemically unmodified natural substances and maximum 15 % of derived natural substances (cf. Table 3).

Additional requirements:

- 1) At least 95 % of the natural substances of plant and animal origin and of derived natural substances (if applicable and as per § B3.2.) contained in the product must come from controlled organic farming and/or from controlled wild collection in line with the criteria laid down in the EC eco-regulations [Regulation (EC) No 834/2007, former (until 31 December 2008) Regulation (EEC) No 2092/91] or in the USDA *National Organic Program* (NOP).
- 2) In case derived natural substances contained in the product have been produced out of controlled organic starting material, the organic amount as defined in Annex 4 will be considered and added to the organic total amount. This list will be updated regularly, in order to take the increasing availability of such organic based derived natural raw materials into consideration.

\* Examples for the calculation of plant extracts and hydrolates/floral waters are given in Annex 5.

# For soaps: natural and derived natural part to be added.

**C. Requirements to be met by carrier materials (e.g. for wet wipes and pads)**

All carrier materials of cosmetics, used for the topical application of a formulation to the skin (e.g. wipes or pads) must be recovered from renewable raw materials.

**D. Requirements to be met by packaging and packaging materials**

1. As far as possible packaging must be kept to a minimum.
2. If at all possible, products should be designed for multiple use (except for sample packs).
3. If at all technically feasible and available, recyclable packaging materials, if possible made of renewable raw materials, are to be used.
4. Halogenated plastics may not be used as packaging materials.
5. Pressurised gas (VOC) packs cannot be certified as natural or organic cosmetics according to NATRUE.

### **Annex 1a: Extraction agents approved for the production of natural substances**

- Ethanol (alcohol) of plant origin
- Fats and oils of plant origin
- Glycerine derived from fats or oils of plant origin
- Carbon dioxide (supercritical CO<sub>2</sub>)
- Water

The other extraction agents and solvents that may be needed – if there is no other option offered by the latest technology to recover

- Biotechnologically produced raw materials
- Concretes (or the resulting flower absolues and waxes)
- Phytic acid
- Raw materials from seeds, grain germs and algae
- Silk
- Tannic Acid
- Unsaponifiable plant materials (and to process those), for example Carotinoids Xanthophylls, Tocopherol
- Wool wax

are approved for this purpose only. After use these substances must be completely removed or at least removed to such an extent that they are only contained in technologically unavoidable and technologically ineffective trace concentrations in the finished product. The use of aromatic and halogen organic solvents is explicitly ruled out.

### **Annex 1b: pH-adjusting and ion exchange agents approved for the production of natural cosmetics**

If there is no other option, inorganic acids and bases - but preferably sodium hydroxide or potassium hydroxide and hydrochloric acid - may be used in addition to natural or derived natural acids and bases for the purposes of adjusting the pH value and ion exchange.

**Annex 2a: Nature-identical preservatives approved for the production of natural cosmetics**

(Please note the restrictions in Annex VI of Directive 76/768/EEC!)

| Preservative                                 | Examples of occurrence in nature   |
|--|--|
| Benzoic acid, its salts* and its ethyl ester | In benzoin ( <i>Styrax benzoin</i> ) and in the defence secret of water beetles <i>Dytiscus sp.</i>  |
| Benzyl alcohol                               | Up to 6 % in jasmine flower oil, in its free form or as esters in many other essential oils.   |
| Dehydroacetic acid and its salts*            | In the flowers of <i>Solandra nitida</i> , <i>Solandra grandiflora</i> .   |
| Formic acid and its sodium salt              | Occurrence in insects known since 1670, used for protection by beetles and other arthropods. Also occurs in stinging nettles and fir needles.  |
| Propionic acid and its salts*                | Formed during propionic acid fermentation. Carbohydrates are converted into propionic acid by <i>Lactobacillus casei</i> , <i>Bazillus subtilis</i> or <i>Propionbakterium pentosaceum</i> . |
| Salicylic acid and its salts*                | Free acid e.g. in meadowsweet ( <i>Filipendula ulmaria</i> ), in senna leaves ( <i>Cassia angustifolia</i> , <i>Cassia senna</i> ) and in camomile blossom ( <i>Chamomilla recutita</i> ).   |
| Sorbic acid and its salts*                   | In rowanberry seeds (mountain ash, <i>Sorbus aucuparia</i> ).  |

\*As permitted in Directive 76/768/EEC, except for ethanolamine salts.

**Annex 2b: Nature-identical inorganic pigments and minerals approved in natural cosmetics**

| INCI-Name [EU]                | Chemical Name                  | Examples of occurrence in nature   |
|-------------------------------|--------------------------------|--|
| Alumina                       | Aluminium oxide                | Corundum, clay.  |
| Aluminum (CI 77000)           | Aluminium                      | Most abundant metal in the earth's crust, also occurring in elemental form.  |
| Aluminum Hydroxide            | Aluminium hydroxide            | Bauxite (Gibbsite, Hydrargillite).   |
| Barium Sulfate; CI 77120      | Barium sulphate                | Baryte.  |
| Calcium Aluminum Borosilicate | Calcium aluminium borosilicate | Tourmalines.   |
| Calcium Carbonate; CI 77220   | Calcium carbonate              | Sediment rocks, calcite, aragonite, vaterite. Main component in marble, chalk, dolomite.                             |
| Calcium Chloride              | Calcium chloride               | Antarctite, Sinjarite.   |
| Calcium Fluoride              | Calcium fluoride               | Fluorite or fluorspar, frequently occurring mineral from the mineral group of the simple halides.                    |
| CI 77007                      | Ultramarines                   | <i>Lapis lazuli</i> , mentioned as a gemstone 50,000 years ago, occurs for instance in Afghanistan, Chile and Burma. |



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|--|--|--|
| CI 77163   | Bismuth oxychloride                                    | BiOCl -> mineral: bismoclite, discovered in 1935, occurs for instance in Germany (Black Forest), South Africa, Norway, Chile, Italy, England, Scotland and Russia.   |
| CI 77268:1   | Carbon, Carbon Black                                   | Most abundant element in the earth's crust. Carbon element occurring as graphite and diamond.  |
| CI 77288; CI 77289   | Chromic oxide/chromic oxide, hydrated                  | CrO(OH) -> minerals: guyanait, discovered in 1967, grimaldiit discovered in 1967 and bracewellit discovered in 1967, occurs for instance in Guyana (in the Mazaruni region); Cr <sub>2</sub> O <sub>3</sub> -> mineral: eskolaite discovered in 1958, occurs for instance in Finland (East Finland province).  |
| CI 77400   | Copper   | Occurs naturally in nature, mostly in elemental form.  |
| CI 77480   | Gold   | Occurs naturally in nature, mostly in elemental form. Mountain gold is found in the primary layer, stream gold in the secondary layer in fluvial sand. Even sea water contains 10 mg/m <sup>3</sup> gold.  |
| CI 77489;<br>CI 77491;<br>CI 77492;<br>CI 77499                  | Ferric oxides/ferric oxides, hydrated                  | Fe(OH) <sub>3</sub> * nH <sub>2</sub> O -> mineral: Bernalit, discovered in 1992, occurs for instance in Germany (Black Forest) and Australia (federal state of New South Wales); Fe <sup>3+</sup> O(OH) -> mineral: feroxygit, discovered in 1976, occurs for instance in Germany (Black Forest) and in the Ukraine (Ivanovo-Frankovsk Oblast province); Fe <sub>5</sub> O <sub>3</sub> (OH) <sub>9</sub> -> mineral: ferrihydrite, discovered in 1971, occurs for instance in Germany (Black Forest) and in Kazakhstan; Fe <sup>3+</sup> O(OH) -> mineral: goethite, discovered in 1806, for instance in Germany (Rhineland-Palatinate); α-Fe <sup>3+</sup> O(OH) -> mineral: lepidocrocit, discovered in 1813, occurs for instance in the Czech Republic (Mähren province). |
| CI 77510   | Prussian blue  | Kafehydrocyanite K <sub>4</sub> [Fe(CN) <sub>6</sub> ] * H <sub>2</sub> O, discovered prior to 1974, occurs in Russia, for instance in Siberia and in the Ural.  |
| CI 77742   | Manganese violet                                       | (NH <sub>4</sub> )(Mn <sup>2+</sup> ,Mg)[PO <sub>4</sub> ] * H <sub>2</sub> O -> mineral: niahite, discovered before 1983, occurs for instance in Malaysia, on the island of Borneo (Sarawak province), the USA and in Japan.  |
| CI 77820;<br>Silver Chloride;<br>Silver Oxide;<br>Silver Sulfate | Silver, silver chloride, silver oxide, silver sulphate | Occurs naturally in nature, mostly in elemental form. Silver ores, often together with lead-copper and zinc ores as sulphides, sulphates or oxides. Important locations of elemental silver: Freiberg/Erzgebirge; Kongsberg/Norway; St. Andreasberg/Harz; Keweenaw peninsula/USA; Batopilas/Mexico; Mansfelder Kupferschiefer-Revier (Eisleben, Sangerhausen; mostly silver sheets; also as petrification material of fossils).  |

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|-------------------------------|--|--|
| CI 77891;<br>Titanium Dioxide | Titanium dioxide                       | Anatas, discovered in 1801, occurs for instance in France (Rhône Alpes region), in North and South America and in Australia; brookite, discovered in 1825, occurs for instance in Wales (county of Gwynned), Switzerland (Wallis canton) and in Germany (Saxony Anhalt); rutile, discovered in 1803, occurs in Spain (Castilla y Leon region), Africa, North and South America and Australia.  |
| CI 77947;<br>Zinc Oxide       | Zinc oxide                             | Zn(OH) <sub>2</sub> -> minerals: wulfingit, discovered in 1985, occurs for instance in Germany (Hesse, North Rhine-Westphalia) and in England; sweetit, discovered in 1984, occurs in England (county of Derbyshire); ashoverit, discovered in 1988, occurs for instance in England (county of Derbyshire), in Germany (Harz) and in Italy (Liguria region); ZnCO <sub>3</sub> -> mineral: smithsonite, discovered in 1959, occurs for instance in the USA (New Jersey), Africa and Australia. |
| Copper Sulfate                | Copper sulphate                        | Weathering product, sulphidic copper ore, chalcantite.   |
| Hydrated Silica;<br>Silica    | Silica, hydrated silica                | Quartz sand.   |
| Magnesium Silicate            | Magnesium silicate                     | Talc, Sepiolite, minerals of the Serpentine group  |
| Magnesium Sulfate             | Magnesium sulphate                     | Kieserite.   |
| Manganese Dioxide             | Manganese dioxide                      | Manganese Oxide, also Manganese (IV) oxide, Pyrolusite, occurs principally as pyrolusite (MnO <sub>2</sub> ) - South Ural and South Africa.  |
| Manganese Sulfate             | Manganese sulfate (MnSO <sub>4</sub> ) | Mineral: crystals of melanterite (MnSO <sub>4</sub> · 7 H <sub>2</sub> O) Spain, USA, Germany & Sweden   |
| Mica                          | Mica                                   | Amongst others annite KFe <sub>3</sub> <sup>2+</sup> AlSi <sub>10</sub> (OH,F) <sub>2</sub> , phlogopite KMg <sub>3</sub> (Si <sub>3</sub> Al)O <sub>10</sub> (F,OH) <sub>2</sub> and muscovite KAl <sub>2</sub> (Si <sub>3</sub> Al)O <sub>10</sub> (F,OH) <sub>2</sub> occurs in America (USA, Canada), Europe (England), Asia (China, Saudi Arabia, Pakistan, Myanmar).   |
| Potassium Alum                | Potassium aluminium sulphate           | Occurs naturally as a mineral: kalinite.   |
| Potassium Carbonate           | Potassium carbonate (potash)           | In ash, in inland waters (Dead Sea, Lop Nor desert).   |
| Potassium Chloride            | Potassium chloride                     | Sylvite, Carnallite, Kainite.  |
| Sodium Bicarbonate            | Sodium bicarbonate                     | Natron, mineral nahcolith.   |
| Sodium Borate                 | Sodium borate                          | Borax.   |
| Sodium Carbonate              | Sodium carbonate                       | Soda (various crystal forms), in soda lakes.   |
| Sodium Fluoride               | Sodium fluoride                        | Mineral Villiaumit; first mined 1908 on the Rourme island in Guinea (the Rourme island belongs to the Îles de Los)   |
| Sodium Sesquicarbonate        | Sodium sesquicarbonate                 | Mineral: Trona.  |
| Sodium Sulfate                | Sodium sulphate                        | Glauber salt; in mineral waters; mineral thenardite.   |

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|----------------|----------------|---|
| Tin Oxide      | Tin dioxide    | Occurs as cassiterite in alluvial deposits. It is the main tin ore and is recovered in many countries. The main sources are Malaysia, Thailand, China, Indonesia, Bolivia and Russia. |
| Zinc Carbonate | Zinc carbonate | Mineral: Smithsonite; discovered before 1959, occurs for instance in the USA (New Jersey), Africa and Australia.  |

A coating of these pigments is admissible as long as only natural or derived natural substances are used in accordance with A.1 or A.3.

**Annex 3: Derived natural substances approved for the production of natural cosmetics (open list of INCI designations)**

*Please note:* This is a non-exhaustive list. In principle, all other substances which fulfil the criteria listed in A.3 regarding production and, where appropriate, biodegradability may be included in the list by submitting an application to NATRUE.

However, this list is not a positive list. The substances listed here with their INCI designations may only be used in natural cosmetics when they really meet the criteria listed under A.3 for production and, where appropriate, biodegradability in the concrete individual case (in the raw material of a specific manufacturer/supplier).

List: please see extra document „NATRUE Criteria Annex 3 DERIVED NATURAL.xls“.

**Annex 4: Organic portion of derived natural substances if they have been processed from organic raw materials** according to the criteria laid down in Regulation (EC) No 834/2007, former (until 31 December 2008) Regulation (EEC) No 2092/91 or in the USDA *National Organic Program* (NOP).

| Main process involved to produce derived natural ingredient       | Organic percentage of derived natural ingredient |
|---|--|
| Hydrolysis, saponification, esterification or transesterification | 98%  |
| Hydrogenation or Hydrogenolysis                                   | 98%  |
| Glycosidation   | 98%  |
| Sulphatation  | 60%  |
| Acylation   | 85%  |

**Annex 5: Examples for the calculation of the natural (organic) portion of plant extracts and hydrolates / floral waters**

In the scheme below the letters mean the following:

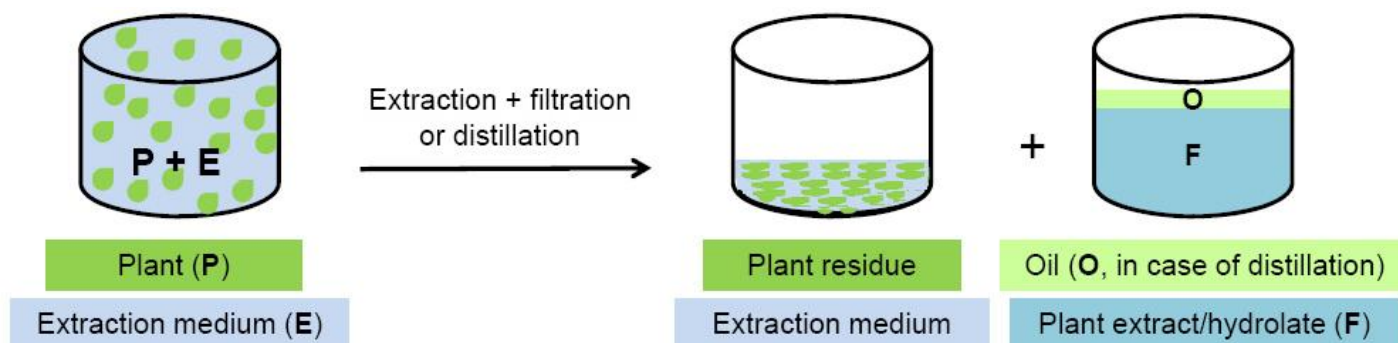
**P** = weight of the plant material used (organic, if applicable)

**E** = weight of the extraction medium used or of the water used for distillation

**F** = weight of the extract recovered (after extraction and filtration) or of the hydrolate recovered (after distillation)

**O** = weight of the plant oil recovered (in case of distillation)

**X** = natural or organic portion of the extract / hydrolate [%] according to paragraph B. 1.



**Case 1:** Distillation or extraction of organic plant material with water or another extraction medium from plant origin (derived natural, not organic):

Extract / Hydrolate:  $X = P/(P + E) \times 100 = X \% \text{ natural and organic}$

Oil (in case of distillation): 100 % natural and organic

**Case 2a:** Extraction of organic plant material with an extraction medium from plant origin (natural, not organic):

Extract: 100 % natural, thereof  $X = P/(P + E) \times 100 = X \% \text{ organic}$

**Case 2b:** Extraction of organic plant material with an extraction medium from plant origin (natural, partly organic):

Extract: 100 % natural, thereof  $X = (P+E_{\text{organic}})/(P + E_{\text{total}}) \times 100 = X \% \text{ organic}$

**Case 3:** Extraction of organic plant material with an organic extraction medium:

Extract: 100 % natural and organic

The plant residue which will remain after distillation or extraction can be processed further as natural substance (and as organic, where applicable).

**Example 1:** Extraction of calendula (organic) with vegetable oil (natural and organic, where applicable):

P = 20 kg dried plant material (organic)  
E = 80 kg vegetable oil (organic, where applicable)  
F = 70 kg extract after filtration

Extract: 100 % natural, thereof  $X = 20/(20 + 80) \times 100 = 20$  % organic  
If organic vegetable oil is used, the extract has to be counted as 100 % natural and organic.

**Example 2:** Manufacturing of a hydrolate through distillation of rose blossoms with water (first distillation):

P = 500 kg fresh rose blossoms (organic)  
E = 500 kg water  
F = 500 kg hydrolate

Oil: 100 % natural and organic  
Hydrolate:  $X = 500/(500 + 500) \times 100 = 50$  % natural and organic

**Example 3:** Manufacturing of a hydrolate through distillation of rose blossoms with water (first distillation):

P = 500 kg fresh rose blossoms (organic)  
E = 1000 kg water  
F = 1000 kg hydrolate

Oil: 100 % natural and organic  
Hydrolate:  $X = 500/(500 + 1000) \times 100 = 33,3$  % natural and organic

**Example 4:** Manufacturing of a hydrolate through distillation of lavender with water:

P = 1000 kg lavender (organic, almost dried)  
E = 350 kg steam (is added until F = 350 kg)  
F = 350 kg hydrolate

Oil: 100 % natural and organic  
Hydrolate:  $X = 1000/(1000 + 350) \times 100 = 74,1$  % natural and organic

**Example 5:** Manufacturing of floral water (without extraction of oil):

Same calculation of the natural and organic portion applies as in the case of hydrolates.

**Table 1: Requirements to be met by the “natural cosmetics” category**

|   | 1   | 2  | 3                         | 4                                     | 5                              | 6                                 | 7          | 8                       | 9  | 10        | 11                               | 12                                    | 13     |
|---|---|--|---------------------------|---------------------------------------|--------------------------------|-----------------------------------|------------|-------------------------|--|-----------|----------------------------------|---------------------------------------|--------|
| Content of raw materials referred to the finished product (%) | Oils/water-free cleaning and skin care products | Parfums, Eaux de Parfum, Eaux de Toilette, Eaux de Cologne | Skin care emulsions (W/O) | Decorative cosmetics containing water | Deodorants and antiperspirants | Skin care emulsions (OW) and gels | Sunscreens | Hair treatment products | Cleaning products containing surfactants | Oral care | Decorative cosmetics, water-free | Soaps                                 | Waters |
| Water content (%)   | Water-free                                      | No specific requirement or limitation                      |                           |                                       |                                |                                   |            |                         |  |           | Water-free                       | No specific requirement or limitation |        |
| Minimum content of natural substances (%)                     | 90  | 60   | 30                        | 15                                    | 15                             | 10                                | 10         | 3                       | 3  | 2         | 1                                | 1                                     | 0.1    |
| Content of nature-identical substances (%)                    | No specific requirement or limitation           |  |                           |                                       |                                |                                   |            |                         |  |           |                                  |                                       |        |
| Maximum content of derived natural substances (%)             | 10  | 10   | 15                        | 20                                    | 30                             | 20                                | 45         | 40                      | 85                                       | 70        | 50                               | 99                                    | 5      |

**Table 2: Requirements to be met by the “natural cosmetics with an organic portion” category**

|   | 1   | 2  | 3                         | 4                                     | 5                              | 6                                 | 7          | 8                       | 9  | 10        | 11                               | 12                                    | 13     |
|---|---|--|---------------------------|---------------------------------------|--------------------------------|-----------------------------------|------------|-------------------------|--|-----------|----------------------------------|---------------------------------------|--------|
| Content of raw materials referred to the finished product (%) | Oils/water-free cleaning and skin care products | Parfums, Eaux de Parfum, Eaux de Toilette, Eaux de Cologne | Skin care emulsions (W/O) | Decorative cosmetics containing water | Deodorants and antiperspirants | Skin care emulsions (OW) and gels | Sunscreens | Hair treatment products | Cleaning products containing surfactants | Oral care | Decorative cosmetics, water-free | Soaps #                               | Waters |
| Water content (%)   | Water-free                                      | No specific requirement or limitation                      |                           |                                       |                                |                                   |            |                         |  |           | Water-free                       | No specific requirement or limitation |        |
| Minimum content of natural substances (%)                     | 90*   | 60*  | 30*                       | 15*                                   | 15*                            | 15*                               | 15*        | 15*                     | 15*                                      | 15*       | 15*                              | 1*                                    | 15*    |
| Content of nature-identical substances (%)                    | No specific requirement or limitation           |  |                           |                                       |                                |                                   |            |                         |  |           |                                  |                                       |        |
| Maximum content of derived natural substances (%)             | 10**  | 10**   | 15**                      | 15**                                  | 15**                           | 15**                              | 15**       | 15**                    | 15**                                     | 15**      | 15**                             | 99**                                  | 5**    |

\* Please take notice of the additional requirements on the content of substances from controlled organic farming in section B. 2.

\*\* Please take notice of the additional requirements with regard to the production of derived natural substances made of organic starting material in section B. 2.

# Please note, that the additional requirements with regard to soaps in section B. 2.



**Table 3: Requirements to be met by the “organic cosmetics” category**

|   | 1   | 2  | 3                         | 4                                     | 5                              | 6                                 | 7          | 8                       | 9  | 10        | 11                               | 12                                    | 13     |
|---|---|--|---------------------------|---------------------------------------|--------------------------------|-----------------------------------|------------|-------------------------|--|-----------|----------------------------------|---------------------------------------|--------|
| Content of raw materials referred to the finished product (%) | Oils/water-free cleaning and skin care products | Parfums, Eaux de Parfum, Eaux de Toilette, Eaux de Cologne | Skin care emulsions (W/O) | Decorative cosmetics containing water | Deodorants and antiperspirants | Skin care emulsions (OW) and gels | Sunscreens | Hair treatment products | Cleaning products containing surfactants | Oral care | Decorative cosmetics, water-free | Soaps #                               | Waters |
| Water content (%)   | Water-free                                      | No specific requirement or limitation                      |                           |                                       |                                |                                   |            |                         |  |           | Water-free                       | No specific requirement or limitation |        |
| Minimum content of natural substances (%)                     | 90*   | 60*  | 30*                       | 20*                                   | 20*                            | 20*                               | 20*        | 20*                     | 20*                                      | 20*       | 20*                              | 1*                                    | 20*    |
| Content of nature-identical substances (%)                    | No specific requirement or limitation           |  |                           |                                       |                                |                                   |            |                         |  |           |                                  |                                       |        |
| Maximum content of derived natural substances (%)             | 10**  | 10**   | 15**                      | 15**                                  | 15**                           | 15**                              | 15**       | 15**                    | 15**                                     | 15**      | 15**                             | 99**                                  | 5**    |

\* Please take notice of the additional requirements on the content of substances from controlled organic farming in section B. 3.

\*\* Please take notice of the additional requirements with regard to the production of derived natural substances made of organic starting material in section B. 3.

# Please note the additional requirements with regard to soaps in section B. 3.

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