

NATURAL / ORGANIC CERTIFICATIONS : Different guidelines — what are the differences ?

ECOCERT, COSMOS, NATRUE, ISO 16128

July 2018

HEALTH • NUTRITION • MATERIALS

Agenda

| Natural or Organic — consumer expectations |
|--|
| ECOCERT / COSMOS / NATRUE / ISO 16128: an overview |
| Organic calculation — examples |
| Natural calculation – examples |
| Guidelines for the use of logos |
| |



Natural & Organic logos — a jungle!



SCIENCE, BRIGHTER LIVING.

Consumers believe natural is best

More and more people seek naturally derived beauty products Certified product launches are a very important feature for consumers

- 20% don't know what "natural & organic" means and 18% don't know which products are, revealing a need for clearer definition and communication from brands...
- ...Especially as 28% think there should be stricter regulations regarding natural and organic claims and 24% are confused about what certain natural certifications mean
- 84% of US NOPC consumers say USA certification is important

Source: Mintel Report [Natural and Organic Personal Care Consumer - US - December 2016]

NOPC: Natural Organic Personal Care



"Natural" is the most influential claim Millennials demand more verification

88% Made with all natural ingredients 86% No artificial ingredients 84% USDA Certified Organic 84% Not tested on animals/cruelty-free 81% Contains organic ingredients 77% Non-GMO verified 66% Locally made 61% NSF certified 71% 61% EWG verified 72% 58% Ecocert certified **69**% 44% Vegan 58% 60% 70% 80% 90% 100% 30% 50% All Millenials

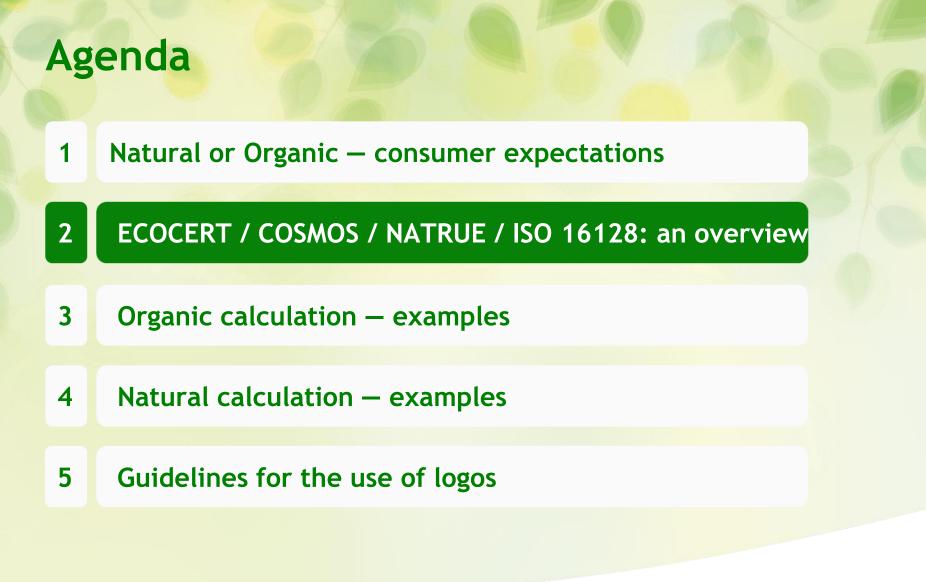
Influence of Claims on Purchase in NOPC, US Oct-2016

Presence of natural ingredients and absence of artificial ingredients are the most influential claims for over 86%

- Organically grown ingredients and absence of GMO is important for over 77%
- Millennials are more demanding regarding every single claim but the biggest differences are seen in verifications and vegan claims
 35% place more importance on vegan
 15% place more importance on verifications

Consumers need a clear, natural standard with certification







Overview of Certification Standards



ECOCERT: The pioneer, created a standard for natural and organic cosmetics in 2002. Ecocert is present in 80 countries.

Goal: to promote natural and organic substances, respect for the environment and high ethical values



COSMOS: a step towards a single European standard initiated by the 5 main European organic and natural standard-setting organizations). Standard approved in 2010.

Goal: to promote the use of products from organic agriculture, respect biodiversity and use clean manufacturing processes that respect human health and the environment



NATRUE: Founded in 2007 by European manufacturers of natural and organic cosmetics.

Goal: to safeguard and promote pure and authentic natural skin care



ISO 16128: International standard released in September 2017.

Goal: providing guidelines on technical definitions and criteria for natural and organic cosmetics ingredients



Scope

| | ECOCERT | COSMOS | NATRUE | ISO 16128 | |
|---------------------------------------|----------|-------------------------------------|------------------------|--------------------------------------|--|
| Organization Limited company | | Non-profit association | Non-profit association | International standard | |
| Guidelines (last issue date) | + (2012) | + (2013) | + (2017) | + (2017) | |
| Labeling | EER | COSMOS CERTIFIED | | | |
| Inspection, certification and control | Ecocert | one of the founder organizations | CH: Bio-Inspecta | Not defined yet / self-evaluation | |
| PRODUCT REVIEW | | | | | |
| Origin/processing of ingredients | + | + | + | + | |
| Composition of entire product | + | + | + | + | |
| Storage and packaging | + | + | + | - | |
| Environmental management | + | + | +/- | +/- | |

+/- : has to follow the green chemistry principles

(covering 3 pillars: renewable origin, process, environmental impact)

Links to individual standards: http://www.ecocert.com/sites/default/files/u3/Natural-and-Organic-Cosmetic-Ecocert-Greenlife-standard-2012-with-TS_1.pdf https://cosmos-standard.org/the-cosmos-standard/ http://www.natrue.org https://www.iso.org/standard/62503.html

BRIGHTER LIVING

What does "natural" mean ? Definitions

| | ECOCERT | COSMOS | NATRUE | ISO 16128 |
|------------------------------|--|--|--|---|
| Denomination | Natural ingredient/ Physically processed agro-ingredient | Physically processed agro-ingredient (PPAI) | Natural substances (water excluded) | Natural ingredient |
| Permitted starting materials | Plant, animal (not animal parts) – (not CITES listed), mineral, marine ingredients | Plant, animal (produced by animals) – (not CITES listed), microbial, mineral | Botanic, inorganic mineral, animal (excl. dead vertebrates) | Plants (incl. Fungi – algae), animals, micro-organisms or minerals |
| Permitted physical processes | Positive list (no chemical change) | Positive list (no chemical change) | Positive list (no chemical change), incl. enzymatic/ microbial reactions if occurring in nature (also required for end product) * | No positive list Physical processes, fermentation occurring in nature (incl leading molecules), traditional preparation (extraction). |
| Permitted solvents | Solvents of natural origin No petrochemical solvent | Positive list (natural solvents): water, EtOH, glycerin, oils, honey, CO ₂ | Positive list CO ₂ , EtOH, Oil and glycerin from vegetal origin, NDES, water | Process solvent: Any renewable solvent (if available). Ingredient solvent: only natural |

All standards have similar definitions regarding starting materials. The major difference concerns ISO 16128 permitting solvents.

CITES: Convention on International Trade in Endangered Species of wild fauna and flora NDES: Natural Deep Eutectic Solvents

st «end product» refers to the result of the enzymatic/microbial reaction



Derived natural / organic / synthetic Definitions

| | ECOCERT | COSMOS | NATRUE | ISO 16128 |
|---------------------------------|---|---|--|--|
| NATURALLY DERIVED | | | | |
| Denomination | Ingredient of natural origin/ Chemically processed agro-ingredient | Chemically processed agro-ingredient (CPAI) | Derived natural substances | Derived natural ingredient |
| Permitted starting materials | Natural substances | Natural substances | Natural substances | Natural/naturally-derived substances |
| Permitted chemical processes | Negative list. Petrochemical solvents allowed if no natural alternative | Negative list. Petrochemical solvents allowed if no natural alternative | | Process solvent: any solvents if renewable ones not available Ingredient solvent: natural or naturally-derived |
| ORGANIC | | | | |
| | Organic farming % organic PPAI + organic CPAI (no petrochemical solvent) | Organic farming % organic PPAI + organic CPAI (no petrochemical solvent) | Organic farming % of organic among natural (including the organic part from naturally-derived substances) | Organic ingredients: natural ingredients (organic farming) Organically-derived ingredients: part of organic from natural source (no fossil fuel moiety) |
| SYNTHETIC | | | | |
| | Not allowed, except positive list (preservatives/mineral origin) | Non Natural Ingredients (NNI): Not allowed, except positive list (preservatives/denaturing agent / mineral origin) | Nature identical substances: positive list (preservatives/ mineral origin) | Non-natural ingredients allowed. No more than 49.9% |

PPAI: Physically Processed Agro-Ingredient CPAI: Chemically Processed Agro-Ingredient NNI: Non Natural Ingredient



Special cases

| | ECOCERT | COSMOS | NATRUE | ISO 16128 |
|----------------------------------|--|--|---|--|
| Water | "Mineral & natural" Excep.: water used to rehydrate dried organic plants (= organic) | Not taken into account. Excep.: water used to rehydrate dried organic plants (=organic) | Separate "water" Calculation (not considered as natural) | Natural Excep.: natural constitutive + reconstitution water (=organic) |
| SPECIAL PROCESSES & II | NGREDIENTS | | | |
| GMO | - | - | _ (except recombinant enzymes) | + (if allowed in their country of origin) |
| Petrochemical compounds | _ | - | - | - |
| Irradiation | - | - | - | +/- |
| Synthetic fragrances | - | - | - | Out of the scope |
| nanoparticles | – (1-100nm) | – (1-100nm) | ? | + |
| Chlorine product (incl cleaning) | - | - | - | +/- |

+/-: under investigation



Highlights

- ECOCERT and COSMOS: Very strict labels especially after the update of ECOCERT in 2012. Focus on organic products, good waste management, energy consumption, preserving ecological balance, biodegradable and limiting contaminants (heavy metals, pesticides, PCB, dioxins, mycotoxins, nitrosamines).
- NATRUE: Focus on natural (more than organic) and on the finished cosmetic product. More focus on green chemistry and packaging, than on the environment, but still close to Ecocert and Cosmos even if calculations for ingredients are different.
- ISO 16128: Totally different approach, aimed to calculate the various indexes. More flexible and less strict. Not a label. More useful for customers (than for consumers) to compare the naturalness of different ingredients.



Agenda

| 1 | Natural or Organic – consumer expectations |
|---|--|
| | |

2 ECOCERT / COSMOS / NATRUE / ISO 16128: an overview

3 Organic calculation – examples

- 4 Natural calculation examples
- 5 Guidelines for the use of logos



Organic calculation General overview

| | ECOCERT | COSMOS | NATRUE | ISO 16128 |
|---------------------------|---|--|--|---|
| Stated on the certificate | X% of total ingredients are of natural origin Y% of total ingredients produced by organic agriculture | % PPAI % CPAI % PPAI organic % CPAI organic % synthetic ingredient | % natural (% organic within natural) % water % derived natural % nature-identical | Natural index * Natural origin index Organic index Organic origin index |
| Plant | Dried plant/extract > 5% Fresh plant equivalent = dried plant x4 | Fresh plant equivalent = dried plant x4.5 | Dried plant taken into account | Fresh plant equivalent = dried plant x4.5 |
| Conditions | Min of 95% of total ingredients come from natural origin (max 5% synthetic ingredients) | At least 95% of physically processed agro-ingredients must be organic | For organic cosmetics: Min 95% (70% if natural cosmetic with organic portion) of total natural substances are organic | None / calculation based on Molecular weight or renewable carbon |
| | Min of 95% of all plant-based ingredients are from organic farming | - | - | Unique ingredient: calculation of an index from 0 (not natural) to 1 (100% natural) |
| | Min 10% of total ingredients are of organic origin | At least 20% (10% for rinse off product) of the total product must be organic | | Mixtures (finished product or active with several ingredients): calculation of natural/natural origin content (in %) = \sum (% ingredient x natural/natural origin index) |

PPAI: Physically Processed Agro-Ingredient

CPAI : Chemically Processed Agro-Ingredient

* : index for pure compound or content for mix



ECOCERT, COSMOS, NATRUE Organic calculation









Max 5% of synthetic ingredients from positive list

Min 95% of total ingredients are of natural origin

Min 95% of total vegetal + marine ingredients are organic

Min 95% of total natural substances are organic

Min 95% of PPAI (natural ingredients) are organic

Min. content of natural substances & max. content of derived natural substances, in the finished product, depending on type of cosmetic (emulsion, sunscreen, soap, etc) Min 20% of total product is organic (10% for rinse-off products) Min 10% of total ingredients are organic



Certification of ingredients: examples ALPAFLOR® EDELWEISS B (5037123)

| | | | 101- |
|--------------------------|--|---|--------------------------------------|
| ERTIFICATION | CALCULATION | EXPLANATION | Composition |
| (ECO) CERT) | 100% of total ingredients are of natural origin | - | INCI Name Content |
| B | 27.30% ORGANIC | Plant extract + ethanol | Leontopodium |
| ECO CERT _® | 19.3% PPAI 70.56% CPAI | Plant extract Glycerin + Ethanol | Alpinum Extract 5-10% Glycerin |
| COSMOS CERTIFIED | 19.3% PPAI organic7.68% CPAI organic | Plant extract Ethanol | >50% |
| Non- | 16% Natural (100% Organic)22% Water63% Naturally-derived | Plant extract + ethanol – (not natural) Glycerin | Aqua 10-25% Alcohol 5-10% |
| | 0% Nature-Identical | | |
| ISO 16128 | 100% Natural origin37.3% Natural27.3% Organic origin | – Plant extract + water + ethanol Plant extract + ethanol | |



Certification of ingredients examples ALPAFLOR® ALP®-SEBUM (5037638)

| CERTIFICATION | CALCULATION | EXPLANATION | Composition |
|--|--|---|--|
| ECO CERT _® | 99.85% of total ingredients are of natural origin 24.2% ORGANIC | All without preservative Plant extract | INCI Name Content Epliobium |
| COSMOS CERTIFIED | 24.2% PPAI 65.47% CPAI 24.2% PPAI organic 0.15% synthetic | Plant extract Glycerin + citric acid Plant extract Preservative | Fleischeri Exract 5-10% Glycerin >50% |
| A REAL PROPERTY OF THE PROPERT | 7% Natural (97% Organic) 27% Water 65% Naturally-derived 0.15% Nature-Identical | Plant extract + citric acid – (not natural) Glycerin Preservative | Aqua 25-50% Citric Acid 0.1-1% |
| ISO 16128 | 99.85% Natural origin34.7% Natural24.2% Organic origin24.2% Organic | All without preservative Plant extract + citric acid + water Plant extract Plant extract | Potassium Sorbate 0.1-1% |



Certificates



DSM NUTRITIONAL PRODUCTS LTD

CERTIFICATE

COSMOS

ECOCERT Greenlife SAS certifies that the products mentioned below, produced and/or sold on the market under the responsibility of the company:

DSM NUTRITIONAL PRODUCTS LTD

case postale 2676 4002 BASEL SWITZERLAND

Comply with the certification scheme of COSMOS (Version 1.1 - January 2011 or Version 2.0 - October 2013)

Certification level: COSMOS RAW MATERIAL V2

| Commercial name | % PPAI | % ORG PPAI | % CPAI | % ORG CPAI | % SYNTH | % SYNTH MOIETIES | Restriction | Granting date |
|--------------------------|-----------|------------------|-----------|------------------|------------|------------------------|-------------|------------------|
| ALPAFLOR® ABI COMPLEX AO | 20,43 | 20,43 | 68,49 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® ALP®-SEBUM | 24,20 | 24,20 | 65,47 | 0,00 | 0,15 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® ARTEMISIA AO | 19,60 | 19,60 | 69,21 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® BUDDLEJA AO | 22,50 | 22,50 | 65,32 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® EDELWEISS B. | 19,30 | 19,30 | 70,56 | 7,68 | 0,00 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® EDELWEISS EP | 27,85 | 27,85 | 62,07 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® GIGAWHITE | 10,65 | 10,65 | 52,83 | 9,60 | 0,00 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® IMPERATORIA AO | 19,37 | 19,37 | 69,41 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® LINUM AO | 22,50 | 22,50 | 65,35 | 0,00 | 0,15 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® MALVA AO | 20,33 | 20,33 | 68,59 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® MARRUBIUM AO | 19,45 | 19,45 | 69,34 | 0,00 | 0,45 | 0,00 | / | 13/12/2017 |
| ALPAFLOR® NECTAPURE PF | 24,80 | 24,80 | 65,04 | 0,00 | 0,00 | 0,00 | / | 13/12/2017 |

End of validity: 31/12/2018

COSMOS Certification Manager, Pauline RAFFAITIN



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es@ecocert.cor



CERTIFICATE

COSMETICS ECOCERT

Certification level: ECOCERT COSMETIC RAW MATERIAL

| Commercial name | % N.O. | % ORG PLANT | % ORG ANIMAL | % PLANT | % SYNTH | Granting date |
|--------------------------|----------|----------------|-----------------|----------|---------|---------------|
| ALPAFLOR® SAMBUCUS AO | 99,55 % | 20,56 % | 0,00 % | 20,56 % | 0,45 % | 13/12/2017 |
| ALPAFLOR® SCUTELLARIA AO | 99,55 % | 24,15 % | 0,00 % | 24,15 % | 0,45 % | 13/12/2017 |
| ARGAN OIL | 100,00 % | 100,00 % | 0,00 % | 100,00 % | 0,00 % | 13/12/2017 |

ECOCERT & COSMOS certificates valid 1 year



DSM NUTRITIONAL PRODUCTS LTD

Certificates



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DSM Nutritional Products Ltd. Bldg 241/ 1020 4002 Basel

bi-Nr. 32956

The following raw materials are certified:

| ALPAF | LOR® | ABI | Compl | lex AO |
|-------|------|-----|-------|--------|
|-------|------|-----|-------|--------|

ALPAFLOR® ALP®-SEBUM

ALPAFLOR® ARTEMISIA AO

ALPAFLOR® BUDDLEJA AO

ALPAFLOR® EDELWEISS EP

ALPAFLOR® EDELWEISS B

5% natural (92% organic) 26% Water 68% Derived natural 0.5% Nature-identical 7% natural (97% organic) 27% Water 65% Derived natural 0.15% Nature-identical 5% natural (92% organic) 25% Water 69% Derived natural 0.45% Nature-identical 5% natural (92% organic) 29% Water 65% Derived natural 0.45% Nature-identical 8% natural (95% organic) 30% Water 62% Derived natural 0.45% Nature-identical 16% natural (100% organic) 22% Water 63% Derived natural 0% Nature-identical This Page is only valid together with the first page of this document no. BVH-329562015-01

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NATRUE certificates valid 2 years



Agenda

- 2 ECOCERT / COSMOS / NATRUE / ISO 16128: an overview
- **3** Organic calculation examples
- 4 Natural calculation examples
- 5 Guidelines for the use of logos



Natural calculation General overview

- If the starting materials (plants, animals) are not organic, but natural or of natural origin
- And if the manufacturing of the ingredient follow the same rules on processes and solvents as those described in previous chapters
- The ingredient may comply with ECOCERT/COSMOS/NATRUE requirements for natural ingredients

For finished products:

NATRUE:

Table showing the minimum content of natural substances and maximum content of derived natural substances, depending on the type of cosmetic (emulsion, sunscreen, soap, etc).

ECOCERT, COSMOS:

The ingredients have to follow the same rules in terms of processes, solvents, sustainability than the organic certified ones.

ISO16128:

No specific requirement to use organic ingredients, just calculate the natural origin percentage (based on weight).

Stated on certificates for ingredients:

ECOCERT: natural origin %, vegetable %

COSMOS: PPAI %, CPAI %, synthetic %

NATRUE: exactly the same wording as for organic

ISO 16128: natural origin %, natural %



Natural origin: example PENTAVITIN® (5033152)

ECOCERT: Ecocert approved 100% Natural Origin, 0% vegetable



PENTAVITIN®

100% Natural origin 0% Plant ingredient 0% Synthetic ingredient

Conform to the ECOCERT Natural and Organic Cosmetics Standard available at http://cosmetics.ecocert.com

COSMOS: Cosmos approved



PENTAVITIN® 100% Natural origin 67.1% CPAI

Conform to the COSMOS Standard available at http://cosmos.ecocert.com

NATRUE:



PENTAVITIN®2%Natural (o% Organic)48%Water50%Derived natural

o% Nature-identical

Complies with the NATRUE Criteria.

Composition

INCI Name Content

Saccharide Isomerate >50%

Aqua 25-50%

Citric Acid 0.1-1%

Sodium Citrate 0.1-1%



PC verified Natural Ingredients

| PRODUCT | ECOCERT* | COSMOS* | NATRUE* |
|--|---------------------|--------------------------------------|--|
| ERYTHRULOSE (5038282) | 100% Nat | Not assessed | Not assessed |
| HYALURONIC ACID BT (5033462) | 100% Nat | Not assessed | Not assessed |
| PENTAVITIN® (5033152) | 100% Nat | 67.1% CPAI | 2% Natural (0% organic) 48% Water 50% Derived natural |
| REGU®-SCENCE (5038306) | Not assessed | 27.7% PPAI 50.2% CPAI 0.5% NNI | Not assessed |
| STIMU-TEX® AS (5033365) | 100% Nat 67% Veg | Not assessed | 99.95% Natural (20% organic) 0% Water 0.05% Derived natural 0% Nature-identical |
| VALVANCE™ <i>Look</i> 100 (5015114) | Not assessed | 0%** | 100% Natural (0% organic) 0% Water 0% Derived natural 0% Natural-identical |
| VALVANCE™ <i>Touch</i> 210 (5015112) | 100% Nat | 0%** | 100% Natural (0% organic) 0% Water 0% Derived natural 0% Natural-identical |

* approved to be used in natural & organic formulations.

** ingredients from mineral origin, therefore neither PPAI nor CPAI

ECOCERT: Nat: Natural or from natural origin; Veg: Physically Processed vegetal ingredients; Synth: Synthetic (petrochemical)

COSMOS: PPAI: Physically Processed Agro-Ingredient; CPAI: Chemically Processed Agro-Ingredient, NNI: Non Natural Ingredients



New ISO 16128 A complex landscape

Quality and Sustainability are priorities for DSM Personal Care. In that context, the new standard ISO 16128, which focuses on technical definitions and criteria for natural and organic ingredients, is relevant for our business. However this standard, launched in September 2017, still allows for multiple interpretations. To overcome that, a working group, of which DSM Personal Care is a part, led by the European organization FEBEA, is working in 2018 on a technical report. This report should finally be discussed and approved by the ISO committee. We therefore don't expect to have a complete clarity before 2020.

In the meantime, according to our best knowledge and understanding of the standard, please find on the next slide our rating for our Personal Care products. Detailed rating available on request.



Natural origin: Recognized by ISO 16128

Many PC products have a natural origin content or natural origin index (excl. ALPAFLOR®)



According to ISO 16128, a natural origin index and a natural index can be provided, as soon as the **natural part** of the ingredient/molecule is **higher than 50%**. Above table lists DSM's best-in-class personal care ingredients.



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Guidelines for the use of logos (1/2)

ECOCERT: logo with indication of percentages and standard ECOCERT wording

Case 1: organic (certified) products: The ECOCERT logo can only be used for a certified (organic) product



ALPAFLOR® ALP®-SEBUM 98.85% Natural Origin 24.20% Organic Origin

Certified by ECOCERT Greenlife according to the ECOCERT Standard for Natural and Organic Cosmetics available at http://cosmetics.ecocert.com **Case 2: natural (approved) products:** A different **ECOCERT logo** must be used for an approved raw material!



PENTAVITIN®

100% Natural origin 0% Plant ingredient 0% Synthetic ingredient

Conform to the ECOCERT Natural and Organic Cosmetics Standard available at http://cosmetics.ecocert.com

COSMOS: same rules regarding wording and percentages, 2 types of logo

Organic certified ingredients



ALPAFLOR[®] EDELWEISS EP 27.85% Organic origin ALPAFLOR[®] EDELWEISS B 26.98% Organic origin

Certified to COSMOS Standard available at http://cosmos.ecocert.com

Natural approved ingredients



PENTAVITIN®

100% Natural origin 67.1% CPAI

Conform to the COSMOS Standard available at http://cosmos.ecocert.com



Guidelines for the use of logos (2/2)

NATRUE

- Logo and certificates are the same for organic certified products and natural (non-organic) products.
- The logo should be used in line with specific rules:
 - linked to a certified (organic or natural) product
 - indicating the percentages
 - with the standard NATRUE wording



ARGAN OIL100%Natural (100% Organic)0%Water0%Derived natural0%Nature-identicalCompliance with the NATELLE Criteria

Complies with the NATRUE Criteria



PENTAVITIN®

2%Natural (o% Organic)48%Water50%Derived naturalo%Nature-identical

Complies with the NATRUE Criteria

Cosmetic finished products: a logo from ECOCERT/COSMOS/NATRUE can only be used when the full formula is certified. ISO 16128: NO LOGO



Natural & Organic Certifications Short Summary

ECOCERT / COSMOS / NATRUE

Very strict certification guidelines, but the calculation methods sometimes provide different percentages from one certification to another.

ISO 16128

Very new. Much broader, but with the advantage of a recognized international standard. FEBEA technical report has still to be written and finally approved by the ISO committee.

With this broad range of certifications, including Fair Trade for the ALPAFLOR[®] Portfolio, DSM :

- Provides a recognized guarantee of the natural/organic properties of its ingredients;
- Supports its customers globally with their own certifications and sustainability targets;
- Offers peace of mind about its ingredients.



Back Up



Goals

• ECOCERT: is a limited company. As an inspection and certification body, it was a pioneer for sustainable development, and created a standard for natural and organic cosmetics in 2002. ECOCERT is present in 80 countries

Goal: to promote natural and organic substances, respect for the environment and high ethical values Linking cosmetics products to organic raw materials and high ethical values

- COSMOS: Non-profit international association. Founded in 2002 by the 5 main European bodies for organic and natural standards (BDIH- Germany, Cosmebio and Ecocert Greenlife-France, ICEA-Italy, Soil association- UK). Standard approved in 2010
 - Goal: to manage and develop the Cosmos-standard as an international

standard for organic and natural cosmetics. Its guiding principles are to:

- Promote the use of products from organic agriculture, and respect biodiversity;
- Use natural resources responsibly and respect the environment;
- Use clean manufacturing processes that respect human health and the environment;
- Integrate and develop the concept of "Green Chemistry".
- NATRUE: Non-profit association. Founded in 2007 by European manufacturers of natural and organic cosmetics. First certification in 2009.

Goal: to safeguard and promote pure and authentic natural skin care

• ISO 16128: International standard released in September 2017. Voluntary basis

Goal: Providing guidelines on technical definitions and criteria for natural and organic cosmetics ingredients



Organic calculations: examples

| PRODUCT | ECOCERT | COSMOS | NATRUE | ISO 161 28 |
|------------------------------------|--|---|---|---|
| ALPAFLOR [®] EDELWEISS B | 100% Of total Ingredients are of natural origin27.30% ORGANIC | 19.3% PPAI 70.56% CPAI 19.3% PPAI organic 7.68% CPAI organic | 16% Natural (100% organic) 22% Water 63% Naturally-derived 0% Nature-identical | 37.1% Natural index 100% Natural origin index 27.3% Organic index 27.3% Organic origin index |
| ALPAFLOR [®] EDELWEISS EP | 99.55% Of total Ingredients are of natural origin27.85% ORGANIC | 27.85% PPAI 62.07% CPAI 27.85% PPAI organic 0.45% Synthetic | 8%Natural (95% organic)30%Water62%Naturally-derived0.45%Nature-identical | 37.85% Natural index99.55% Natural origin index27.85% Organic index27.85% Organic origin index |
| ALPAFLOR [®] GIGAWHITE | 99.90% Of total Ingredients are of natural origin29.37% ORGANIC | 10.65% PPAI 52.83% CPAI 10.65% PPAI organic 9.6% CPAI organic | 12% Natural (100% organic) 44% Water 43% Naturally-derived 0.1% Nature-identical | 56.7% Natural index99.9% Natural origin index20.6% Organic index |
| ALPAFLOR® ALP-SEBUM | 99.85% Of total Ingredients are of natural origin24.20% ORGANIC | 24.2% PPAI 65.47% CPAI 24.2% PPAI organic 0.15% Synthetic | 7% Natural (97% organic) 27% Water 65% Naturally-derived 0.15% Nature-identical | 34.7% Natural index 99.85% Organic origin index 24.2% Organic index 24.2% Organic origin index |

Glycerin: CPAI or naturally-derived Ethanol: CPAI organic or natural + organic Citric acid: natural for Natrue, CPAI for Cosmos Plant: organic (with reconstitution water except for Natrue) Water: not natural for Natrue



Naturalness must be reflected in all of the brand's actions

Consumers are looking for more ethical products and brands that respect the environment. Brands that truly want to be natural must therefore commit to a "fully natural" approach and place sustainability at the centre of everything they do, from A to Z.

As well as formulating natural, organic products with sustainably-sourced natural, organic ingredients and packaging using sustainable production methods, it is essential for brands to take a stand for People & the Planet and to incorporate this in their brand identity & communication.





ALPAFLOR® fairly traded sustainable crops

CITES*

Plants not listed

NAGOYA & CBD** compliancy

Organic crops

According to Bio Suisse standards. Protection of soils & groundwater.

Protection of Alpine biodiversity. Renewable source.

Direct payment from Helvetic Confederation to farmers who maintain the natural Alpine landscape.

*CITES: Convention on International Trade in Endangered Species ** CBD: Convention on Biological Diversity Profitable economic activity for mountain farmers, avoiding flight to the cities from the countryside.

DSM assumes all risks involved in the cultivation not the farmers or the cooperative.

Farmers' wages paid based on the area cultivated not the yield of dried plant.

DSM's cultivated land does not take up space which could be used to grow food.



ALPAFLOR[®] Fair Trade dried alpine supply chain

The same rules are applied for North-North certifications as for North-South ones (developed countries- developing countries)

- Long term contract with farmer/cooperative
- Small-scale producers
- Short and local supply chain /product carbon footprint
- Minimum price guarantee /fair wages
- Protecting biodiversity/organic farming
- Good working conditions
- Technical support
- Development fund

fair trade

Fair trade certified according to the Fair For Life standard

For North-based developed countries, there is a major emphasis on environmental impact, in addition to the social improvement components.



Source: www.fairforlife.org

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