

# CosmEthically ACTIVE certificate – Creating a new era of cosmetics

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## ABSTRACT

CosmEthically ACTIVE is the first certificate that pursues an integral approach to the evaluation of natural cosmetics. It is based on the scientific assessment of a cosmetic product, and reviews the product's composition by environmental aspects, level of dermal compatibility, concentration of cosmetically active ingredients and principles of rational formulating. Cosmetically ACTIVE strives for a fair, evidence-based communication of activity claims, and high ecological and dermal acceptability of natural cosmetics.

**Keywords:** certificate, cosmethically active, natural cosmetics



## FOR STARTERS...

Cosmetic products are an indispensable part of our lives, driving the cosmetics industry to be one of the most innovative and lucrative economic sectors. New cosmetics are launched continuously with the aim of meeting consumers' demands for active, skin-friendly and natural products, as well as manufacturers' desires for innovation and continuous progress.

Following the needs of today's consumers and emerging environmental issues have contributed to the **natural cosmetics** sector becoming mainstream. However, a wave of different views on naturalness has washed over us in recent years. With no clear regulatory stand point, we're getting lost in an avalanche of opinions and labels, some that truly fight for the benefit of natural cosmetics and others that mislead us through greenwashing.

That's where the **CosmEthically ACTIVE certificate** (1) plays an important role.

## NEW CONCEPT OF COSMETICS EVALUATION

CosmEthically ACTIVE (Fig. 1) is the first certificate that pursues an integral approach to the evaluation of cosmetics:

- CosmEthically ACTIVE reviews a cosmetic product not only by the naturalness of the ingredients from both the dermal and environmental aspects, but also by the concentration of the cosmetically active ingredients and the science-based evidence behind them.
- CosmEthically ACTIVE establishes cosmetics that are based on the skin's physiological needs and formulated rationally following the "less-is-more" principle.



Figure 1: The CosmEthically ACTIVE logo.

A huge **added value and uniqueness** of the CosmEthically ACTIVE certificate comes from the evidence-based approach of a product's integral evaluation, which is represented by a scientific assessment of a cosmetic product during the certification process, made by independent scientists professionally active in the area of cosmetology. Scientific evaluation based on the principles of skin physiology and modern cosmetology is a guarantee that CosmEthically ACTIVE certified products are of the highest quality and truly natural, active, skin, animal and environmentally friendly.

CosmEthically ACTIVE allows you to immediately recognise products that are rationally formulated with ingredients of the best skin and environmental acceptability, and whose cosmetic activity is supported by the highest level of science-based knowledge.

## WHY CONCENTRATION MATTERS?

In technological terms, a cosmetic product consists of **cosmetically active ingredients**, the ingredients of a vehicle and various other ingredients, e.g. preservatives and perfuming ingredients (2). Cosmetically active ingredients are mainly responsible for the desired, specific skin care effects such as antioxidative effects. Marketing claims are therefore primarily based on the presence of cosmetically active ingredients and their cosmetic effects. Without a suitable, i.e. sufficient concentration, however, no significant activity can be expected.

Unfortunately, cosmetic regulations are poorly defined in this respect. There is currently **no strict re-**

**requirement** that would back the consumer, and offer or evaluate information regarding the content of cosmetically active ingredients, or at least ensure that a cosmetic product is truly of acceptable quality in this respect. This generally allows cosmetic manufacturers to hide behind their claims and include only the minimum, and not necessarily the effective, quantities of cosmetically active ingredients.

The CosmEthically ACTIVE certificate provides you the certainty of an evidence-based cosmetic product, formulated using nature-friendly ingredients at cosmetically active concentrations.

## THE HIGHEST STANDARDS – SERVING THE SKIN AND NATURE, AND THE CONSUMER

Natural and organic cosmetics have evolved in an extremely positive way in the past decade. We welcome and deeply respect the hard work of those who came before us. The time has come, however, to take an important step further.

The following objectives reveal our mission, vision and values:

- With the CosmEthically ACTIVE certificate, we are establishing a concept of **active cosmetics** that contain the right ingredients in suitable concentrations to deliver the desired skin effects. Our mission is our promise to counter empty claims and misleading advertising.
- During the certification process, a cosmetic product's composition is **scientifically evaluated** based on the principles of skin physiology and modern cosmetology. Our basic criterion is to ensure high dermal compatibility.
- **Rational cosmetic products** are demanded: individual ingredients must be selected on a case-by-case basis, based on their functions, the desired cosmetic activity and technological and sensory aspects, and their total number should be kept to a minimum.

- CosmEthically ACTIVE follows strict criteria to achieve the highest possible level of **environmental protection**. Only ecologically acceptable cosmetic ingredients that are highly degradable are allowed.

## COSMETHICALLY ACTIVE CERTIFICATE MAKES A DIFFERENCE!

The major difference between the CosmEthically ACTIVE and other certificates of natural cosmetics is that CosmEthically ACTIVE examines **evidence of the cosmetic activity** of a product by identifying the cosmetically active ingredients and, even more importantly, evaluating the concentrations of those ingredients in a cosmetic product. During the certification process, an independent scientific assessment of a cosmetic product's composition is made by a scientist professionally active in the fields of cosmetology, pharmacognosy, pharmacy and chemistry, with competencies in the area of cosmetic formulation and in-depth knowledge about ingredients of natural origin (3).

The basis of the CosmEthically ACTIVE certificate lies in the standards of existing natural cosmetics certificates, but goes a step further toward the **skin and environmental compatibility**. It doesn't look solely at the naturalness of an ingredient or formulation, but also at its ecological and dermal impacts. For example, a natural shampoo with pH 7 cannot be approved because that pH value is not physiologically compatible with the human scalp.

Another crucial yet difficult characteristic of CosmEthically ACTIVE is the list and content of approved cosmetic ingredients. In general, other certification institutions for natural and/or organic cosmetics define the minimum and/or maximum content of substances that are considered natural and substances that are considered processed or derivatised.

**CosmEthically ACTIVE follows a completely different approach** because a shift has been made from naturalness to activity and the evaluation of a product as a whole, but without making compromises with regard to environmental aspects. We strongly believe that such a concept is based on a **rational understanding of modern cosmetology and principles of**



**sustainability**, and makes the CosmEthically ACTIVE certificate one of the strictest certification systems at the global level, strongly oriented towards the healthy and ethical future of our planet.

To explain in more detail, CosmEthically ACTIVE criteria are not based on percentages of substances. Ingredients are not explicitly categorised into natural and processed or derivatised ingredients, but into ingredients that are permitted and those that are not permitted. Consequently, the CosmEthically ACTIVE logo does not distinguish between different natural or organic categories. **The focus is based on the intersection of cosmetic activity/performance, the naturalness and environmental impacts of ingredients, and dermal compatibility.**

With regard to naturalness, we believe that we have made a highly beneficial compromise towards environmentally acceptable (semi)synthetic ingredients by permitting (3):

- Condition 1: Substances of natural, semisynthetic or synthetic origin that are structurally identical to substances naturally present in the human body and in our environment (e.g. in the plant, fungi and animal worlds, and of mineral origin, except petrochemical-derived cosmetic ingredients);

- Condition 2: Substances of semisynthetic or synthetic origin that are composed from the body's or environment's own building blocks into which they are subsequently broken down; and

- Condition 3: Substances of semisynthetic or synthetic origin with a high rate of (bio)degradability into substances structurally identical to the body's or environment's own substances. However, those ingredients are only permitted when, due to specific chemical or technological characteristics, there is not a suitable replacement with substances complying with condition 1 or 2.

## WHY US

Progress in modern cosmetics, including a wide palette of cosmetic ingredients, technological solutions, marketing strategies and cosmetic regulations, is going in the direction of implementing scientific approaches and scientific evidence. In an abundance of information, however, it has become difficult for us to recognise perspectives that truly follow values into which we believe.

This is what we strive to do with all our knowledge and hearts. **Modern CosmEthics** is an association of cosmetology professionals that creates the culture

and awareness of natural, sustainable, ethical and cosmetically active products. With the **professional and scientific background of our team**, we strive for the establishment of natural cosmetics as a branch of high-quality cosmetics.

We believe deeply that this is the only possible long-term future for cosmetics, cosmetic manufacturers, the users of cosmetics and our planet. There is a long road ahead of us, but a brave combination of knowledge, experience, skills, stubbornness and love supports us on our journey.

Last but not least, we are also an advocate for change in consumer consumption habits, with an emphasis on reducing the overall consumption of cosmetic products. Use natural but use rational, and use less but use smart. What you apply is who you are.

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## REFERENCES

1. Modern CosmEthics. CosmEthically ACTIVE [Internet]. Velenje: Sirimo dobro besedo [cited 2021 April 9]. Available from: <https://cosmethicallyactive.com/>
2. Janeš D, Kočevar Glavač N. Modern Cosmetics, Ingredients of Natural Origin, A Scientific View, Volume 1. 1st ed. Velenje: Širimo dobro besedo; 2018. <https://moderncosmethics.com/product/modern-cosmetics/>
3. Modern CosmEthics. CosmEthically ACTIVE Certificate, Technical Document, Version 1.0 [Internet]. Velenje: Sirimo dobro besedo [cited 2021 April 9]. Available from: [https://cosmethicallyactive.com/wp-content/uploads/2020/12/Technical-Document\\_1.0\\_2020.pdf](https://cosmethicallyactive.com/wp-content/uploads/2020/12/Technical-Document_1.0_2020.pdf)

# Nature above all in cosmetics: There are so many challenges

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## ABSTRACT

The global cosmetics market is growing steadily. From the aspect of both consumers and manufacturers, focus is shifting towards identifying and solving the issues of eco-friendliness and sustainability without compromising performance. Natural cosmetics and certification institutions strive to achieve the best possible impacts, with the CosmEthically ACTIVE certificate representing a new, science-based, integral approach to the evaluation of natural cosmetics. Finally, we as individuals have the choice of changing our habits and educating ourselves. For the benefit of our future.

**Keywords:** certificate, cosmethically active, natural cosmetics, sustainability



## THE TIMELESS QUEST FOR BEAUTY...

... is driving the global cosmetics market to grow steadily, with estimated sales of more than €200 billion in 2019 (1). As a result of an ever-wider selection of cosmetic products, which are defined by the European Commission as *'any substance or mixture intended to be placed in contact with the external parts of the human body or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours'* (2), today's consumers (rightfully) have higher expectations and more demands than ever.

## SUSTAINABILITY, REDUNDANCY AND TRANSPARENCY

Increasing concerns about the safety of products and their environmental and social impacts have brought attention to **sustainability in the cosmetic industry**. How can we meet the needs of our population without threatening future generations? An increasing number of educated consumers with easier access to scientific literature are becoming fonder of ingredients of natural origin, and are pushing companies to become 'greener' and consider sustainability through a cosmetic product's entire life cycle, i.e. from the selection and sourcing of raw materials, processing, manufacturing, packaging and distribution, to use and disposal, and post-consumer use (3–6).

**Simple formulations without redundant ingredients** are desired, where each is added with a known, evidence-based purpose (7). When choosing ingredients, those that are of natural origin or highly degradable and sustainable are preferred. They should also be responsibly sourced, ensuring that workers and communities involved in cultivation are treated fairly, both financially and ethically. Heavier focus must be placed on safety, both for the consumer, who expects safe, non-irritating products, and nature, which means the inclusion of ingredients that are organically cultivated, do not persist in the environment and are safe to all life forms. In terms of product safety, please be aware that generalising the concept that ingredients

of natural origin are better for the skin or hair simply because they come from nature has no scientific rationale.

Finally, **transparency** is expected for what is in a formulation and also where it came from.

## FORMULATING NATURAL COSMETICS...

... becomes even more challenging when taking into account that consumers also expect quality, excellent and attractive sensory properties, and the best cosmetic activity of a product. This is not easy to accomplish. The replacement of unsustainable ingredients (synthetic or natural) with sustainable ingredients with better skin and environment compatibility requires a great amount of knowledge, investigation and testing.

Even with all of these difficulties, the shelves are already full of products labelled 'natural' and 'organic', yet how can we be sure they are trustworthy in this era of misinformation?

There are no harmonised definitions or criteria for natural and organic products, and this lack of regulation in the industry provides a major opening for market manipulation. A system of **certification institutions for natural cosmetics** has evolved as a response and has become important, particularly from the perspective of consumers. Certification institutions have set their own parameters for the evaluation of cosmetics for the purpose of labelling them 'natural' and 'organic', where generally their criteria differ mainly through the percentages of minimum and maximum content of ingredients that are defined as natural and organic, and processed or derivatised. They also have different lists of chemical reactions that are permitted for the derivatisation of natural substances.

We must keep in mind, however, that natural does not necessarily mean sustainable, as it does not imply any ethical, social, economic or environmental responsibility. Generally, natural describes the origin of ingredients, while organic describes agricultural methods used for cultivation. The sustainability of cosmetic ingredients encompasses a wider concept. Not only





the natural source and destiny after release into the environment, but also the way an ingredient was extracted, purified or processed should follow rules of sustainability, including a high level of (bio)degradability into non-toxic and environmentally friendly compounds. We should also not forget that natural material is limited and should therefore be responsibly sourced.

## COSMETHICALLY ACTIVE

Through the **CosmEthically ACTIVE certificate**, our aim is to contribute significantly to the awareness and resolution of the aforementioned issues (8). CosmEthically ACTIVE follows a completely different approach of cosmetics evaluation because a shift has been made from assessing solely the naturalness of ingredients to assessing the activity and a cosmetic formulation itself, but without making significant compromises with regard to environmental aspects. We strongly believe that such a concept is based on a **rational understanding of modern cosmetology and the principles of sustainability**, and makes the CosmEthically ACTIVE certificate one of the strictest certification systems at the global level, strongly ori-

ented towards the healthy and ethical future of our planet.

To explain in greater detail, CosmEthically ACTIVE criteria are not based on percentages of substances. Ingredients are not explicitly categorised into natural and processed or derivatised ingredients, but into ingredients that are permitted and those that are not permitted. Consequently, the CosmEthically ACTIVE logo does not distinguish between different 'natural' or 'organic' categories. The focus is based on the intersection of cosmetic activity/performance, the naturalness and environmental impacts of ingredients, and dermal compatibility. We follow **five main rules**: nature above all when selecting ingredients; the use of ingredients in cosmetically active concentrations; rational formulations with no redundant ingredients; a high level of skin compatibility; and the pursuit of ethical principles with no animal testing. We are establishing the concept of active cosmetic products that contain the right ingredients in suitable concentrations to deliver the desired skin effects, but what is more, only physiologically and ecologically acceptable cosmetic ingredients that are highly biodegradable are allowed, to not only provide the best for the consumer, but also for the planet and future generations.



## YOUR CHOICE IS YOUR VOICE

In the end, how can we as consumers contribute to greater sustainability in the cosmetics industry? We should strive to **change our consumption habits**, with an emphasis on reducing the overall use of cosmetics, and choose brands that are sustainability oriented. Given that scientific literature is easily accessible, we should **educate ourselves**, properly review the ingredients of the products we use and then make decisions based on proven facts, not marketing trends. In addition, **sorting and recycling cosmetics packaging** or when possible choosing products with biodegradable or reusable packaging is an important step towards a sustainable future.

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## REFERENCES

1. L'Oréal. Cosmetics market – L'Oréal Finance: Annual Report 2018 [Internet]. [cited 2021 April 20]. Available from: <https://www.loreal-finance.com/en/annual-report-2018/cosmetics-market-2-1/>
2. EUR-Lex. Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products (recast) (Text with EEA relevance) [Internet]. Luxembourg: Publications Office of the European Union [cited 2021 April 20]. Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009R1223-20190813>
3. Bom S, Jorge J, Ribeiro HM, Marto J. A step forward on sustainability in the cosmetics industry: A review. *J Clean Prod.* 2019;225:270–90.
4. Sahota A. Sustainability: How the Cosmetics Industry is Greening Up. 1st ed. Chichester: John Wiley & Sons; 2014. <https://www.wiley.com/en-us/Sustainability%3A+How+the+Cosmetics+Industry+is+Greening+Up-p-9781119945543>
5. Fonseca-Santos B, Antonio Corrêa M, Chorilli M. Sustainability, natural and organic cosmetics: Consumer, products, efficacy, toxicological and regulatory considerations. *Brazilian J Pharm Sci.* 2015 Jan 1;51(1):17–26.
6. Kim S, Seock YK. Impacts of health and environmental consciousness on young female consumers' attitude towards and purchase of natural beauty products. *Int J Consum Stud.* 2009;33(6):627–38.
7. Cosmetics & Toiletries. Clean Beauty Decoded [Internet]. [cited 2021 April 20]. Available from: <https://www.cosmeticsandtoiletries.com/research/methodsprocesses/Clean-Beauty-Decoded-510077751.html>
8. Modern CosmEthics. CosmEthically ACTIVE [Internet]. Velenje: Sirimo dobro besedo [cited 2021 April 9]. Available from: <https://cosmethicallyactive.com/>