

# **COMPLETE GUIDE TO THE COSMETHICALLY ACTIVE PRODUCTS**

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COSMETHICALLY ACTIVE CERTIFICATE

**MODERN COSMETICS**



# INTRODUCTION

Information regarding cosmetic ingredients is not difficult to obtain today and consumers are becoming more and more educated, capable of setting their own criteria and choosing only the cosmetic products of the highest quality.

The much bigger challenge, in the context of an abundance of information, is to recognise which information is reliable. Only the right amount of accurate knowledge allows us to distinguish between conventional and truly natural cosmetics, and cosmetics that only claim to be natural. It is even more difficult for the consumer to distinguish between cosmetic products carrying empty marketing claims and those that actually deliver them.

That's where the CosmEthically ACTIVE certificate plays a significant role.





## What does the name CosmEthically ACTIVE stand for?

CosmEthically ACTIVE is a construction that summarises our principles. We believe that cosmetic products should be cosmetically active – meaning they contain the right ingredients in suitable concentrations to deliver the desired skin effects, and ethical – meaning they contain only ingredients that are ecologically and physiologically acceptable, and are not derived from or tested on animals. By merging these concepts, CosmEthically ACTIVE was born.

## What is the CosmEthically ACTIVE certificate?

CosmEthically ACTIVE is the first certificate that pursues an integral approach to the evaluation of cosmetics. It reviews a cosmetic product not only by the naturalness of the ingredients from both physiological and environmental aspects, but also by the concentration of cosmetically active ingredients and the science-based evidence behind them, and the cosmetic efficacy of the product itself.

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

### What does cosmetically active mean?

A product is described as cosmetically active when it contains the right ingredients in suitable concentrations to deliver the desired cosmetic activity on the skin.

### CosmEthically ACTIVE certificate

- only natural ingredients;
- ingredients used in cosmetically active concentrations;
- no animal testing.



## What's the difference between the CosmEthically ACTIVE certificate and other natural cosmetics certificates?

The major difference between the CosmEthically ACTIVE and other certificates of natural cosmetics is that the CosmEthically ACTIVE certificate examines the cosmetic activity of the product, identifies the cosmetically active ingredients and, more importantly, evaluates the concentrations of those ingredients in a cosmetic product.

CosmEthically ACTIVE goes a step further toward physiological compatibility. For example, a natural shampoo with pH 7 cannot be approved because the pH value is not physiologically compatible with the human scalp.

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 is a guarantee that CosmEthically ACTIVE certified products are of the highest quality and truly natural, active, and skin and environmentally friendly.

### **Completely new concept**

Evaluation of the cosmetic activity and physiological compatibility of a cosmetic product.



# BACKGROUND

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 cosmetic products are launched continuously with the aim of meeting consumers' demands for active, skin friendly and environmentally friendly products, as well as manufacturers' desires for innovation and continuous progress.

## Why concentration matters?

Marketing claims about the activity of cosmetic products are becoming more and more daring, even provocative. Activity claims are mainly based on the presence of so-called cosmetically active ingredients and their cosmetic effects. However, without the suitable (i.e. sufficient) concentration, no significant cosmetic effects can be expected.

### Good to know

In technological terms, a cosmetic product consists of cosmetically active ingredients, the ingredients of a vehicle and various other cosmetic ingredients, e.g. preservatives and perfuming ingredients. 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.



## Cosmetic regulations and evidence-based cosmetics

Cosmetic regulations are poorly defined in terms of cosmetically active concentrations. There is currently no strict regulatory requirement nor recommendation 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 raises the question: How can we evaluate the wide range of cosmetic products available today?

The CosmEthically ACTIVE certificate offers a good answer, as it provides the certainty of an evidence-based cosmetic product.

### Example: Ceramides

Ceramides are mainly used as emollients for mature and dry skin with an impaired barrier function. Based on scientific studies, the content of ceramides that delivers such activity was shown to be above approximately 0.2%. However, cosmetic products with ceramides available on the market contain as little as 0.00000001% of ceramide III, which is much too low to express beneficial cosmetic effects.

#### References:

Huang HC, Chang TM. Ceramide 1 and ceramide 3 act synergistically on skin hydration and the transepidermal water loss of sodium lauryl sulfate-irritated skin. *Int J Dermatol* 2008; 47(8):812-819.

Cosmetic Ingredient Review Expert Panel. Safety Assessment of Ceramides as Used in Cosmetics. *Cosmetic Ingredient Review*, 2015.



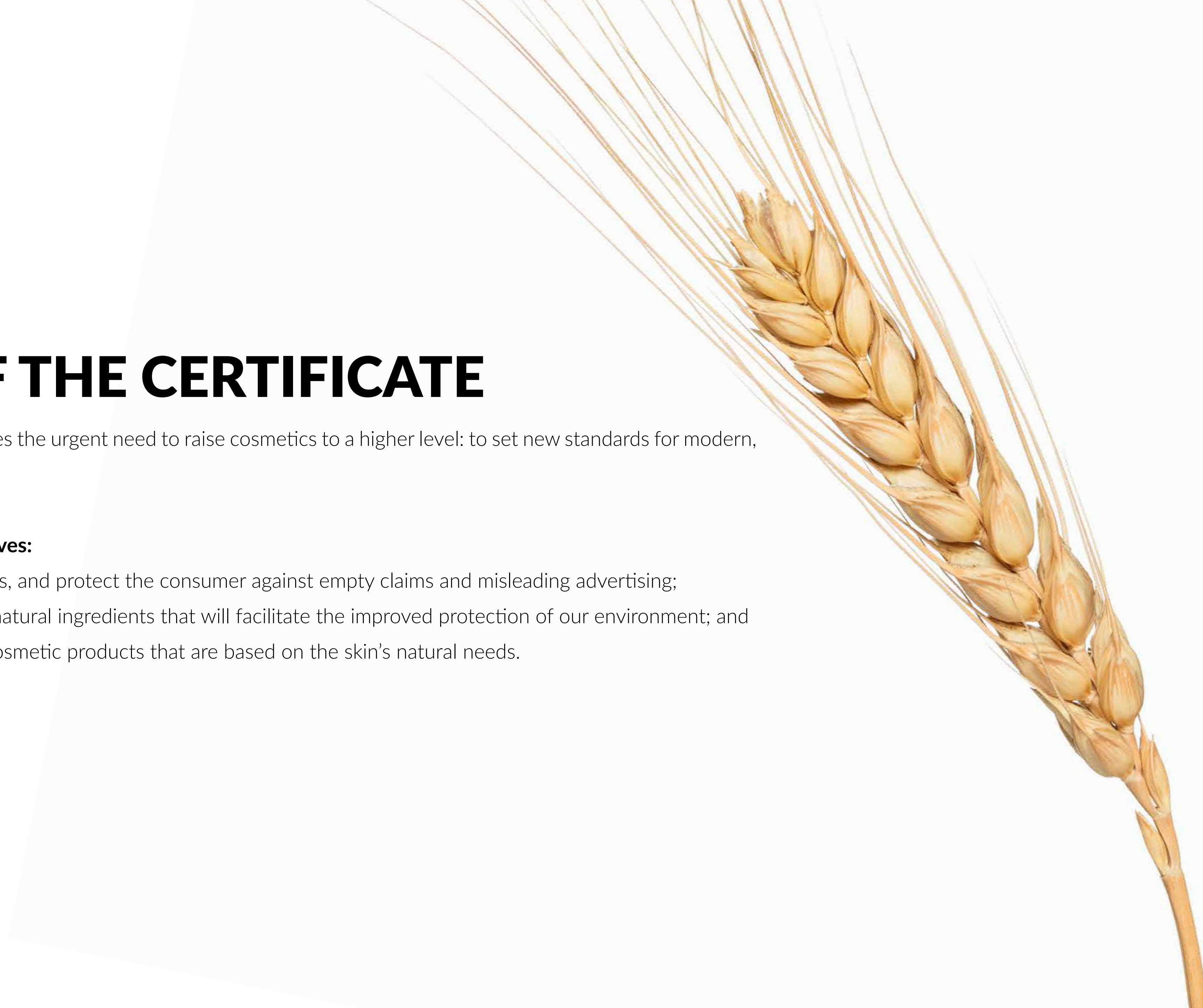


# OBJECTIVES OF THE CERTIFICATE

The CosmEthically ACTIVE certificate recognises the urgent need to raise cosmetics to a higher level: to set new standards for modern, high-quality natural cosmetics.

**The certificate achieves the following objectives:**

- to establish the concept of active cosmetics, and protect the consumer against empty claims and misleading advertising;
- to define strict conditions when selecting natural ingredients that will facilitate the improved protection of our environment; and
- to set a superior quality level for rational cosmetic products that are based on the skin's natural needs.





# BASIC PRINCIPLES

The principles and criteria of the CosmEthically ACTIVE certificate are based on the highest level of knowledge, and are continuously updated and amended based on new scientific evidence in areas such as cosmetology, toxicology and pharmacy, and based on the evolution of legislation.

## **Nature above all when selecting ingredients**

Only ecologically and physiologically acceptable cosmetic ingredients are allowed: those found in nature and derived from natural sources, and those that do not occur in nature. When the latter are irreplaceable due to their specific chemical or technological characteristics, it is required that they can be broken down into natural building blocks to ensure a high rate of (bio)degradability.







## **Evidence-based cosmetics**

The selection of individual cosmetic ingredients is evidence-based. Cosmetically active ingredients are incorporated at active concentrations that have been proven to express desired cosmetic effects after application, or desired cosmetic effects may be predictable based on the ingredient's chemistry when scientific evidence on cosmetic activity is not available. The cosmetic ingredients of a vehicle must also be logically selected.

## **Less is more**

Rational cosmetic products are demanded: individual cosmetic ingredients are selected on a case-by-case basis, based on their functions and the desired cosmetic activity and technological and sensory aspects, without redundant ingredients, and their total number should be kept to a minimum.

## **No animal testing**

A cosmetic product must not be tested on animals because the concept of the CosmEthically ACTIVE certificate pursues the highest of values and ethical principles.





# CRITERIA AND RECOMMENDATIONS

## Basic regulations

National regulatory authorities and the CosmEthically ACTIVE certification process require a cosmetic product to comply with the applicable cosmetic legislative, depending on the market where a product is registered, for example:

- European Union: Regulation (EC) 1223/2009 on cosmetic products, Commission Regulation (EU) 655/2013 laying down common criteria for the justification of claims used in relation to cosmetic products, Regulation (EC) 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals, and Council Regulation (EC) 834/2007 on organic production and labelling of organic products;
- USA: FFederal Food, Drug & Cosmetic Act (FD&C Act); Summary of Color Additives for Use in the United States in Foods, Drugs, Cosmetics and Medical Devices;
- Australia: Industrial Chemicals (Notification and Assessment) Act 1989, Trade Practices (Consumer Product Information Standard) (Cosmetics) Regulations 1991; etc.

## Compliance with other certificates

The compliance of cosmetic products with the applicable certification standards for natural and/or organic cosmetics is supported. Please note that they may differ from the CosmEthically ACTIVE certificate. This is, however, only a recommendation, not a necessary condition.

- Europe: COSMOS, NaTrue, ECOGEA;
- USA: USDA NOP, COPA, NSF ANSI 305, NPA;
- Australia: BFA, ACO, NASAA, OFC; and
- other: fair-trade certificates, palm-free certificates or sustainable palm oil certificates, cruelty-free certificates, carbon-neutral certificates, etc.





## Animal testing

A cosmetic product must not be tested on animals. An animal testing ban has been enacted in the EU.

## Origin of cosmetic ingredients

Only physiologically and ecologically acceptable cosmetic ingredients, both of completely natural origin and synthetic origin, are permitted:

- 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.

Cosmetic ingredients of animal origin are not permitted, as the concept of the CosmEthically ACTIVE certificate pursues the highest of values and ethical principles.

Strongly supported are the use of: cosmetic ingredients of local origin, cosmetic ingredients of organic origin and palm oil from sustainable sources. These are, however, only recommendations, not necessary conditions.



# Permitted cosmetic ingredients

## General list of cosmetic ingredients that fulfil condition 1

Permitted are the following substances and chemical groups of substances considered as naturally present in the environment:

- Herbal substances and powdered herbal substances
- Plant extracts and juices
- Vegetable butters and oils, and unsaponifiable compounds
- Essential oils, absolutes, CO<sub>2</sub> extracts and hydrolates
- Monosaccharides, oligosaccharides and polysaccharides
- Amino acids, peptides and proteins
- Vitamins and provitamins
- Vegetable waxes
- Other secondary plant metabolites: phenolic, carboxylic and terpenic compounds, etc.
- Mineral (anorganic) cosmetic ingredients

## Cosmetic ingredients that fulfil conditions 2 and 3

Permitted are substances that are obtained from the body's or environment's own building blocks into which they are subsequently broken down, and substances with a high rate of (bio)degradability into the body's or environment's own building blocks. Please see the main document 'List of permitted cosmetic ingredients'.





## Not permitted and restricted cosmetic ingredients

### General list

Not permitted are the following substances and chemical groups of substances:

- Denatured alcohol
- Halogenated substances
- Petrolatum, mineral oil, paraffin and other petrochemical-derived cosmetic ingredients
- Silicones
- Sodium lauryl sulfate, ammonium lauryl sulphate and sodium coco sulfate
- Nanomaterials\*
- Cosmetic ingredients produced by ethoxylation or propoxylation\*
- Antiperspirants
- Cosmetic ingredients of animal origin
- Cosmetic ingredients under assessment as endocrine disrupting by the European Chemicals Agency (ECHA)

\*Exceptions are only allowed in a highly limited range, as they are irreplaceable due to their specific functions.

## **Selection of cosmetic ingredients**

Only cosmetic ingredients scientifically accepted to be safe for use in cosmetics are permitted.

The selection of individual cosmetic ingredients is rational and evidence-based. Individual cosmetic ingredients in a final formulation are selected on a case-by-case basis, based on their functions and the effects that are expected in terms of desired cosmetic activity and technological and sensory aspects, without redundant ingredients. The total number of ingredients should be kept to a minimum. Cosmetically active ingredients are incorporated at active, evidence-based concentrations that have been proven to express cosmetic effects after application, or desired action may be predictable based on the ingredient's chemistry when scientific evidence on activity is not available. The cosmetic ingredients of a vehicle must also be logically selected.







## Review

Permitted and not permitted cosmetic ingredients are reviewed and modified regularly according to the availability of new scientific and technical data, and the evolution of cosmetics and chemicals legislation.





## **Assessment of cosmetic products during the CosmEthically ACTIVE certification process**

Modern CosmEthics is a certification body that awards the CosmEthically ACTIVE certification mark. The key operational unit at Modern CosmEthics is the Modern CosmEthics Expert Team comprised of experts professionally active in the fields of cosmetology, pharmacognosy, pharmacy and chemistry, with competencies and in-depth knowledge in the area of cosmetic formulation and cosmetic ingredients of natural origin.

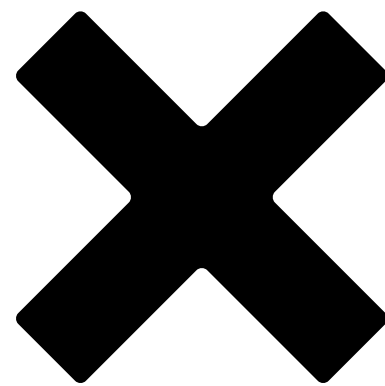
The main element of the certification process is the evaluation of cosmetic products for their compliance with the CosmEthically ACTIVE certificate criteria. A professional opinion regarding a cosmetic product is given by an assessor from the Modern CosmEthics Expert Team, and is comprised of 1) an assessment of the quality of individual cosmetic ingredients as raw materials based on the quality of technical documentation (e.g. certificates of analysis, technical datasheets and SDSs/MSDSs), 2) an assessment of the quantitative and qualitative composition of a product, and 3) a basic laboratory analysis of the product.





# **EXAMPLES OF APPROVED AND NOT APPROVED FORMULAS**

INCI	Content (%)	Function	Comment
Water	q.s.	solvent	permitted
Glycerin	5	humectant	permitted
Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.2	viscosity controlling	not permitted
Caprylic/Capric Triglyceride	6	emollient	permitted
Helianthus Annuus Seed Oil	2	emollient	permitted
Dimethicone Copolyol	2	emollient	not permitted
Ceteareth-25	1.5	emulsifying	not permitted
Glyceryl Stearate	1	emulsifying	permitted
Argania Spinosa Kernel Oil	0.1	emollient	too low
Retinyl Palmitate	0.0001	skin conditioning	too low
Tocopheryl Acetate	0.0001	antioxidant	too low
Achillea Millefolium Extract	0.008	skin conditioning	too low
Aloe Barbadensis Extract	0.001	skin conditioning	too low
Althea Officinalis Extract	0.001	skin conditioning	too low
Panthenol	0.1	skin conditioning	too low
Niacinamide	0.05	smoothing	too low
Parfum	0.25	perfuming	synthetic; not permitted
Phenoxyethanol, Methylparaben, Ethylparaben, Propylparaben, Butylparaben	0.8	preservative	not permitted



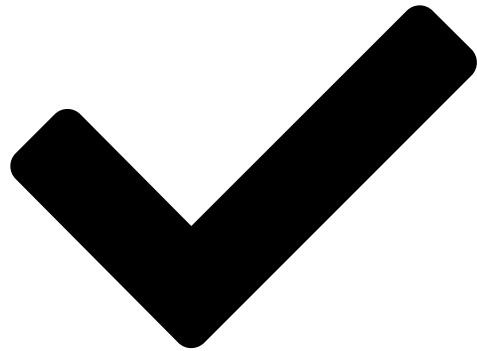
# NOT APPROVED

Antioxidant cream moisturiser for mature skin, enriched with argan oil, and aloe and yarrow extracts

The formulation is not approved: it contains cosmetic ingredients that are not permitted in natural cosmetics (non-biodegradable ingredients, ingredients obtained through ethoxylation, synthetic fragrances, etc.), and the cosmetically active ingredients that should support the claimed cosmetic effect (antioxidant moisturiser with argan oil, and aloe and yarrow extracts) are used in amounts that are too low to express the desired cosmetic activity on the skin.



INCI	Content (%)	Function
Water	q.s.	solvent
Glycerin	3	humectant
Xanthan Gum	0.2	viscosity controlling
Caprylic/Capric Triglyceride	5	emollient
Prunus Domestica Seed Oil	3	emollient
Butyrospermum Parkii Seed Butter	5	emollient
Argania Spinosa Seed Oil	5	emollient
Cetearyl Glucoside	q.s.	emulsifying
Cetearyl Alcohol	4	emulsifying
Niacinamide	0.5	smoothing
Sodium PCA	2	humectant
Aloe Barbadensis Powder	0.1	skin conditioning
Achillea Millefolium Extract	0.5	skin conditioning
Panthenol	1	skin conditioning
Dehydroacetic Acid, Benzyl Alcohol	q.s.	preservative



# APPROVED

Antioxidant cream moisturiser for mature skin, enriched with argan oil, and aloe and yarrow extracts

The formulation is approved: it contains only cosmetic ingredients that are permitted according to the CosmEthically ACTIVE certificate, and the cosmetically active ingredients are used in concentrations that have been proven to express the cosmetic activity on the skin and support the marketing claim (antioxidant moisturiser with argan oil, and aloe and yarrow extracts).

# A WORD FROM THE FOUNDERS OF THE CERTIFICATE

The presented concept of CosmEthically ACTIVE cosmetics is a completely new, unique and revolutionary understanding of cosmetics, based on the highest level of knowledge. The ultimate objective of the CosmEthically ACTIVE certificate is to gain international recognition as a synonym for high-quality and evidence-based, natural, healthy and sustainable cosmetics.

We believe deeply that this is the only possible long-term future for cosmetics, cosmetic manufacturers, the users of cosmetics and our planet.

**We encourage you to take the challenge, and follow us in supporting, promoting and creating a natural, sustainable and healthy world.**







## **Change your habits, change the world**

The trend of natural, including going back to natural values, is becoming a realistic fact of the modern world in different areas of our lives, e.g. in the food sector, textile industry and, finally, in cosmetics. We are proud to see that people are increasingly aware that we are solely responsible for our health and the environment in which we live. 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.**

All cosmetic products that meet the requirements of the CosmEthically ACTIVE certificate are truly active, natural, skin friendly and environmentally friendly. Given the current level of knowledge, they are the purest and most priceless investment in our health, the health of our children and future generations, and the health of our planet.





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