



KEZ[®]

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CNC Standards

Certification of Natural and Organic Cosmetics

In force from: 1.7.2022

PREAMBLE

KEZ o.p.s. (KEZ) is a public benefit corporation accredited as a certification body that performs independent inspection and certification of producers, processors and traders involved in the ecological agriculture system.

Due to the increasing consumer demand for cosmetic preparations containing natural ingredients or organic products, and an absence in the Czech Republic of a certification agency that would deal with these issues systemically, KEZ inspection agency has decided to develop CNC – Standards for Certification of Cosmetic Preparations (hereinafter referred to as the Standards), defining requirements on cosmetic preparations that are not included in Council Regulation (EC) no. 834/2007 on organic production.

We have invited experts on cosmetic production and cosmetic care professionals to collaborate on the development of the Standards and the assessment process.

The qualitative indicators for cosmetic preparations are ensured by traceability of the components throughout their development, manufacture and distribution process in relation to the environment. This ensures total product integrity down to the end consumer.

The purpose of the Standards is to provide consumers with true and verifiable information about the content of organic and eco-friendly ingredients in certified cosmetic preparations. The certification logo awarding process is in compliance with the ethical principles of the independent certification agency KEZ o.p.s.

BASIC TERMINOLOGY

Cosmetic preparation

Any substance or mixture intended for contact with the outer parts of the human body (skin, hair system, nails, lips, outer genitalia) or the teeth and mucous membranes of the oral cavity, exclusively or mostly for the purpose of cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition, or modification to bodily odours.

Substance

A chemical element and its compounds in their natural condition or obtained via a production process, including all additives necessary for maintaining its stability and all impurities produced during the process, excluding any solvents that can be separated without affecting the substance stability or changing its composition.

Mixture

A mixture or solution composed of two or more substances.

Manufacturer

A natural person or a body corporate that manufactures a cosmetic preparation or that has had a cosmetic preparation designed or manufactured and markets it under its name or trademark.

Market delivery

Delivery of a cosmetic preparation for distribution, consumption or use on the Community market as part of business operation, whether against a payment or free of charge.

Organic ingredient

An organic ingredient is a component of a cosmetic preparation for which KEZ o.p.s. or another of the inspection agencies listed in the Journal of the European Union has issued a certificate of organic origin in compliance with Council Regulation (EC) no. 834/2007.

Refining vegetable oils (fats)

Technological steps removing undesirable substances from oils (fats). Refining may contain degumming, neutralization, bleaching, deodorisation.

Chemical refining oils (fats)

Process of refining oils (fats) where degumming with phosphoric acid and neutralization with sodium hydroxide are used. Degumming with citric acid is not regarded as chemical refining.

Chemical refined oils (fats) are permitted in CERTIFIED NATURAL COSMETICS. Chemical refined oils (fats) are forbidden in CNC Organic.

Natural cosmetics

Natural cosmetics are such cosmetic preparations that both comply with the Standards parameters and contain exclusively environmentally friendly ingredients enumerated in the positive list in Annex 1 to the Standards.

Ingredient of natural origin

An ingredient of natural origin is a substance or mixture of substances that are naturally found in nature and have been obtained for the cosmetic preparation from nature. Ingredients analogous to natural ones that have been obtained through chemical synthesis are not considered of natural origin. Such ingredients may subsequently be treated chemically exclusively using the methods listed in 3.3 below. If an ingredient is composed of a substance(s) of natural origin and a synthetic substance permissible hereunder, the certification applicant shall specify the proportion of the natural and synthetic components in weight percentages. The calculation formula for determining the content of the synthetic ingredient component in the cosmetic preparation is shown in Annex 2 to the Standards. The certification body has the right to verify the proportion, request the applicant to furnish documentation based on which it performed the calculation, and verify the validity and correctness of the documentation.

Water shall not be included among the natural component proportions. However, if it is listed as Aqua among the Ingredients (INCI), it has to comply with the legislative parameters for that appellation. The policy is that ingredients as per this paragraph have to comply with the general requirements for ingredients permissible for final cosmetic preparations.

Raw materials with functional significance

If the applicant for certification according to these standards states in the information for consumers or in other labeling the raw material or raw materials as substances fulfilling a specific function for the skin (for example hydration, reduction of sensitivity, anti-greasing, softening, lightening, etc.) or derives from it such a claim for a cosmetic preparation as a whole, then for such raw material or raw materials it must be true that it occurs naturally in nature. These substances can be produced synthetically or using natural ingredients, but always procedures that are in accordance with these standards. At the same time, this raw material or these raw materials cannot be obtained from natural sources as raw materials for cosmetic preparations or food in quantities greater than the usual laboratory quantity.

In order for a specific component/ingredient to be considered functional, it must not be listed in any group of substances according to Appendix No. 1 of the Standards.

This point does not apply to raw materials that perform only basic cosmetic functions, such as washing, cleaning or changing the color of the skin and adnexa with pigments.

CNC – CERTIFIED NATURAL COSMETICS

A cosmetic preparation that has complied with the Standards parameters, contains at least 85% of components of natural origin, provided that KEZ o.p.s. certification agency has issued a certificate for it and it contains exclusively substances listed among the ingredients of Annex 1 to the Standards.

CNC Organic

A cosmetic preparation that has complied with the Standards parameters, doesn't contain chemical refined oils (fats), contains at least 90% of components of natural origin while at least 20% of the weight percentage of the natural components has to be organic.

1 GENERAL PRINCIPLES OF THE STANDARDS

1.1

The purpose of the CNC Standards is to set unambiguous and transparent rules for both manufacturers and suppliers of cosmetic preparations that contain ingredients originating from ecological agriculture or environmentally friendly ingredients.

1.2

The Standards apply to cosmetic preparations that are expected to comply with Regulation (EC) no. 1223/2009 of the EP and of the Council on cosmetic products, Commission Regulation (EU) No 655/2013 laying down common criteria for the justification of claims used in relation to cosmetic products, as amended and Act no. 258/2000 Coll. on public health protection as amended. Failing the aforesaid legislative requirements, a cosmetic preparation cannot be certified under the Standards.

1.3

In obtaining the ingredients, the manufacturer shall take care to make considerate use of nature and conserve it in its natural forms, including protection of animal and plant species and inorganic components. Use of genetically modified ingredients

(GMO) and ingredients that employ methods based on genetic engineering in any stage of their development or production is prohibited. This requirement applies to all the ingredients of a certified cosmetic preparation. CNC may only contain animal ingredients listed in Annex 1. Use of ingredients obtained from dead, stunned or ill animals or animals undergoing treatment or pharmacological nutritional and metabolic supplementation is prohibited. In obtaining the ingredients, the manufacturer takes care to minimize the destruction of and damage to nature.

1.4

Prior to certification (i.e., during inspection etc.), the cosmetic preparation manufacturer shall provide documents that prove the compliance of the cosmetic preparation with the legal requirements for sale within the single market of the European Community (hereinafter, the Market) in compliance with the Directive.

1.5

Cosmetic preparations are subject to constant research and development. The Standards may be subject to amendments and modifications as a result of legislative changes, environmental requirements and keeping the cosmetic preparations made under the Standards reliable towards the consumers.

Holders of the right to use the CNC CERTIFIED NATURAL COSMETICS and CNC Organic (cosmetic preparation manufacturers or distributors) shall be informed about changes to the Standards, typically via electronic mail, no later than six months before the change enters into force.

According to the previous paragraph, holders have the right to submit comments and proposals for changes to these standards, but no later than three months from the sending of the proposed changes by KEZ. KEZ is not obliged to accept comments and suggestions.

2 THE RULES

2.1. ORIGIN OF INGREDIENTS

Plant-based ingredients contained in CNC can be of two qualities:

- a) They originate from ecological agriculture or from collection of herbs or fruits growing in the wild. Such ingredients are referred to as organic ingredients in the Standards. A certificate of ecological origin has been issued for such organic ingredients by an inspection agency (see list of inspection agencies in the Journal of the EU). Only such ingredients may be listed as organic ingredients on the CNC labels.
- b) They are of plant origin and such origin is reliably documented by the manufacturer/distributor.
- c) The calculation of the content percentage shall be made depending on the method of indicating the quantity of the final preparation in volume or weight percentage. Water contained in the product shall not be included in the basis for calculating the percentages.
- d) The product must not contain identical organic and conventional components.

2.2. OTHER INGREDIENTS

Ingredients of an origin other than plant-based may only be used in cosmetic preparations under these Standards in case they are listed in Annex 1 to these Standards.

2.3. ANIMAL PROTECTION

CNC, their prototypes or development stages or basic ingredients (documented by a statutory declaration) must not be tested on animals by the manufacturer, first distributor or any other distributor after 1 January 2000. Neither may the aforesaid parties commission such testing with other parties. Testing on animals does not include testing on cultivated tissues or separate isolated somatic cells.

3 SUBSTANCES AND PROCEDURES

3.1 CNC must not contain:

- synthetic colourants;
- synthetic aromatic substances pursuant to ISO 9235;
- synthetic preservatives except those explicitly permitted in Annex 1;
- silicones;
- paraffin, petroleum jelly and other similar petroleum derivatives;
- polymers of acrylic acid in any form;
- substances that have undergone a process of irradiation with an ionizing dose of energy in their production or during the CNC production;
- chemical UV filters;
- genetically modified materials and their products/derivatives;
- ethoxylated ingredients.

3.2 SUBSTANCES PERMISSIBLE IN CERTIFIED COSMETIC PREPARATIONS

Annex 1 to the Standards includes an up-to-date list of permitted substances or groups of substances. The Annex may be updated in accordance with latest scientific findings. However, its updates shall have no effect on existing certifications.

3.3 EXTRACTION METHODS

The permitted extraction methods are: maceration, extrusion, filtering, centrifugation, solar extraction, cold extraction, pressure or vacuum pressing, distillation using water or steam at low pressures, decoction, leaching, infusion, bioleaching/fermentation, CO₂.

4 STORAGE, PROCESSING AND PACKAGING

4.1 Storage

Stored ingredients for CNC Organic must be labelled in a way that prevents mixing or confusing them with substances non-compliant with the Standards.

4.2 Processing

The production of cosmetic preparations under the Standards has to be separated in place or time from the production of uncertified preparations.

4.3 Packaging

The packaging material shall advisably make use, in particular, of materials that are recyclable, recycled or reusable.

It is forbidden to use PVC and polystyrene as packaging material, if it is in direct contact with the components of the cosmetic product and also contains GMOs. The applicant for certification shall document this fact with a written statement from the packaging manufacturer.

5 IDENTIFICATION

5.1 Identification of components

Proper identification of all the components on the label according to the INCI (International Nomenclature of Cosmetic Ingredients) is essential to providing the consumer with clear and accurate information and is a precondition for certification.

In order to provide the consumer with clear information on the specific content of organic ingredients of cosmetic preparations that contain at least 10% of organic ingredients, the manufacturer/first distributor (generally, holder of certification under the Standards) may state the percentage of components from ecological agriculture on the product packaging using the phrase "Contains X% of organic ingredients", or state the specific names and percentages of the organic ingredients contained. In the latter case, the organic ingredients shall be denoted in the INCI or by names common in the country/countries of distribution.

5.2 Trademarks

A) If a product demonstrably complies with the parameters set in the Standards, or contains up to 20% of an organic ingredient(s), the manufacturer/first distributor/distributor (generally, the certification holder) may refer to it on the packaging or in advertising as "**CNC – CERTIFIED NATURAL COSMETICS**" based on a certificate issued and a contractual agreement with KEZ o.p.s. on granting the right to use the trademark.

B) If a product demonstrably complies with the parameters set in the Standards and contains at least 20% of an organic ingredient(s), the manufacturer/first distributor/distributor (generally, the certification holder) may refer to it on the packaging or in advertising as "**CNC Organic**" based on a certificate issued and a contractual agreement with KEZ o.p.s. on granting the right to use the trademark.

6 FINAL PROVISIONS

6.1 Manufacturer's duty

The manufacturer shall demonstrably prove that it has made persons involved in producing the CNC cosmetic preparation(s) familiar with the Standards.

6.2 Compliance with the Standards requirements

By signing the "Contract on the Certification of Cosmetic Products" with KEZ o.p.s., the cosmetic preparation manufacturer pledges to voluntarily comply with the requirements of the Standards.

6.3 Copyright

The CNC – Standards for Certification of Cosmetic Preparations are the property of KEZ o.p.s. and must not be used, copied and reproduced without the proprietor's written consent. The trademarks CNC CERTIFIED NATURAL COSMETICS and CNC Organic must not be used in product labelling or advertising without the proprietor's consent.

7 Enumeration of legislation in force

Regulation (EC) No 1223/2009 of the EP and of the Council on cosmetic products, as amended

Commission Regulation (EU) No 655/2013 laying down common criteria for the justification of claims used in relation to cosmetic products, as amended

REGULATION (EU) 2018/848 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on organic production and labelling of organic products, as amended

Act no. 258/2000 Coll., on public health protection, as amended

The legislative regulations of the EC and the Czech Republic will be monitored continuously and updated in the Standards.

ANNEX 1

Positive list of substances permitted for use in CNC production

Material Safety Data Sheets in compliance with Regulation (EC) no. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) have to be furnished for all ingredients that are classified as hazardous or contain hazardous substances in excess of the limits defined by the above Regulation. If the ingredients are not classified as hazardous, specifications that will allow KEZ o.p.s. to decide whether they comply with the CNC criteria have to be furnished. In the latter case, KEZ o.p.s. reserves the right to define the scope and type of such documentation.

CNC may only contain the following biodegradable substances:

Surface active agents, including tensides and solubilizers

All surface active agents, including tensides and solubilizers, used in CNC have to comply with the criteria for final aerobic biological degradation in compliance with Regulation (EC) no. 648/2004, Article 4 and Annex III, within 28 days for at least 60%. In addition, they have to comply with the ecological criteria for the award of the Community eco-label to soaps, shampoos and hair conditioners (Commission Decision of 21 June 2007, notified under document number C(2007) 3127).

The permissibility of surface active agents is determined by the following criteria:

1. For substances not listed in the text below, the Standards shall also follow, to an extent necessary for assessment, Commission Decision 2007/506/EC, establishing the ecological criteria for the award of the Community eco-label to soaps, shampoos and hair conditioners.
2. Surface active agents may only be used as the main washing components in preparations the primary purpose of which is washing, cleaning of hair, skin or mucous membranes or in preparations intended for combing and/or shaping hair.

NONIONICS

Aliphatic acids

Examples: stearic acid, palmitic acid and other acids originating from plant material, including complex fatty acids

Aliphatic alcohols

Examples: cetyl alcohol, stearyl alcohol, behenyl alcohol, etc.

Partial esters of sorbitol and fatty acids

Examples: sorbitan monolaurate, sorbitan monopalmitate, sorbitan tristearate, etc.

Cyclic alcohols

Examples: cholesterol and its esters, wool wax alcohols

Partial esters of glycerol with fatty acids

Examples: glycerol monostearate, glycerol monooleate, glycerol monostearate citrate

Glycerine sorbitan esters of fatty acids

Esters of fatty acids and saccharides, including polyglycerides

Examples: polyglyceryl methylglucose distearate, glucosides of fatty alcohols

IONICS

Anionic tensides:

Soaps

Examples: sodium palmitate, potassium stearate, calcium oleate, zinc stearate (soaps with the ammonia and aluminium groups are not permitted)

Other anionic tensides:

Tensides based on a saccharide molecule and compliant with the requirements of Commission Decision 2007/506/EC are permissible. Substances produced by introduction of sulphuric acid to reactive mixtures are expressly not permitted, except substances listed in Commission Decision 2007/506/EC.

Cationic tensides:

Not permitted

Amphoteric (ampholytic) tensides:

Examples: alkyl betaines, glycerophospholipids (e.g., lecithin), sphingolipids

Hydrophilic solvents or hydrating agents of alcoholic nature

Water

Water that has undergone any process of chemical or physical disinfection or sterilization such as by irradiation by ionizing nuclear or non-nuclear radiation must not be used. Ozonation is not considered an ionizing disinfection or sterilization process.

Alcohols

Primary, secondary and tertiary alcohols of plant origin (such as ethanol, glycerine, sorbitol, inositol, glucitol) and their esters can be used. Perfuming ingredients of an alcoholic nature are not considered solvents.

Acids

All plant-based acids that are permitted as cosmetic components by the Directive can be used.

Saccharides

In addition to the sugar derivatives listed in the other categories, all types of saccharides can be used, such as fructose, glucose, maltose, sucrose, amylose, amylopectin, cellulose and its natural derivatives. Natural derivatives also include saccharides and their derivatives normally occurring in nature and also produced by microbial fermentation, such as gluconates and gluconolactone. For the purposes of the CNC Standards, saccharides also include plant-based starches: conventional potato starch, gum arabic, guar gum, and xanthan gum.

Amino acids and proteins

Amino acids, peptides or proteins used have to be demonstrably of plant origin.

Oleophilic solvents and other fatty components

Solvents include oils such as mixtures of glycerids of complex aliphatic acids (acylglycerols) of plant origin (e.g., from soya).

Additional solvents are vegetable oils, such as sunflower, flax, maize, olive, evening primrose, soya, cocoa, etc., which can undergo hydrolysis, hydrogenation, esterification, transesterification, and other condensation reactions. When using hardened hydrogenated fats made of vegetable oils, it has to be proven that the content of the trans-unsaturated fatty acids is no more than 1% of the total content of the unsaturated fatty acids.

The following fat-adding substances can be used as additional fatty components:

- a) of plant origin: fatty acids, glycerophospholipids (e.g., lecithin, cardiolipin, phosphatidylinositol), sphingolipids including ceramids, stigmaterols and sitosterols, complex plant fats such as shea butter, squalene and its fatty plant derivatives;
- b) of animal origin: both types of beeswax (cera alba, cera flava), wool wax, wool wax alcohols, farm animals milk. Treatment of milk by centrifugation and its heat treatment is considered permissible. Furthermore, milk fractions and milk products are permissible if they were obtained by technology that complies with the Standards.

Inorganic components

Naturally obtained oxides of biogenic elements that are permitted for cosmetic preparations (e.g., zinc oxide, silicon dioxide, ferric oxide, calcium oxide, magnesium oxide, etc.).

Naturally obtained salts of biogenic elements that are permitted for cosmetic preparations (e.g., sodium chloride, potassium chloride, magnesium chloride, calcium carbonate, calcium sulphate, etc.).

Other inorganic components

Kaolin, bentonite, hectorite, diatomaceous earth, various types of sediments, including mineral mud and akadama, and other mineral substances permitted for cosmetic preparations.

Colourants

Substances intended exclusively or mostly for colouring a cosmetic preparation, the whole body or some of its parts by absorbing or reflecting the visible light; precursors of oxidative hair dyes are also considered colourants.

Only colourants obtained from plant sources are permitted. Such colourants include, among others, anthocyanins (E163), carotenes (E160a), chlorophylls a chlorophyllins (E140), riboflavin (E101), and caramel (E150).

Substances added in order to affect viscosity

In addition to the above, plant mucinogenic polysaccharides (e.g., tragacanthin) and alginic acid are also permitted.

Perfuming ingredients and taste-affecting substances

Perfuming ingredients include substances and mixtures of substances added to a cosmetic preparation with the primary purpose of modifying its fragrance, possibly also taste (toothpaste).

Perfuming compositions may contain substances obtained from plants. CNC must not contain any synthetic perfuming ingredients even where an identical substance occurs naturally. However absolute produced by chemical extraction (for example n-hexane) can be used in the formula for a cosmetic preparation.

Perfuming ingredients must not contain any of the allergens listed in Regulation (EC) No 1223/2009 of the EP and of the Council on cosmetic products, as amended. This requirement does not apply to natural essential oils.

Preservative ingredients

Substances intended exclusively or mostly for suppressing the growth of microorganisms in a cosmetic preparation.

In addition to the natural substances listed under the other groups in these Standards, the following are permissible:

- benzoic acid, its salts and ethylester
- salicylic acid and its salts
- sorbic acid and its salts
- benzyl alcohol
- dehydroacetic acid
- N-(1-Oxododecyl)-L-arginine ethyl ester chloride (INCI: Ethyl Lauroyl Arginate HCL)

UV filters

Substances intended exclusively or mostly for human body protection from ultraviolet radiation by means of absorbing, reflecting or dispersing the radiation.

Only physical filters – zinc oxide, titanium dioxide, silicon dioxide – can be used for intercepting the UV spectrum of photon radiation for the purposes of skin protection or CNC colour stabilization. Only titanium dioxide can be declared as the UV filter for labeling and identification. The other substances can be used in the formula but without indication "UV filter" on the label. Requirements on preservative ingredients apply to their stabilization.

Antioxidants

Substances obtained from plant sources by the procedures specified in these Standards must preferably be used as antioxidants. If the antioxidant substance occurs naturally in the plant source, not as a contaminant or marginal component, but at the same time does not exist on the market as a raw material in quality even for cosmetic preparations, it can be obtained synthetically. The burden of proof is not on KEZ o.p.s. In practice, mainly vitamins A, E, C are used as antioxidants, which can be esterified with one of the fatty acids. Only the substances listed in this appendix may be used as solubilizers or carriers of antioxidant substances.

Other substances

The natural origin (not of animal origin except substances listed in CNC) of any substances other than the above used in CNC is crucial for assessing their permissibility. Examples of such compounds include some substances in the isoprenoid group not yet listed, such as caffeine, theophylline and cyclopentaperhydrophenanthrene substances. They also include some metabolic products of fungi (such as *Pythium oligandrum*), all bee products.

Exemplary enumeration of processes in cosmetic preparation production that are not eligible for certification

- bleaching – deodorization (supported by animal origin)
- use of enzymes obtained from GMO
- deterpenation (other than using steam distillation)
- ethoxylation
- ionizing radiation
- sulfonation (as the main reaction)
- methods employing genetic engineering
- treatments using mercury
- propoxylation
- alkoxylation
- use of petroleum derivatives as catalyzers
- production and extraction of vegetable oils and fats by chemical solvents except absolue

Annex 2

Calculations

1) Determining the content of synthetic ingredient component in a cosmetic preparation

$$SV_i = S_i \times \left[\frac{X_i \times (1 - W_i)}{1 - WA - \sum_{i=1}^n X_i \times W_i} \right]$$

SV_i relative content of synthetic component ingredient **i** in the product

S_i proportion of the synthetic component in ingredient **i**

W_i water content in ingredient **i**

X_i ingredient **i** content in the product

WA water added to the product

where:

$$S_i = A_i * S_v$$

A_i content of the active substance in question (pure chemical compound) in ingredient **i** as per technical specification

S_v synthetic component content in the active substance determined by expert assessment

$$\sum_{i=1}^n X_i \times W_i$$

= the sum of water content in all the ingredients contained in the product

Example calculation

The cosmetic preparation composition is as follows:

- water 60% (WA)

- ingredient **i** 25% (X_i)

- ingredient **z** 15% (X_z)

The content of the synthetic component in the active substance of ingredient **i** is 80% (S_v).

According to the technical specification for ingredient **i**, its active substance content is 30% (A_i); the remaining 70% is water (W_i). The water content in ingredient **z** is 50% (W_z).

What is the relative content of the synthetic component of ingredient **i** in the product (SV_i)?

Solution:

$$S_i = A_i * S_v = 0.3 * 0.8 = \mathbf{0.24, \text{ i.e., 24\%}}$$

$$\text{SUM}[i=1, n](W_i * X_i) = (W_i * X_i) + (W_z * X_z) = (0.7 * 0.25) + (0.5 * 0.15) = \mathbf{0.25, \text{ i.e., 25\%}}$$

$$SV_i = S_i * \frac{X_i * (1 - W_i)}{1 - WA - \text{SUM}[i=1, n](W_i * X_i)} = 0.24 * \frac{0.25 * (1 - 0.7)}{1 - 0.6 - 0.25} = \mathbf{0.12, \text{ i.e., 12\%}}$$

Conclusion: The cosmetic preparation contains 12% of the synthetic component of ingredient **i** in question.