

Natural and organic cosmetics. Law regulations and the newest trends

The trend for natural cosmetics began in Poland about 10 years ago and year by year it has been gaining new fans. Natural and organic cosmetics is the most dynamically developing sector of ecological products. According to the Allied Market Research it is supposed to grow by 9,8 % annually in the years 2014-2020. Customers can choose between cosmetics certified as 'natural' or 'organic' by well-known units and a wide range of non-certified products. The price of the first group is usually twice as high as in the case of the second one. In exchange the customer gets an honest information about the percentage of natural and organic ingredients from monitored plantations as the criteria of providing this information is strictly defined. As it comes to products without a certificate – so far there was no definition of a natural and organic product. In February 2016 the first and long-awaited version of ISO16128 norm was released. It was stating the definition of ingredients which are natural, have natural origin, are organic or have organic origin. However, it did not solve the question of the natural or organic cosmetic. In September 2017 there was released the second part of ISO 16128 norm, which was giving the instructions for counting the index of naturalness, natural origin, organicness or organic origin not only for ingredients, but also for the final product. The methodology is basing on the characteristics of the ingredients and earlier counted indexes of naturalness and organicness.

Criteria for natural and organic cosmetics according to the COSMOS standards

In Europe there are a few units certifying natural and organic cosmetics. Every of them acts according to its own set of criteria and instructions of certifying natural and organic products. The differences in their standards concerned both the definition of natural and organic cosmetics and the criteria of counting the naturalness and organicness indexes basing on the ingredients given in the formulation. The certifying organizations on one hand were providing customers with a sense of honest approach to the formulation and natural cosmetics labelling and on the other hand a vast number of certifying units were implementing their own rules and additional questions both from the side of customers and producers. In 2002 five main European certifying organizations met to start working on unifying the standards of ecological cosmetics and create clear rules for everybody interested in certification – both producers and customers. In 2010 an international non-profit association was created – COSMOS-standard AISBL and the standards of COSMOS (COSmetic Organic Standard) were published. The

organization was set by 5 companies: German BDIH, French Cosmebio and Ecocert Greenlife, Italian ICEA and English Soil Association, which certify the products according to international criteria. Since 2010 these companies have been gradually switching to COSMOS standards. Ecocert Greenlife, one of most famous organizations, since 2017 has been certifying products according to the unified COSMOS standards. It does not mean though that Ecocert disappeared from the packaging of natural and organic cosmetics. It was enriched in a signature of COSMOS NATURAL or COSMOS ORGANIC, given dependently on the percentage of organic ingredients in their formulation.

[Pic. 1 and 2 \(logo Cosmos Natural and logo Cosmos Organic\)](#)

To get the status of **COSMOS ORGANIC** the cosmetic has to contain **minimum 20 %** of organic ingredients in the formulation and **95% of ingredients from monitored plantations** (agro ingredients). As it comes to the **COSMOS NATURAL** – the minimal amount of organic ingredients is not required. The ingredients should meet the criteria for particular categories of allowed ingredients according to COSMOS (described in another paragraph).

According to COSMOS standards, cosmetics from monitored plantations (agro ingredients) are divided in to categories:

- PPAI - *Physically Processed Agro-Ingredient*
- CPAI – *Chemically Processed Agro-Ingredient*

Both of them are allowed, but the **physically processed agro ingredients have a higher organicness index**. The numeric values for PPAI and CPAI are vital to count the **organicness index of a cosmetic**. It is also important that in a given extract the allowed amount of synthetic ingredient cannot be higher than 2%. Another important information is that not every ingredient in a certified products must possess the certificate of COSMOS or Ecocert. Being approved by the units is enough (*Ecocert/ Cosmos approved*). Some of the ingredients can be approved only in particular types of cosmetic products. They are not mentioned on the validated ingredients according to the COSMOS standards, available at <http://cosmosstandardrm.org/data/indexrmorg.php>.

Specifications for natural and organic cosmetics concern not only raw materials and cosmetic pulp, but also:

- Materials used in packaging and labelling – eco-friendly, made of recyclable materials
- Technological processes, which should be environmentally friendly
- Production should be separated from the production of non-certified products
- Special preparations should be used in the process of cleaning and disinfection of production facilities: basing on ethyl alcohol of plant origin, isopropanol or hydrogen peroxide
- Clear marketing communication – providing the percentage of organicness on the label and marketing information, without misleading consumers
- Inspection, certification and control of the processes indicated by the organs authorised by independent accreditation. The list of units authorised to certify and audit cosmetic producers is published here:

<https://cosmosstandard.files.wordpress.com/2017/07/certifiers20authorised20june202017.pdf>

Categories of ingredients allowed by COSMOS to be used in certified cosmetics

The ingredients which are allowed in natural and organic cosmetics were divided into 5 categories. The first one is **water**, the main ingredient of every cosmetic. COSMOS allows drinking water, spring water and distilled water as well as water obtained in osmosis process and sea water. The main condition is its microbiological cleanliness. The next category are **mineral ingredients** created in geological processes, excluding fossil fuels origin. The most important ones are: kaolinite clays, aluminosilicates, non-organic pigments, mica, silica, natural salts. The third group are **agro-ingredients** obtained from agriculture, water plantations or wild harvest and also ingredients obtained in biotechnological processes, **physically processed**. In this group we should mention non-GMO plants, obtained in processed with the use of bacteria and animal origin: e.g. honey, milk, lanoline, but not being a part of animal body. Solvents and other substances used in the process must be also of natural origin. The fourth group are **chemically processed agro-ingredients**. These processes should be consistent with *Green Chemistry Programme*, where a special emphasis is placed on low energy use, minimal waste production and basing on sustainable ingredients. Plant ingredients, both physically and chemically processed are: extracts, oils, waxes, essentials oils (also in fragrances). The fifth group are **other components**, including allowed **synthetic substances** like **synthetic preservatives, which can be also**

found in nature, such as acids: benzoic acid, dehydroacetic acid, sorbic acid, salicylic acid and their salts.

Forbidden processes and ingredients

It is forbidden to use some reactions in the process of obtaining the ingredients for natural cosmetics: ethoxylated, sulphonated, synthesis with using of ethylene oxide, mercury and petrochemical solvents. It is also not allowed to use particles smaller than 100 nm, genetically modified or obtained in the presence of gamma and x-ray radiation as well as mineral oils, silicones, artificial colorants and fragrances.

Why are clients quick to buy natural cosmetics?

We have been observing a *slow life* trend for many years, which is based on careful and conscious life, building deep relations, using natural solutions and solving many problems, including the ones connected with health, according to the rule 'less means more'. It is also healthy food, natural healthcare without chemically processed food and chemical medicines as well as cosmetics without chemical substances, especially those ones with bad fame. Those ingredients which are the most frequently criticized on many blogs (which not necessarily promote true knowledge about healthy and safe skin care by the way) are: parabens, EDTA, silicones, PEG and SLES, paraffin and vaseline (as derivate of crude oil). According to Organic Monitor research (2016) 31% of consumers reach for a natural cosmetic for the first time because they want to avoid undesirable ingredients. The assortment of natural cosmetics is especially rich in Germany, France and Great Britain. However, the trend for paying attention to conscious choice of cosmetic products according to their natural composition is more and more visible also on Polish market. Another reason for choosing a natural cosmetic is a presumption that this kind of care is more efficient and healthier in comparison to conventional cosmetics. Even if there are no scientific reasons and independent research to prove that, clients prefer to avoid potential risks as they are afraid of the impact of chemical substances on their organism. Moreover, choosing natural cosmetics they show their concern of the environment, animals and poorer people from so called Global South (countries of Africa, Asia and Latin America). Practising fair trade they try to eliminate poverty in these areas. To sum up, the choice of cosmetics is in many cases conformable with people's values and life philosophy. According to the Resolution 1223/2009, every authorised cosmetic should meet the criteria described by the law and its composition should be thoroughly analysed in the terms of toxicology to ensure the security for the human health. Thus regardless of the origin of the substances (natural or synthetic) cosmetics should go through the same safety assessment. Plant extracts, which are known for their positive impact on

skin, are also supposed to be thoroughly controlled in terms of some particular substances, which might have negative consequences for human health if used in bigger amounts.

Greenwashing – ‘green’ only by its name

Currently, what makes for a solid confirmation of the quality of natural or organic quality are certificates given by authorised units, including COSMOS, Ecocert, NaTrue, Cosmebio, Soil Association, ICEA, BDih (certificate „Certified Natural Cosmetics”). These units established the definition of natural and organic cosmetic and dependently on the organization, they are merely the same. However, certified cosmetics are still minority one the natural cosmetics market nowadays, which is dominated by many companies declaring that they products are natural in spite of not being certified at all. Very often a plant extract in the composition is enough to state that the product is natural, regardless of the conditions in the plantation, the methods of obtaining the extracts and solvents used in the production process. For a conscious customer the main determinant responsible for their decision to buy the cosmetics is an INCI index. However, it is not enough to ensure that the extract was obtained as a result of physical processes, with a respect to the green chemistry rules and from the plants coming from monitored plantations. And such criteria are demanded in the case of COSMOS or Ecocert certificates. Therefore it is important to know the *greenwashing* phenomenon, also known as a *green lie* – misleading a customer by understatements and highlighting ecological actions, which actually do not exist, abusing the healthy lifestyle trend. Such actions are e.g. labelling the product as a natural or organic while in fact it contains natural ingredients only partially. The concept or naturalness might be related in this case to some particular ingredients, but not the final product. Whilst the concept of *organicness* should not be used according to non-certified products at all, as requirements for such cosmetics are very strict and might be defined only by a particular certifying unit. Another example of misleading a customer are graphic signs used on packaging which are related to the nature, like e.g. a green leaf or as symbol of organization/ecological logotype which actually does not exist. This misuse might concern both the packaging which is not biodegradable and the definition of a natural cosmetic is also related to the packaging (jars, air-less, bottles, cartons, etiquettes).

How to protect oneself against greenwashing?

Despite of greenwashing being more and more popular, we should not strike off uncertified natural cosmetics. We should verify a few important questions connected with marketing declarations:

- Look for the confirmation of the most frequently misused statements: *ecological, organic, natural*.
- Check the INCI composition in the terms of natural and authorised substances. Producers usually give Ecocert or COSMOS stars to confirm that the extracts or oil used in the product come from monitored plantations and were obtained with a respect towards the environment.
- Pay attention into the material used for packaging (biodegradable or recycled).

Trends on market of natural and organic cosmetics

For a few decades natural cosmetics have been related to the products basing on natural oil, butters and plant extracts and recalling regional tradition (extract of camomile, green tea, calendula, birch, linden etc.). Nowadays customers expect something more. Apart from natural composition they pay attention to innovation in texture and packaging, sensor values (nice fragrance, silk touch on the skin, long-lasting moisture and matt finishing). They look for active substances from the most remoted parts of the world, tested *in vitro* and *in vivo* and matched to the individual needs. The product should be primarily efficient and bring visible effects after the first application. According to Mintel data, half of the clients in the USA choose natural cosmetics. 25% of German customers buy natural cosmetics, because they believe that they have a positive impact on the environment. In China 45% of women are planning to increase their everyday use of natural cosmetics. 29% of customers from Australia search for products made by local society. There is also a trend of small companies producing natural cosmetics in small amounts and advertised only in social media. Very often they show on Instagram every particular stage of the production process. Clients are also asked about those products which they might miss in the company's offer. They also take an active part in choosing the label or packaging by voting with *likes* on Facebook. This kind of relation building make the customers feel they have a real influence on the shape of the company's assortment and the visual side of the cosmetics used by them. **Vegan cosmetics**, in 100% made of plants, also grow in popularity. They might be certified by The Vegan Society or the International Movement for Animals – Viva!

To sum up, natural cosmetics producers have two ways to prove the declared slogans about their naturalness or organicness - certification or acting according to the norm ISO 16128, which was fully

published in the end of 2017, ordering the approach to non-certified natural cosmetics. The trend for natural cosmetics, although not new, is gaining popularity year by year and we can forecast that trend should be maintained in the future.

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