

The packaging as an important part of the cosmetics process production

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Abstract: *This paper describes the cosmetic market development in Europe and in Poland. This review focuses on the last part of the cosmetics process production – confection, mostly on the packaging type materials, the function and design as well as the colour and information put on the labels. The packaging of the cosmetics influences the consumers decision concerning the choice and the purchase of the cosmetics. It is an important process which decides directly about the economy of the company.*

Keywords: *cosmetics industry, packaging types, packing function, packing materials, confection.*

Introduction

The cosmetics market is a dynamically developing industry, characterized by growing competitiveness. This competitiveness is primarily due to the various needs of consumers, who are the main motivators for creating new products and improving products already on the market. Cosmetic trends make the cosmetics market a very labile industry, sometimes chaotic and sometimes even capricious [1].

The Polish cosmetics market is extremely diverse, with around 400 companies, ranging from large international companies to domestic medium-sized, small and micro-enterprises. Such a peculiar profile of the Polish cosmetics market provides it with a solid basis and allows it to excel among the leaders of the European cosmetics industry [2].

Thanks to the steady development over the last 15 years, the value of the Polish cosmetics market reached PLN 16 billion in 2016. As a result, Poland is ranked 6th in Europe as a cosmetics manufacturer just behind the leaders of this industry, i.e. France, Great Britain and Germany [2].

The Polish cosmetics market has grown by 32% over the last 15 years. The value of the market increased from PLN 9 billion in 2002 to PLN 16 billion in 2016, comparing the situation in other European countries, the jump of the Polish industry is spectacular. While such cosmetic powers as France or Italy recorded a downward trend, the Polish market developed the fastest [2]. At present, the most

important export directions of Polish cosmetics are Germany, Great Britain and Russia.

New perspectives for the Polish cosmetics industry are also emerging. The Middle East and the Asian countries are particularly attractive markets due to their fast growing economies. In the years to come, the European market will be saturated, which is why Asian countries may be the most important growth factor for Polish producers, who operate globally. On the other hand, the export of Polish cosmetics to European countries is still growing, so this direction cannot be ignored, especially as Polish products are increasingly gaining in the eyes of European consumers [2].

To sum up, the Polish cosmetics market is developing at an ever faster pace, which is due to the development of the economy. The wealth of society is growing, which translates into a growing demand for cosmetic products. The Polish Cosmetics Industry Association estimates that already in 2021 the value of the Polish cosmetics market should reach as much as PLN 20 billion [2].

Packaging in the cosmetics industry

The primary function of packaging is to protect the products they contain. However, packaging itself has many more functions than you might think. During the purchasing process, packaging makes the biggest contribution to the positive perception of the product by the consumer, it is a kind of a business card, which should encourage to buy the product. The graphic design and shape of the packaging should inspire customer confidence and be extremely attractive. In today's cosmetics industry, packaging is not only an independent element of promotion, but also a part of the company's marketing strategy. The packaging is the key factor that draws the customer's attention to the company [3].

The market of cosmetic packaging is among the most dynamically developing and includes various packaging types used in various regions [4].

Packaging types and functions

The global packaging market is practically divided by type of packaging used, the main and most common types being: bottles (including pump, washer, airless, roll-on), tubes and screw-on containers.

Often, the biggest part of the cost of a cosmetic product is its packaging. They are a basic way for manufacturers to distinguish cosmetics on the shelf. Properly selected cosmetic containers attract the consumer's attention and strengthen the purchasing decision [4].

Bottles

Cosmetic bottles are a particularly popular way of storing liquid cosmetics and even some powders. They are most often used for storing low-viscosity cosmetic emulsions, e.g. lotions, and perfumes. Bottles can have different shapes and sizes. The type of product that is stored in the bottles determines the lid to be used. The size of the bottle depends on the cosmetic substance to be stored in the container.

Cosmetic products such as lotions, foundations, tonics and serums are packed in airless cosmetic bottles. These bottles are hermetically sealed to ensure better product maintenance by minimising oxidation processes.

Spray bottles are usually used for perfume, body mist and facial tonics, and recently there has been a trend to spray tonic onto the face straight from the bottle. When it comes to making a perfume bottle, it is important to remember the consumer. In this case, simplicity is not important, but reaching above all the taste of the customer, who expects a certain form of luxury.

Roll-on bottles are considered to be extremely functional and comfortable. Although many perfume manufacturers opt for a spray bottle, a roll-on bottle still has many advantages in terms of storing fragrances. Unlike a spray bottle, a roll-on fragrance is applied precisely where it is needed. This method of applying perfumes is considered to allow the consumer to enjoy the fragrance longer. It is smaller than a spray bottle and can be put into even the smallest bag, which is appreciated by female consumers. Roll-on bottles are also used for liquids with high viscosity, e.g. perfumes in oil, glands, antiperspirants [5].

Tubes

Tubes are considered to be the ideal solution for packaging cosmetic products. They combine high aesthetic value with easy adaptation to numerous cosmetic forms [6]. The first flexible tube was developed by John Goffe Randa, an American, over 175 years ago and had no connection with the cosmetics industry as it was used to store paint [7].

Cosmetic tubes are distinguished by a variety of applications, they are manufactured in different sizes and styles, they have very narrow openings, thanks to which they increase the barrier against contamination and help to maintain the durability of the product. Originally these tubes were made of metals such as aluminium, lead, and tin. Colgate & Co was the first company to focus on the development of these packaging solutions. Over the years, packaging companies have moved away from rigid design towards technologies such as PolyFoil, which provides 100% light protection and a soft texture that makes working with the tube easier. This technology also provides savings in packaging costs, which are used by both large and small cosmetic companies [6].

The most common tube closure is the flip-top closure, which is one of the biggest innovations among the tube closure types. Usually, the flip-top closure is also equipped with a special silicone valve allowing for precise dosing and preventing uncontrolled leakage of the product [5].

Screw-on containers (jars)

Cosmetic jars have a number of applications, which makes them versatile packaging and perfect for various types of cosmetic emulsions. Most of the containers available on the market are round in shape, but packaging manufacturers adapt to the needs of the cosmetic market and anyone looking for something unique can choose from a variety of shapes, from round to square or even diamond. These packages are equipped with twist-off fasteners, which on the

one hand are easy to unscrew and on the other hand are very safe and provide protection against uncontrolled leakage (Fig. 6). Usually, face creams are placed in jars, and thanks to the sealed closure, cream manufacturers can be sure that it will not leak during transport, will maintain appropriate physicochemical parameters and will be easy to use [5].

Types of packaging materials

One of the main factors, especially in the cosmetics sector, which has a major impact on consumer choice is undoubtedly the packaging material. Appropriate selection of raw materials affects the creation of the image of the company on the cosmetics market. The visual side of the packaging is particularly important for exclusive products. Nowadays, the designers involved in the packaging process have a wide range of plastics available, thanks to which they can afford to design visually interesting packaging, such as fancy perfume bottles, which take every possible shape, or decorative jar caps with creams [8].

The basic requirement for packaging is the protection of its contents. It must protect the product, in particular, against UV radiation, oxygen, carbon dioxide and moisture. The packaging material must not contain any toxic substances which could potentially contaminate the product and endanger the health of the consumer. In addition, the manufacturer of the cosmetic product must ensure that the particles of the packaging material do not migrate to the cosmetic product or that the particles of the cosmetic ingredients do not react with the plastic and thus cause damage to the packaging. Therefore, when designing a new packaging material, one should be extremely cautious and carry out a number of tests confirming its safety or select for packaging those materials which already exist on the market and have been thoroughly tested [9].

Consumers often believe that the packaging material determines the quality of a cosmetic product, for example that a cream in a glass jar will always be perceived as more 'luxurious' than a cream in a plastic jar. Women are particularly sensitive to this issue. Men often do not pay attention to the material the packaging is made of [10].

The most common safe packaging materials are:

Paper/Cardboard – Actually the most common raw material in the cosmetics industry. It is used primarily for the production of external packaging, which is designed to attract the customer's attention when shopping. These packages provide designers with a range of possibilities while designing. Thanks to the technologies available today, the packaging can be processed in an almost unlimited way, it can be shaped into original shapes, it can be given the desired texture, colour and even smell. Although cardboard is a flexible, easily treatable material, it is also hard and strong enough to perform its basic function of protecting the cosmetic product. Moreover, an important aspect to which consumers have recently become increasingly aware is that cardboard is a fully ecological and recyclable raw material [11].

Glass – As a packaging material, it is widely used in the cosmetic industry, from ampoules with e.g. hyaluronic acid to liquid foundations, face creams to

perfumes. Versatility is not the only advantage. Cosmetic manufacturers often choose glass packaging because glass successfully serves as a protection for cosmetics, protects against moisture, high temperature, air, and appropriately coloured dark glass perfectly protects against UV radiation [12]. Another very important advantage of glass is that it does not interact with the product and is therefore chemically indifferent to it. It is also a fully recyclable material. Glass packaging is reusable and more and more cosmetic companies are introducing the possibility of returning it in exchange for additional benefits during subsequent purchases. Unfortunately, it is not a flawless material. Its disadvantages include fragility and low resistance to damage caused by falls or shocks. Glass containers usually require additional cardboard packaging to protect them from damage during transport. The disadvantage of glass packaging is its weight, which, however, apart from its appearance, makes it seem exclusive [13].

Bamboo – This material has been used by people for more than 5,000 years in many areas such as construction, food production and textiles. Bamboo packaging has recently become more and more popular in the wake of the ecological trend. It allows companies to promote environmental care because bamboo is a fast-growing, renewable (the fastest-growing plant in the world) and fully biodegradable material. In addition to the obvious benefits for the planet, this material also has a number of advantages that make it ideal for use as a packaging material. It is particularly resistant to heavy loads and unfavourable environmental conditions and, most importantly, it does not interact with the cosmetic that is stored in it. Due to the fact that bamboo is an easy to process material, its flexibility allows for the creation of sophisticated shapes of packaging, and its natural colour and structure create the impression of a luxurious product [14].

Aluminium – the advantage of metal is its ease of processing and resistance to mechanical damage, at the same time low weight of the material itself [13]. Aluminium also fits in with recent trends where it is fashionable to obtain the metallic appearance of packaging [15]. This raw material is used in the process of so-called vacuum metallisation, where the material is covered with a layer of aluminium sprayed in vacuum conditions. This process takes place in the following way: in the vacuum chamber the metal is heated to the melting point and then the surface of the previously prepared material is evenly covered. For protection, the metallised surface is still coated with a varnish coating that protects it against UV radiation. Such a prepared product perfectly imitates metal packaging, and in addition to obtaining an unusual appearance, has a number of other advantages such as better abrasion resistance, increased resistance to temperature fluctuations and increased protection against light, moisture and chemical agents, which is extremely important in the case of packaging in the cosmetics industry [16]. Packaging made entirely of aluminium can be used for many cosmetic products and at the same time, thanks to its low weight, it reduces shipping costs. Other key advantages of aluminium packaging include protection against oxygen and a long service life [17].

Polyethylene (PE)/Polypropylene (PP) – Polyolefin is a group of polymers used in packaging, including polyethylene and polypropylene. They are used because they are relatively easy to process, are not too expensive, practical and, what is the most important for the cosmetics industry, biologically neutral [18]. Both polyethylene and polypropylene are thermoplastic polymers, i.e. they start to soften when heated to an appropriately high temperature and after cooling they transform back into a solid. The polymers of the thermoplastic group can be processed many times without any significant change in their properties. Technological progress has led to the fact that polymers from the polyolefin group play a major role in the plastics industry. It is estimated that they account for as much as 60% of global production and consumption of these materials. Some call them plastics of the future because of their different physicochemical properties and physiological indifference. In the cosmetics industry, high density polyethylene is most commonly used, which is characterised by high thermal resistance and resistance to loads (as opposed to low density polyethylene). Polypropylene is distinguished above all by its high rigidity and resistance to chemicals. It is also characterized by excellent transparency and at the same time creates an ideal barrier against moisture and odours from the environment. The increase in demand for plastic products keeps the polyolefin production index at a high level [19]. Unfortunately, the disadvantage of these polymers is that they degrade very slowly in the natural environment, e.g. polyethylene decomposes over about 300 years. However, these plastics can be successfully recycled, which reduces the consumption of natural resources and the amount of waste [20].

Polyethylene terephthalate (PET) – This is a high molecular weight polyester belonging to the group of thermoplastics, containing terephthalic acid and ethylene glycol. PET is widely used in the cosmetics industry as a packaging material. It is characterized by high mechanical strength, which does not weaken even at high temperatures. It is a rigid and hard material with a high degree of transparency. It has excellent resistance to dirt and is non-toxic and physiologically inert, so manufacturers of packaging for cosmetics use this material without worrying that it will react with the ingredients of the stored cosmetics. Unfortunately, PET packaging has a relatively short shelf life, with about 90 tonnes of this plastic going to landfill each year. Due to its high molecular weight and hydrophobicity, this material is resistant to environmental factors, as a result of which it decomposes for a very long time, becoming a ballast for the environment [21]. However, it is recyclable and the process is very cost-effective for this material. The technology, which was developed almost 50 years ago in the United States, makes it possible to obtain a special fibre from milled PET packaging, which is an excellent raw material for skiing, training or tourist clothing [22]. This fibre is more resistant to abrasion than e.g. wool and is not susceptible to microorganisms and many chemical agents [20].

Surlyn – This material, produced by DuPont, a chemical company, is referred to as a thermoplastic resin, obtained on the basis of ethylene copolymers. It is

characterized by extraordinary transparency and gloss, no optical defects, resistance to chemical agents, mechanical injuries and has less weight than glass. This material is very easy to process and form, thanks to which it is possible to create the most sophisticated shapes of packaging, which is the most widely used in the perfumery industry (where the packaging often has to reflect and suggest to the customer the nature of the perfume). Thanks to the fact that this material imitates glass so perfectly, Surlyn has already appreciated the world's largest cosmetic brands and eagerly uses it to create elegant and sophisticated designs. An example is the Versace brand and their famous *Bright Crystal* perfume, where the cap is made entirely of Surlynine and imitates a heavy, massive diamond that perfectly harmonises with the content of a glass bottle. Surlyn, unlike glass, is a scratch-resistant and unbreakable material and therefore offers a wide range of possibilities for designing sophisticated packaging. Surlyn comes in a colourless form as standard, and there is also a coloured form. The material allows cosmetics manufacturers to stand out on the shelf and increases the perception of the product as more luxurious. It does not react with the ingredients of the cosmetics and preserves the physicochemical properties of the product for a long time. Additionally, thanks to its low weight, it allows to reduce production and distribution costs. Surlyn packaging is fully recyclable, so it does not pose a serious threat to the environment [8].

Shape of packages

The shape of the packaging is another extremely important criterion for consumer choice. Packaging available on the market is divided into two types: traditional (type: jar, bottle) and modern and innovative (with futuristic, fantasy shape resembling e.g. a character from a fairy tale). Manufacturers assume that when designing the shape of the packaging, it is important to remember its usefulness; they believe that the customer will not buy the packaging if it does not fulfil its main function - product protection. It must also be stable and lie well in the hand. From the manufacturer's point of view, it must also be easy to produce, easy to store and also suited to the packaging equipment available in the company. However, in order to sell a product, it is important to remember that consumers pay attention to the fancy shapes of packaging, which stand out on the shelf. The most popular types of shapes that attract the attention of shoppers are:

- Edge patterns reminiscent of feminine shapes,
- Geometric, minimalistic and tasteful patterns,
- Pyramid-like conical patterns with flat base [11].

It has been proven that consumers make as much as 60% of their decisions on impulse after seeing the packaging. Therefore, the original and distinctive packaging allows for much easier recognition of the product and finding it on the shelf, e.g. after viewing the advertisement [23].

The most important distinguishing features of packaging on the market are: originality, modernity, innovation and aesthetics. It is good when the packaging

suggests the content - an example is Holika Holika, that created a packaging for the aloe vera gel in the shape of an aloe vera leaf, which immediately suggests to the consumer which product they buy, while the packaging is ergonomic, aesthetic and pleasing to the eye [24].

Recently, a strong trend has developed, according to which the packaging is supposed to surprise, delight and entertain the customer with its appearance, the packaging is to be aesthetic but also unusual. The masters in creating packaging that arouses positive emotions are Korean cosmetics brands such as Tony Moly, Holika Holika mentioned above or Etude House.

Another popular trend among cosmetics and their packaging is to compare them to food, most often sweets. Women are particularly interested in the "appetising" appearance of the packaging. With a choice of cosmetics of the same quality, but one in an ordinary, indistinguishable package, and the other in a package resembling for example a muffin, they will certainly choose the latter. The trend of "appetising" packaging dominates especially among make-up cosmetics, a popular brand which follows this trend is the Too Faced brand, which released eye shadow pallets in packaging resembling chocolate bars to the market [25].

Frequency of use of the packaging

Cosmetic packaging may be divided into those which are used only once and those which are reusable. Today's consumers of cosmetics rarely use reusable packaging despite the recent ecological trend. Rechargeable packaging is rarely associated with financial or environmental care. Consumers prefer to choose packaging with the original appearance and use it only once rather than using a refillable packaging. In order to encourage customers to buy and use reusable packaging effectively, companies introduce special benefits, such as a discount on the purchase of another cosmetic if the packaging is returned to the company or if the packaging is returned for refilling [10].

Design of packaging

Cosmetic packaging has recently taken the form of an effective marketing tool. The visual element of the packaging is at this moment freely used for the purpose of selling the product. Visual aspect of packaging has long been of interest to specialists in interdisciplinary visual quality research.

The visual layer of the packaging acts as a kind of magnet for the customer, attracting them with the shape, colour, material of which the packaging is made, as well as markings, prints or decorations. The human mind is very susceptible to the actions of the psychology of advertising, which is even able to shape in its subconscious the image of the quality of life. Nowadays, the availability of numerous offers forces consumers to make constant choices and to analyse which product will be better for them, which gives the companies some room for manoeuvre in the struggle for clients. That is why it is so important to design packaging well, which, as a marketing communication tool, has an incredible impact on the customer's purchasing decisions and choices [26].

Most of the consumer choices made at the time of purchase are due to the instantaneous impulse caused by the packaging, which has attracted the attention of the buyer. The most important prerequisite for starting packaging design is to identify the target customer group. The following economic and demographic criteria should be defined: gender, age, economic situation, as well as psychological and social criteria, i.e. values professed or circumstances related to upbringing. After defining the target group of consumers, it is possible to start designing the packaging elements, i.e.: graphic detail, text information, colour and size [10].

Colour effect on the customer

One of the most important elements that influence consumers' purchasing decisions is the colour of the product's packaging. In a world where the number of stimuli that affect the customer is almost overwhelming, it is the colour that allows for a special distinction. It has great power, it can influence the mood of the buyer, how his eyesight behaves or even the speed of decisions made. The knowledge of the psychology of colour is constantly used in marketing and promotion. Warm colours mean that the human brain consumes more energy to analyse them and thus stimulates them to act, while cooler colours mean that the brain consumes less energy to process them in a soothing and calming way. In order to secure an advantage on the cosmetic market, each manufacturer should be familiar with the secrets of choosing the colour of packaging [27].

Colour is an inseparable part of the package. It attracts the attention of the buyer and, at the same time, helps to identify the product quickly. In order to choose the right packaging colour, the psychological, physiological, chemical and physical aspects should be taken into account before starting the project. The influence of colours on the psychological background of a person, and therefore on his or her purchasing decisions, is significant. Research shows that the colours that contribute to the sale of the products are red, white, blue and brown. The age and gender of the potential customer is also important for recording the colour of the packaging. Cooler colours, such as blue and white, are more common among older people. On the other hand, younger people prefer lively, warmer colours, in decisive colours, which also depends on the trend prevailing in a given period.

When selecting a colour, one should bear in mind such factors as psychological conditions, marketing goal and generally understood aesthetics. You should also have a basic knowledge of colour science. This should be done by an expert and not by a person with strictly subjective preferences. It is also necessary to examine the colour habits of potential consumers, as the use of too "elegant" colours may result in a lack of interest in the product. Also, when introducing a product to foreign markets, one should become familiar with the meaning of particular colours in a given region and culture [10].

General symbolism and meaning of colours:

Red

This colour has a very strong emotional impact. On the shelf it attracts attention and makes you active, thus quickly making a decision to buy. It is also used to emphasize energy, strength and sensuality, which is why it is often the leading theme of advertising. An example is the Garnier brand, which has used red in its line of intensive body care products. This colour, combined with the words "intensive care", reinforces the meaning of this phrase.

Blue

It is a colour of peace and stability, conducive to concentration. It represents purity and perfection, and is associated with professionalism and mastery. Blue inspires confidence, means cleanliness and freshness. The Nivea brand has placed this colour in its best known products because it inspires trust among consumers and has a soothing effect. It is also associated with the long tradition of using the classic Nivea cream.

Yellow

Yellow is the colour of the sun and joy. It is associated with happiness and wealth, but also with ambition. Looking at this colour, the customer feels optimistic, willing to act and thus wants to try the product. Due to the fact that this colour evokes warm feelings and is associated with pleasure, it is often used and is ideally suited for cosmetic products that are used during holidays, i.e. in the packaging of sun creams.

Green

This colour is most associated with nature. It symbolizes health, harmony and freshness. Often, brands that want to be associated with nature use it to create packaging for their products. Green also gives consumers a sense of stability, balance and security. Yves Rocher brand, which is known for its use of only natural ingredients, decided to use the green colour in its packaging.

Black

Black is a colour that evokes both positive and negative emotions. In the cosmetics industry, it definitely awakens the positive ones. It is identified with what is luxurious, exclusive and prestigious. Black is a universal and timeless colour. The black colour is used by brands that want to emphasize their success as well as the high quality of their products, which can certainly be said about the Chanel brand.

Pink

The pink colour is associated with innocence, delicacy and romance for the consumer. In addition, it has a calming, anxiety- and conflict-reducing effect. It is often considered to be a non-serious and infantile colour and is therefore used by cosmetics manufacturers for children's products, especially young girls. The pink colour combined with the fairy tale illustrations was used by Beauty, which certainly attracts the attention of children, especially small girls [28].

Size of packaging and perception of the product

Packaging is a stimulus that acts on the customer, an important component of packaging is its size. Three-dimensional packaging gives amazing possibilities in the case of creating original forms of packaging, however, the size of packaging also has a significant impact on the customer's purchasing decisions. The size of the packaging is a clear indication to the customer of the amount of product he is buying. Therefore, customers very often pay attention to the apparent size of the packaging, but this does not always correspond to the actual amount of cosmetics. Slim, narrow and tall packaging seems to be larger for consumers than that with original, fancy shapes [29]. Manufacturers deliberately manipulate the customer by choosing packaging in accordance with Webber law. It is a psychological law that "concerns the ability to see the difference between stimuli". According to this rule, too small differences will not be noticed by consumers. This gives the producers an opportunity to showcase how to lower the cream's weight with the simultaneous use of e.g. a concave or double bottom in the package [30].

Packaging size is not only a matter of handling but also of rationality. Nevertheless, the packaging must be adapted to the product and should be handy and also easy to store [10].

Text on the packaging and illustrations






When designing packaging, one should remember to include the necessary information on the packaging. All cosmetic companies as well as those responsible for the implementation of the product on the European market are obliged to place the necessary information on the packaging. It must also be ensured that this information is easy to read, indelible and fully visible. The label of the packaging should include:

- details of the responsible person (name and address, if the cosmetics are imported the name of the country of origin should also be included),
- nominal content (except for samples, packages containing less than 5 grams/millilitres of product, disposable packaging),
- date of minimum durability of the cosmetic product (PAO symbol or the phrase 'Best used before'),
- batch number (identification mark),
- recommended precautions,
- cosmetic functions (if not apparent from product presentation).

The ingredients of a cosmetic product characterised according to the names adopted in the International Nomenclature of Cosmetic Ingredients - INCI, from the highest to the lowest concentration, should be preceded by a phrase 'Ingredients' [31].

In addition to the above mentioned information, the manufacturer of cosmetics is obliged to include appropriate markings on the label or leaflet accompanying the cosmetics (Table 1) [32].

Table 1. Compulsory graphic signs on packaging

Sign	Description
	Product shelf life after opening (PAO – Period After Open)
	Minimum durability date day-month-year or month-year)
	Reference to the attached information (leaflet, tape or card on the packaging)
	Compliance with applicable legislation (symbol on aerosol products)
	Total volume of packaging [ml] (symbol on aerosol products)

In addition to the most important information, illustrations may also be provided on the packaging label. The combination of a product and an illustration gives the manufacturer a certain amount of profit. A specific symbol or drawing attracts attention and makes it easy for the consumer to remember the product and to find it on the shelf at a later stage. The illustration must relate closely to the product itself, its function or its composition. It must create an impression of attractiveness and encourage the customer to buy. It should be remembered that the illustration on the packaging and the product itself should be adjusted according to the group of recipients, their age, preferences, views and tastes should be taken into account. The Le Petit Marseillais brand used neutral illustrations referring to the composition and smell of the product [10].

“Eco” trend on the market of cosmetic packaging

Along with the growing awareness of people in the field of environmental care for several years, changes in the cosmetics industry can also be observed. Consumers increasingly pay attention to the composition of the product, environmental certification and, consequently, to what the packaging is made of

and whether it is recyclable. Generally speaking, the customer is more and more often wondering about the impact of the cosmetics industry on the environment. These changes encourage producers to use materials that meet customer requirements, i.e. that do not increase environmental pollution and are fully recyclable, in the production of packaging.

Both global companies and small domestic companies take care of the environment extremely seriously. Companies such as L'Oreal and Unilever introduce fully recyclable materials into their packaging. Already in 2011, L'Occitane and Albea introduced tubes in their series of cosmetics, which consist of as much as half of the PCR material, i.e. Post Consumer Recycled, which means that the material comes fully from already used plastic. The Procter & Gamble Group has used bioplastic in its Pantene Pro-V Nature Fusion shampoo series, a material which is partly made from sugar cane.

The Aveda brand, which belongs to the Estee Lauder group, declares that the bottles and tubes they use to package their products contain at least 80% of plastic that has already been recycled. As has already been mentioned above, not only are global companies complying with the principles of ecology, but even the Polish company Dr Irena Eris Cosmetics Laboratory, established the Technology Inside Ecology line in 2009. The packaging is made of special paper, low-processed, FSC-certified (this certificate ensures that the paper used for packaging comes from responsible sources). Clochee is another domestic brand that relies on eco packaging. All its packagings, from plastic bottles to glass jars, are made of recyclable materials and is reusable.

The Fridge brand introduced an interesting concept. They use only glass jars as packaging, which the customer can always return and in return (after collecting the appropriate number of "flowers") they receive a new cosmetic.

One of the ideas introduced by packaging producers is to reduce their weight and thus the amount of material needed for their production. In this way, there are already tubes, which instead of being closed separately have a seal welded to the body of the tube. An interesting idea was applied in the tubes by the German company Uberwood, the material of which the tube is made contains 25% of components obtained from wood, these tubes have a specific appearance and smell.

Despite the many advantages of ecological packaging, it is often difficult to implement it on the market. It is connected not only with the abandonment of cheap and easy solutions, but also with the increase in the price of the cosmetic itself, which in turn leads to a reduction in sales of the product. However, together with the growing awareness of consumers, the requirements placed on packaging manufacturers will also increase, and we can only assume that the development of technology will make it easier and cheaper for them to implement ecological packaging on the market, which will certainly translate into sales success and will also benefit the environment [33].

Conclusion

The most important function of the packaging is to protect the cosmetic products. Nevertheless, also the graphic design and shape of the packaging decide about the attractiveness to the customers and influence their decision to buy. Actually, the packaging is not only an element of promotion, but a part of the company's marketing strategy as well.

Also the environmental aspects of the cosmetics production are important. The producers must follow the requirements before they decide about the composition of the product. The packaging must possess an environmental certification and the information concerning the recyclability of the packaging.

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