

RIISING TREND IN FUNCTIONAL TEXTILES

“COSMETIC TEXTILES”

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ABSTRACT

Through the history, for the people dressed in order to veil or smarten up, beside the features as durability, aesthetics, design and fashion, today, functional properties of textile products began to be more important than ever. In recent years, cosmetic textiles take over as a rapidly growing and developing segment of functional textiles used in health and hygiene sectors, means new target groups and new markets for textile industry.

Key Words: cosmetic, textile.

1. INTRODUCTION

The wellness or health promoting aspects of textile finishes have gained great importance due to concept of wellness related to health and healthy living in the last times [1]. Wellness has derived from the words well being and fitness, and means that a person feel herself physically and psychologically good. Wellness could be provided by body care, balanced nutrition, exercise and textile wear products. Cosmetic textiles, which evaluated as wellness textiles [2], are accepted one of the best examples of these wear products.

2. COSMETIC TEXTILES-“COSMETOTEXTILES”

According to Cosmetic Directive (76/768/EEC), a “cosmetic product” is defined as any substance or preparation intended to be placed in contact with the various external parts of the human body or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance and/or correcting body odors and/or protecting them or keeping them in good condition [3].

Cosmetic textiles are textile materials which release substances or solutions in given time intervals and are claimed to have properties such as cleaning, perfuming, protecting and correcting body odors [1].

There is nowadays an increasing vogue for so-called cosmetic textiles which are essentially garments that are designed to come into contact with the skin, which then transfer some active substances that may be used for cosmetic purposes. Especially in the developed nations people desire to live a long and qualified life and look youthful, so there is now a demand for products which are designed to beautify and to combat ageing [4].

Ingredients used in cosmetic textiles obtained from 3 main categories. These are synthetic and inorganic compounds, animal and herbal contents. Some of the commonly used components are iron oxide, zinc nanoparticles, titanium oxide and zinc oxide.

Lots of medical and ve scientific researchs have shown that herbal contents are more safe than chemical and animal contents. Some of the cosmetic substances herbal and animal originated are on the table [5].

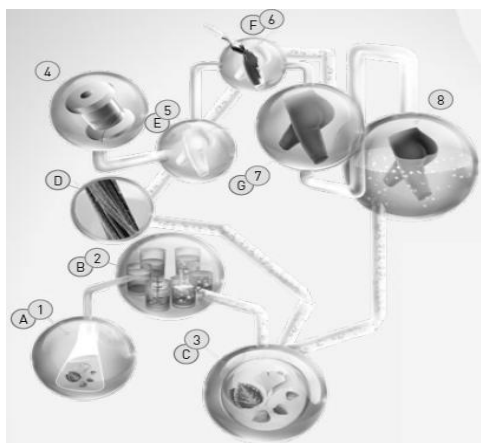
Table 1. Cosmetic Ingredients Herbal and Animal Originated

Cosmetic Ingredients Herbal Originated	
Name	Function
Aloe Vera	Protects skin moisture, stimulates blood circulation, rejuvenates the skin and tightens.
Carrot Oil	Softens skin and tightens, heal skin disorders like eczema, dermatitis and rash.
Glycerin	Used as a solvent, lubricator and softener in cosmetic industry.
Coffee	Helps to reduce cellulite as a stimulant and antioxidant, improve cellular circulation.
Grapefruit Oil	Regulates the lymphatic system, helps reduce cellulite, clears oily skin and acne.
Jasmine Oil	Used for relaxing and as a perfume. Good for dry and sensitive skin.
Lavender Oil	Healing, abirritant and helps rejuvenation, acts as antiseptic and antibacterial.
Shea Butter	Used in cosmetic as moisturiser and emollient.
Cosmetic Ingredients Animal Originated	
Name	Function
Chitosan	Moistens, nourishes and heals the skin texture. Cilt dokusunu nemlendirir, besler, iyileştirir. Stimulates the rejuvenescence
Squalane	Helps the rejuvenescence and prevents formation of brown maculas on the skin.
Cyclotella	It acts as a helper to fight with cellulite.
Cod Liver Oil	Nourishes the skin.

3. MANUFACTURING COSMETIC TEXTILES

Developments in cosmetic textiles actualized with microcapsules, containing cosmetic ingredients, physically or chemically bound to the fibre surface [6]. Microencapsulation which acts an important role in development of cosmetotextiles, is a technique by which solid, liquid or gaseous active ingredients are packaged within a second material for the purpose of shielding the active ingredient from the surrounding environment.[7].

Microcapsules can be applied to the textiles by padding, coating, spraying or immersion methods. For all these methods, a binder is required to fix the capsules on to the fabric. [8]. Manufacture of cosmetic textiles is shown in Fig.1 [9].



- A -1 Formulation of active cosmetic ingredients
- B -2 Manufacture of micro-capsules
- C -3 Active cosmetic ingredients micro-encapsulated
- D- Incorporation of micro-capsules into the fiber
- 4 Yarns
- E -5 Manufacture of the textile
- F -6 Dyeing
- G- Finished product dyed micro-encapsulated
- 7 Finished product dyed
- 8 Micro-capsules fixed onto the dyed finished product

Figure 1. Manufacturing cosmetic textiles

4. WHY TEXTILES USED FOR COSMETIC PURPOSES?

Large number of attempts on cosmetic textiles, cause the questions why textiles are used for cosmetic purposes. Consumers does not have enough information on these products, so although their interests in these products, they are skeptical.

Conducted study in the research scope, different models from bottom and top products will be chosen and designed, and manufactured. Microcapsules, containing different cosmetic ingredients will be transferred on to manufactured products by different microencapsulation methods. Cosmetic textile products will be tested with different objective and subjective methods, and investigated in terms of clothing comfort and human health, and the obtained datas will be used for product development.

5. DISCUSSION

Cosmetic textiles are claimed to have cosmetic effects such as slimming, firming, moistening. However these claims are accepted only as a marketing strategy by the consumers, because these claims are not supported by the science based studies.

The psychological obstacles to cosmetic textiles can be summarized as follows.

- It is not normal for consumers that the cosmetic applications made through by textiles,
- There are so many fake cosmetic textiles on the market, for this reason consumers think that cosmetic textiles are only marketing products and don't have any real effects,
- Ignoring the requirement of communication and education about cosmetic textiles by textile brands and retail chains,
- Because of the specified reasons above, it's possible to say that costumers are in need of getting information about real and fake cosmetic textiles.

Cosmetic textiles with real cosmetic effects can be defined in this way;

- Large quantity of cosmetic substance content,
- Clear and prominent claims about cosmetic performance and proven of these claims scientifically with cosmetic efficacy studies and/or costumer satisfaction surveys,
- Accordance with European Cosmetic Directive,

- Be more expensive than ordinary textiles (real added value) [10].

6. CONCLUSION

As a result of the literature reviews on cosmetic textiles is a serious deficiency in this area is outstanding. Also cosmetic textiles surround the body like a second skin and contact with the skin. Therefore it is very important for human health to determine the cosmetic efficacy of these clothes and their impacts on the human skin.

In this respect, the scope of the planned study, it is aimed to investigate that the actual cosmetic effects are satisfied or not and to specify whether cosmetic textiles cause any itching, redness, irritation and other adverse effects on the human skin. Therefore, it is aimed to develop standard science based test methods by conducted studies and collecting datas with the case report forms approved by the relevant ethical committee.

Cosmetic textile products developed and improved with the study, will ensure as well as high customer satisfaction by comfort features, cosmetic efficacy and also ability to be a skin friendly product, will create a market where the high value added products are sold in the textile industry. Study method will contribute to the literature and guiding for further studies on this subject.

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