Federal State Institution of Higher Professional Education

Saint-Petersburg State University

Graduate School of Management

**Strategy of import substitution for «Pharmtek» company**

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# INTRODUCTION

In modern Russia, import substitution is an urgent topic in the face of a decrease in the volume of supplies from most European countries. This process aims to reduce dependence on imported components and reduce logistics costs. For 2022, about 56% of companies in Russia faced the need for import substitution in the field of raw materials procurement. Although logistics problems began during the COVID-19 pandemic and significantly affected the efficiency of production processes for Russian companies that were dependent on imported raw materials, the situation has now become even more difficult due to the departure of many foreign companies, which for many years have been regular suppliers of raw materials for Russian manufacturing companies. But even despite this, in more than 57.3%[[1]](#footnote-1) of companies, the import substitution strategy is implemented without the approval of a formalized document and has no structure and long-term planning. One of the industries where the issue of dependence on imported components is currently particularly acute is the production of pharmacy cosmetics.

Dermatological preparations are gaining more and more popularity every year not only among women and adolescents, but also among other target groups, since the condition of the skin greatly affects self-esteem, success and perception of a person by society. And for this type of cosmetics, it is necessary to use in the production of components that meet high quality and safety standards.

This paper will describe in detail the process of searching for potential Russian suppliers for some of the necessary components for the production of cosmetics from «Pharmtek».

The company exists on the Russian market for 15 years and during this time has taken a strong position in the field of dermatological preparations. And also at the present time it has established itself outside of Russia, having established deliveries in Belarus and Uzbekistan. The company is constantly looking for opportunities for further development and growth.

The relevance of this paper is confirmed by the fact that the company currently faced with the problems of purchasing high-quality components for the production of pharmacy cosmetics directly from European manufacturers. Therefore, the company needs to find new suppliers of some components that would be fully suitable for certain characteristics for the production of pharmaceutical cosmetics.

The paper is written in the form of a consulting project. The purpose of the work is to create recommendations for development strategy of import substitution for «Pharmtek» company.

1. To achieve research goal the following objectives are stated:
2. Make an analysis of «Pharmtek» activities. Describe the history of the company, the products and competencies produced by the company.
3. Define managerial problem
4. Make an analysis of the pharmacy cosmetics market in Russia
5. Make an analysis of potential suppliers of the necessary components
6. Create recommendations for development strategy of import substitution

The **object** of the study is the pharmaceutical company «Pharmtek», the **subject** of the study is the company's strategy of import substitution for the production.

The first chapter of paper contains a description of the history and activities of «Pharmtek», as well as an analysis of «Pharmtek» resources and competencies. Also a description of the products produced.

The second chapter contains a description of the Russian market of pharmacy cosmetics. Review of Russian and foreign companies-suppliers of chemicals. As well as a comparative analysis of the suppliers of the necessary components.

The third chapter contains an analysis of two Stearic acid supplier companies, namely "Nefis Cosmetics" and "Himavangard". And developing recommendations for import substitution based on the previous chapters

The papers of domestic and foreign scientists formed the basis of this paper. To write this work, the works of such authors as Moiseev V.V., Titova O.V., Porter M.E. and Douglas A. Irwin were studied.

To obtain information about the company's activities, primary materials provided by the company and information from the company's official website were used, and in March 2023, a text interview was conducted with the medical director of Pharmtek, Alla Feinshtein.

To analyze the Russian cosmetics market, analytical reviews of the Russian pharmaceutical market from the marketing agency DSM Group, analytical publications of the Russian News Agency TASS, as well as information from the official websites of Russian chemical companies, information from the website of the Federal Agency for Technical Regulation and Metrology were used.

For the analysis of foreign chemical manufacturing companies, data from the relevant official websites, as well as correspondence with representatives of the respective companies were used.

#

# CHAPTER 1. COMPANY DESCRIPTION AND MANAGERIAL PROBLEM STATEMENT

## 1.1 Company Description

«Pharmtek» is a Russian pharmaceutical company that has successfully established itself not only in the Russian market of dermatological preparations, but also in the markets of Belarus and Uzbekistan.

Research and production company «Pharmtek» was founded in 2008 and is currently engaged in scientific development, production, distribution and active promotion of drugs for the treatment and prevention of various dermatological diseases.

«Pharmtek» products consistently rank among the top most used dermatological products, according to market analysis from research companies Ipsos and DSM Group.[[2]](#footnote-2)

The company's activities include:

Dermatology Research

Development of dermatological products

Consulting activities with current doctors

Production of products is carried out by a contract method and is manufactured by ZELENAYA DUBRAVA, the drugs are undergoing clinical trials on the basis of leading Russian scientific and clinical institutions.

## 1.2 «Pharmtek» resources and competencies analysis

To determine the competitive advantages that can help in the process of import substitution, it is necessary to assess Pharmtek's resources and competencies. First of all, it is necessary to identify the key success factors for the pharmaceutical cosmetics market. All the factors described below were highlighted during an unstructured interview with a «Pharmtek» representative, an analysis of the pharmaceutical cosmetics market in Russia and a study of the activities of the main players in this market.

1. The presence of a research department

2. Availability of quality and innovative pharmaceutical cosmetics

3. Availability of own production facilities

4. Wide range of products offered

5. Multi-channel product distribution

6. Availability of qualified specialists

7. Improved communication

8. Participation in thematic conferences

9. Established partnerships (distributors, contract manufacturing, suppliers, scientific and clinical institutions on the basis of which products are tested, etc.)

10. Established partnerships with doctors and specialists in the dermatological field

11. Marketing and a strong presence in the information field

Thus, it can be determined that in the field of pharmaceutical cosmetics there are many key success factors that can ensure the company's high competitiveness in the market. «Pharmtek» has the following resources and competencies:

Resources:

Physical resources: Capacity to develop and test new formulas

Intellectual resources: ownership of patents for developed formulas, research and development potential

Human Resources: 130 qualified people in various fields, such as medical specialists, medical representatives, marketing managers and so on

Competencies:

1. Ability to quickly respond to changing audience needs by testing new formulas and releasing new types or categories of pharmaceutical cosmetics

2. Ability to develop new formulas with proven efficiency

3. Ability to contribute to the development of dermatology in Russia, through the writing of scientific articles, in collaboration with current doctors and specialists in the field of dermatology

4. Ability to maintain contact with leading doctors and specialists in the field of dermatology

5. Ability to compete at scientific conferences and exhibitions on the topic of dermatology and cosmetology.

6. Broad market presence. «Pharmtek» has official offices in 56 cities, and pharmaceuticals are sold in more than 50,000 partner pharmacies.

*Tab. 1. Resourses and Competencies of "Pharmtek"*

|  |  |  |
| --- | --- | --- |
| **Resources and Competencies** | **Importance** | **Company valuation** |
| Facilities to develop innovative formulas | 5 | 4 |
| Facilities for the production of pharmacological cosmetics | 3 | 1 |
| The image of a reliable company in the eyes of consumers | 5 | 4 |
| Qualified personnel | 3 | 4 |
| Strong raw material supply chains | 5 | 2 |
| Wide range of products offered | 4 | 5 |
| Ability to organize the continuous development of innovative pharmacological agents,  | 5 | 3 |
| Ability to quickly respond to changing trends and market demands | 5 | 3 |
| Ability to organize a high presence at scientific conferences and exhibitions | 3 | 5 |
| Ability to establish stable contacts with leading specialists and doctors | 3 | 5 |

*\*Made by the author based on an analysis of the pharmaceutical cosmetics industry, as well as an interview with a representative of the «Pharmtek» company (Appendix 1)*

The resources and competencies that were identified in the analysis above will form the basis for further analysis and provide final recommendations to «Pharmtek».

##

## 1.3 Company products description

The company operates in the direction pharmacy cosmetics dermatological products.

Currently, the company owns 8 brands: «ALGEL», «SKINACTIV», «AQUAPILING», «LIPOBASE», «ZINOVIT», «Clavio», «MIKO-STOP» and «VARTOX». In total, eight brands contain 45 different products aimed at solving various dermatological problems.

In this paper, the products of the brand «LIPOBASE» will be considered in detail. «LIPOBASE» is a brand of dermatological cosmetics for normal, dry, atopic and sensitive skin. The main volume of products in Russia is distributed through 50,000 partner pharmacies throughout the country. There are also regional representatives in 56 cities. The product is also distributed online through such market places as OZON, Wildberries and Yandex Market. The brand is among the top 4 brands of pharmacy cosmetics in Russia for 2022, and the brand also has one of the highest shares of online sales, which is 15%. General sales in 2022 amounted to 730 million rubles, which is 29% more than the same figures in 2021[[3]](#footnote-3).

***Fig. 1.*** *Share of online sales of pharmaceutical cosmetics in Russia in 2022*

***Source:*** *Made by the author, based on information from DSM report*

Currently, the «LIPOBASE» brand has 16 unique product names.

*Tab. 2.The list of pharmacological cosmetics under the «Lipobase» brand from «Pharmtek»*

|  |  |
| --- | --- |
| **Product name** | **Product description** |
| LIPOBASE® гель для душа липидовосстанавливающий | Lipid-restoring shower gel. Designed to cleanse, soften and reduce dry skin. |
| LIPOBASE® шампунь увлажняющий | Moisturizing shampoo. Designed for daily care of sensitive and dry scalp. |
| LIPOBASE® baby крем детский для тела | Children's moisturizer with antiseptic effect |
| LIPOBASE® baby гель-масло от «молочных» корочек  | Baby gel oil designed to gently remove seborrheic crusts. |
| LIPOBASE® baby детское масло для купания | Baby oil for hygienic care of dry and irritated skin. |
| LIPOBASE® baby крем под подгузник | Baby cream for the prevention of diaper dermatitis and the elimination of skin irritations. |
| LIPOBASE® baby масло детское для ухода и массажа | Baby moisturizing oil for daily massage. |
| LIPOBASE® baby шампунь детский увлажняющий | Baby shampoo with moisturizing effect. Suitable for irritated skin. |
| LIPOBASE® baby эмульсия детская для тела | Baby emulsion for recovery after irritation and protection against allergens. |
| LIPOBASE® бальзам интенсивный для сухой и очень сухой кожи | Intensive lipid-restoring balm is intended for the care and restoration of dry, very dry and atopic skin, including against the background of chronic changes (chronic dermatitis: atopic dermatitis, eczema, psoriasis, etc.) |
| LIPOBASE® бальзам-барьер для губ и лица «Восстанавливающий» | Moisturizing lip & face balm. |
| LIPOBASE® крем защитный | Body cream. Eliminates irritation and dry skin. |
| LIPOBASE® крем | Cream for complex care of sensitive body skin. |
| LIPOBASE® масло для ванны и душа | Oil for hygienic care of dry skin. |
| LIPOBASE® эмульсия д/тела защитная | An emulsion that provides comprehensive skin care for any condition accompanied by dryness, flaking, irritation, itching. |
| LIPOBASE® эмульсия для тела | Moisturizing emulsion to restore the stratum corneum. |

*\*Made by the author, based on information from the official website of "Pharmtek"*

## 1.4 PESTEL analysis

PESTEL analysis is an effective tool for analyzing the external environment. PESTEL analysis is necessary to assess the key market trends in the industry and identify possible development paths. In this regard, a PESTEL analysis of the pharmaceutical cosmetics market in Russia was carried out for Pharmtek.

**Political**

**Difficult foreign policy situation**

Due to the deterioration of relations, mainly between Western countries and Russia, sanctions were imposed on Russia, prohibiting the import of cosmetic products from the United States into Russia. And many large European brands left the Russian market, limited the range or rebranded to avoid reputational losses. All this led not only to the disappearance of popular Western brands on the Russian pharmaceutical cosmetics market, but also to the disappearance of most of the Western companies that were engaged in the supply of chemicals necessary for the production of pharmaceutical cosmetics in Russia. The pharmaceutical industry is one of the most import-dependent in the Russian economy, so such restrictions have forced Russian manufacturers to urgently look for new suppliers in Russia, Asian countries or resort to the services of companies that carry out parallel imports to Russia. This inevitably leads to an increase in the price of chemicals, an increase in the likelihood of problems in logistics, and so on.

**Economical**

**Unstable ruble exchange rate and inflation**

Since 2019, inflation in Russia has been growing non-stop, which affects the cost of consumer goods. In 2022, inflation reached its highest level in the last seven years[[4]](#footnote-4). Also, the instability of the ruble against the dollar leads to an increase in prices for goods, depreciation of people's savings and a deterioration in the life of the population.

*Fig. 2. Inflation rate in Russia*

*Source: Made by the author, based on information from Federal State Statistics Service*

The unstable exchange rate of the ruble has a particular impact on the cost of imported goods, while the pharmaceutical cosmetics industry in Russia is very dependent on imported chemicals.

**Low purchasing power of the population**

In 2022, the real incomes of Russians fell by 1.4%. The fall of the ruble led to a decrease in trade with Western countries and sanctions led to a significant increase in prices in all market segments. Coupled with record inflation since 2015, the purchasing power of the population has declined significantly.

**Rising prices for raw materials**

The dependence of the Russian pharmaceutical cosmetics sector on imports, the decriminalization of parallel imports, the imposition of sanctions, supply disruptions, the unstable ruble exchange rate, a sharp reduction in the number of suppliers - all this affects the rise in prices for raw materials, which in turn affects the increase in the cost of the final product.

**Social**

**Decline in fertility**

Children's cosmetics are one of the largest sectors of pharmacological cosmetics in general. In 2022, the birth rate decreased by 6.9% compared to the same indicator in 2021. This is mainly due to falling living standards[[5]](#footnote-5).

**Consumer distrust in Russian cosmetics**

In order to identify the attitude of Russian consumers to pharmaceutical cosmetics produced in Russia, a survey was conducted in the form of an online questionnaire on the Vkontakte social network. A total of 210 people completed the survey. The survey was completed by 69% of women and 31% of men, aged 19 to 55, and living in Russia. The average age of the respondent was 31 years.

One of the questions had the wording “Do you trust Russian-made pharmacological cosmetics?” As can be seen from the pie chart below, more than half of the respondents expressed distrust of pharmaceutical cosmetics produced in Russia. 31% of respondents do not pay attention to the country of origin, and only 14% of respondents trust Russian brands ***(Appendix 2).***

*Fig. 3. Distribution of answers to the question "Do you trust Russian-made pharmacological cosmetics?"*

First of all, this is due to the confidence of consumers with a lower efficiency of goods, compared with foreign counterparts, or in general, in the confidence of the complete absence of a positive effect after using the product. Consumers also have questions about the safety of Russian goods.

**Request for "healthy beauty" in society**

Pharmacological cosmetics includes pharmacological components. This fact imposes certain rules on the use of this category of cosmetics, which are more stringent and detailed than when we are talking about ordinary cosmetics from the mass market. This explains their more tangible claimed impact when used. The two main categories of pharmacological cosmetics are dermatological preparations aimed at eliminating skin defects, irritations, allergies and skin diseases. And therapeutic and prophylactic products aimed at preventing the development of skin diseases, combating age-related skin changes, pigmentation, etc. The condition of the skin greatly affects the self-esteem of people and brings psychological discomfort, regardless of gender, especially when we talk about young people who very often face skin problems due to hormonal changes. Also popular in society are anti-aging cosmetics aimed at consumers over 30 who are trying to maintain a more youthful appearance of the skin.

**Ethical component**

In recent years, people have increasingly begun to pay attention to ways to test cosmetics, reacting negatively to testing cosmetics on animals. In Russia, there is still no ban on testing cosmetic products on animals. And many brands are still testing their products in such an inhumane way. Brands that refuse to test their products on animals have a greater credibility among buyers. And many people refuse to use cosmetics that have been tested on animals for ethical reasons.

**Technological**

**Development of the chemical industry in Russia**

From 2009 to 2022, there has been an increase in the production of chemical products in Russia. During the COVID-19 pandemic, the chemical industry was one of the few sectors that continued to ramp up production. Nevertheless, the production of chemical products in Russia accounts for 1.1%[[6]](#footnote-6) of the total volume of world chemical products. Currently, there are enterprises in Russia that produce chemicals for cosmetic products, not all the necessary components can be replaced with Russian-made components due to the small number of enterprises or their absence at all. However, domestic demand for chemical components is constantly growing, which may lead to the growth of enterprises that produce components for the production of cosmetic products.

**Growing use of marketplaces**

The popularity of market places in Russia has grown every year. Especially the growth in the popularity of online shopping and especially online purchases of medicines and health products occurred due to the COVID-19 pandemic. For example, the turnover of Wildberries in 2022 increased by 98% compared to 2021. Moreover, after goods from the category of household goods, the most dynamic growth was observed in the category of health products. The growth was 124% compared to the same indicators in 2021[[7]](#footnote-7). The use of online sales for pharmaceutical cosmetics was insignificant, since the main sale is carried out through partner pharmacies, but now the use of marketplaces as one of the distribution channels gives a great competitive advantage.

**Environmental degradation leads to skin problems**

This item is very closely related to "Request for "healthy beauty" in society", which was mentioned among the social factors. The deterioration of the ecological situation affects the health of people and their immunity, which is also manifested in the condition of the skin.

**Environmental degradation**

The cosmetics industry is a huge contributor to environmental pollution. This applies not only to the plastic from which packages are made, which are then thrown away. Every year, the industry creates more than 120 billion plastic packaging, most of which cannot be recycled[[8]](#footnote-8). Also, the problem lies in the compositions, since some components, for example, pigments, can harm the environment and animals. In Russia, this topic is not as common and discussed as in other more developed countries, but environmentally friendly production strengthens the reputation of the brand in the eyes of consumers.

**Legal**

**Parallel Import**

On March 29, 2022, the Russian government allowed the import of goods into Russia without the consent of the manufacturer. Until March 29, 2022, this was considered a violation of the law[[9]](#footnote-9).

Parallel import allows to independently import goods into Russia, purchasing them not only from the manufacturer, but also through other distributors. The list of goods for which parallel imports are allowed includes products of inorganic chemistry, such as oxides and hydroxides. Organic chemical compounds such as alcohols. As well as essential oils and other chemical components that is used in the creation of decorative, care and pharmaceutical cosmetics[[10]](#footnote-10).

**State regulation**

In Russia, pharmacological cosmetics are not identified as a separate category of goods at the legislative level and do not need special certification, which is required for medicines. Pharmacological cosmetics refer to cosmetics, which in turn do not require deep and long-term clinical trials. The main criteria for the approval of cosmetics are normal toxicological and microbiological indicators. While in Europe and the USA "Cosmeceutical" is allocated in a separate category of goods, which are classified as cosmetics and medicines. There are also special cases when such goods are fully classified as medicines.

The above analysis is an analysis of the macro environment. The results of pest analysis are presented in the table below (*Tab. 3.*).

*Tab. 3. PESTEL analysis*

|  |  |  |
| --- | --- | --- |
| **Factor types** | **Factors** | **The significance of the influence of the factor** |
| **By time** | **By type** | **By dynamics** | **Relative significance score (1-min, 5-max)** |
| **Political** | Deterioration of political relations with other countries and unstable political situation | **N\F** | **-** | > | **5** |
| **Economic** | Unstable ruble exchange rate and inflation | **N\F** | **-** | > | **4** |
| Low purchasing power of the population | **N\F** | **-** | > | **4** |
| Rising prices for raw materials | **N\F** | **-** | > | **5** |
| **Social** | The fall in the birth rate of the population | **N\F** | **-** | = | **2** |
| Consumer distrust in Russian cosmetics | **N** | **-** | < | **3** |
| Request for "healthy beauty" in society | **N\F** | **+** | = | **3** |
| Ethical Issues | **N\F** | **+** | > | **1** |
| **Technological** | Development of the chemical industry in Russia | **N\F** | **+** | > | **4** |
| Growing use of marketplaces | **N\F** | **+** | > | **5** |
| **Environmental**  | Consequences of environmental degradation for human health | **N\F** | **+** | > | **3** |
| Environmental degradation | **N\F** | **-** | > | **2** |
| **Legal** | Parallel Import | **N\F** | **+** | > | **5** |
| State regulation | **F** | **+** | = | **2** |

*\*Made by the author*

## 1.5 SWOT analysis of a Russian pharmaceutical company «Pharmtek»

In order to obtain a complete assessment of the impact of internal and external factors on the «Pharmtek» company, a SWOT analysis was made.

*Tab. 4. SWOT analysis*

|  |  |
| --- | --- |
| **S strengths** | **W weakness** |
| Brands awareness among customersEstablished communication of medical representatives with leading Russian doctorsOwn laboratories. Independence from foreign laboratoriesUse of natural ingredientsWide range of productsProducts are not tested on animals | Above average priceDependence on European raw materials |
| **O opportunities** | **T threats** |
| Russia's Growing Chemicals MarketReduced competition with foreign productsDevelopment of online sales | Sanctions pressure Unstable ruble exchange rate and rising prices for raw materialsParallel ImportConsumer distrust of Russian components |

*\*Made by the author*

**Strengths**

**S1 Brand awareness among customers**

«Pharmtek» products can be found in 50,000 pharmacies throughout Russia. The company has existed since 2008 and during this time the company's representative offices have appeared in 56 cities of Russia, as well as in Belarus and Uzbekistan. Two of «Pharmtek» brands are in the Top-6 most popular brands of pharmacy cosmetics in 2022. Considered in this paper, «LIPOBASE» and «ZINOVIT» are ranked 4th and 6th, respectively. And the total sales of only these two brands in 2022 amounted to 1,280 million rubles. Also, a steady growth in sales indicates the growing interest of the consumer in the brand. Compared to 2021, «LIPOBASE» brand sales growth in 2022 was 29%[[11]](#footnote-11).

**S2 Established communication of medical representatives with leading Russian doctors**

Medical representatives of the company attend events dedicated to discussions of the development of dermatology in Russia, consult doctors. The company also makes scientific publications on its website, written jointly with leading Russian dermatologists, intended for doctors.

**S3 Own laboratories. Independence from foreign laboratories**

«Pharmtek» has a long practical experience in developing formulas for its products. All formulations of «Pharmtek» preparations are original. Preparations are created in compliance with international quality standards in close cooperation with leading experts in the field of dermatology, undergo clinical trials on the basis of leading Russian scientific and clinical institutions (North-Western State Medical University named after I.I. Mechnikov, Pavlov University, St. Petersburg State Pediatric Medical University, PRMU) and have proven effectiveness, and also fully comply with all necessary standards.

**S4 Use of natural ingredients**

The maximum preference in the compositions is given to natural and skin-related components with a high safety profile. The products do not contain parabens, phthalates, alcohol and mineral oils. Much attention is also paid to the hypoallergenic compositions.

**S5 Wide range of products**

«Pharmtek» has 8 brands of medicinal cosmetics with 45 unique product names that are aimed at correcting a wide variety of dermatological problems.

**S6 Products are not tested on animals**

First of all, the refusal to test products on animals improves the image of the company in the eyes of consumers, since in recent years more and more people have begun to have a negative attitude towards testing cosmetics on animals. It also contributes to the development of alternative ways to test cosmetics and increase awareness of such methods.

**Weakness**

**W1 Above average price**

The company has a wide range of unique products. It was also previously said that pharmacy products are narrowly focused and each individual product is designed to solve a specific problem. But among other brands that are in the top 10 best-selling drugstore cosmetics brands, there may be some products that are slightly similar in their qualities and purpose of use. It can be seen, cream-type products are several times more expensive than similar products from competitors. Given that cream and oil products are the backbone of the «LIPOBASE» brand, this situation could put the company at a disadvantage. On the other hand, «LIPOBASE» has the most extensive selection of highly targeted cream and oil products among competitors, which significantly distinguishes the brand from the rest.

*Tab. 5. Comparison of prices for body creams between companies that are in the top-10 most popular pharmaceutical companies in Russia in 2022*

|  |  |  |  |
| --- | --- | --- | --- |
| Brand name | Name of product  | Price per pack (rub) | Price per ml (rub) |
| LIPOBASE | LIPOBASE® крем | 553 | 7.3 |
| Loshadinaya Sila | «Буренка» | 562 | 2.24 |
| 911 Vasha Sluzhba Spaseniya | Крем для тела  | 145 | 1.45 |

*\*Made by the author based on information from the official website of the «Planeta Zdorov'ya» pharmacy network [Accessed 19 May 2023]*

*Tab. 6. Comparison of prices for shampoos between companies included in the TOP-10 most popular pharmaceutical companies in Russia in 2022*

|  |  |  |  |
| --- | --- | --- | --- |
| Brand name | Name of product | Price per pack (rub) | Price per ml (rub) |
| LIPOBASE | LIPOBASE® шампунь увлажняющий | 527 | 2,11 |
| Loshadinaya Sila | Шампунь для роста и укрепления волос  | 664 | 2,6 |
| Alerana | Шампунь Alerana PH-БАЛАНС увлажняющий  | 531 | 2,1 |

*\*Made by the author based on information from the official website of the «Planeta Zdorov'ya» pharmacy network* *[Accessed 19 May 2023]*

**W2 Dependence on European raw materials**

 At the moment, the supply of European raw materials to Russia has either stopped due to the refusal of some Western companies to work with Russian companies, or it has become very difficult due to logistical problems and the volatility of the ruble. And even if it is possible to establish a supply chain from Europe, then possible political upheavals in the future may jeopardize production. Also, Russian companies are now very exposed to the risk of exchange rate fluctuations, which can lead to a significant increase in prices for the cost and imported products and, consequently, lead to a deterioration in the financial results of the company.

**Opportunities**

**O1 Russia's Growing Chemicals Market**

From 2009 to 2022, there is an increase in the production of the chemical industry in all sub-sectors. Also during the COVID-19 pandemic and the difficult situation in logistics, the chemical industry was one of the few areas that continued to increase production. In 2023, there is a decrease in production due to sanctions on the export of Russian chemical companies, but domestic demand is gradually growing. Currently, there are enterprises in Russia that produce chemicals for cosmetic products, which can surpass Chinese and Indian counterparts, as well as approach the reference European raw materials[[12]](#footnote-12).

**O2 Reduced competition with foreign products**

Foreign and especially European products have not disappeared from the Russian market and the consumer still has the opportunity to purchase cosmetics from European manufacturers. But due to logistical problems, the range of products in all segments of the perfumery and cosmetics market has decreased by 25%, while the cost of imported cosmetics is tied to the unstable ruble exchange rate.

**O3 Development of online sales**

For a long time, pharmacies were the main channel for the sale of medical cosmetics. Currently, percentage of online sales in the medical cosmetics sector is quite low. On average, among the 10 most popular brands in 22, the percentage of online sales is 14%. Moreover, the share of online sales of the three most popular brands is only 10.5%. For comparison, the share of online sales of selective cosmetics averages 21.5%.

Currently, «Pharmtek» has one of the highest percentages of online distribution, behind «Cetaphil» and «Dry Dry» with 14% and 15% for the brands «ZINOVIT» and «LIPOBASE», respectively, and are gradually increasing the percentage of online sales. In addition, online trading has been growing rapidly in recent years, especially during the COVID-19 pandemic, and the trend continues (*Fig. 2.*)

**Threats**

**T1 Sanctions pressure**

At present, Russia's relations with other countries are in a very unstable position. This is especially true for European countries, which for a long time were suppliers of chemicals to Russia for the production of cosmetic products. There is always the risk of new sanctions, not only from Western countries, but also from countries that are currently the only remaining suppliers of the necessary raw materials for the production of cosmetic products.

**T2 Parallel Import**

Currently, the import of US cosmetic products into Russia is prohibited. European cosmetics are on sale, but in a much smaller volume and range. Due to logistical problems, the range of products in all segments of the perfumery and cosmetics market decreased by 25%. But, as mentioned above, Russian consumers have a very strong trust in foreign cosmetics brands. This is especially true for people under 30 years old, so even the reduced volumes of European products will compete with Russian companies. (Source: survey)

**T3 Unstable ruble exchange rate and rising prices for raw materials**

In recent years, the unstable exchange rate of the ruble has significantly affected the purchasing power of the population, especially when it comes to imported goods. In addition, the unstable ratio of the ruble to other currencies directly affects the rise in price of imported raw materials, which still occupies a significant part in the production of cosmetics.

**T4 Consumer distrust of Russian components**

There is an opinion among Russian consumers that Russian-made cosmetic and perfumery products are inferior in quality and effectiveness to foreign cosmetics. And this even more applies to Russian cosmetics, which are made from Russian raw materials. Since when choosing between foreign and Russian cosmetics, a potential consumer will choose a non-Russian-made product with a greater degree (Appendix 2).

In order to build the further development of «Pharmtek» in the Russian market, as well as to develop recommendations, a secondary SWOT analysis was made. As a result, after comparing the opportunities and threats of the company with the strengths and weaknesses, proposals were developed for the company.

## 1.6 Secondary SWOT analysis of a Russian pharmaceutical company «Pharmtek»

|  |  |  |
| --- | --- | --- |
|  | O1 Russia's Growing Chemicals MarketO2 Reduced competition with foreign productsO3 Development of online sales | T1  **Sanctions pressure**T2 Parallel ImportT3 Unstable ruble exchange rate and rising prices for raw materialsT4 Consumer distrust of Russian components |
| S1 Brands awareness among customersS2 Established communication of medical representatives with leading Russian doctorsS3 Own laboratories. Independence from foreign laboratoriesS4 Use of natural ingredientsS5 Wide range of productsS6 Products are not tested on animals | S1S5O3 Increasing the volume of cosmetics distribution through online platformsS1S2O1 Attracting new suppliers | S2S4T4 Informing consumers about the safety of Russian chemicals |
| W1 Above average priceW2 Dependence on European raw materials | W2O1 Use of Russian chemicals for the production of goods | W1T2 Positioning the product as a medium price category |

*\*Made by the author*

**S1S5O3 Increasing the volume of cosmetics distribution through online platforms**

If we analyze the pharmaceutical cosmetics sector, then the main part is distributed through pharmacies with the help of medical representatives. The share of online sales of pharmaceutical cosmetics is significantly lower than that of skin care and color cosmetics. Until 2021, the share in sales was insignificant, but already in 2022, for some brands, it began to account for up to 30% of all sales of a particular brand. If we consider the percentage of online sales of the top 10 pharmaceutical cosmetics brands in 2022, we can see that the two brands of «Pharmtek»: «LIPOBASE» and «ZINOVIT» have some of the highest online sales rates with 15% and 14% respectively. With the increasing demand of Russians for online shopping, distribution through marketplaces is becoming an increasingly attractive way to sell products for companies focused on the distribution of pharmaceutical cosmetics. This is especially true for «Pharmtek», because the company provides a wide range of products[[13]](#footnote-13).

**S1S2O1 Attracting new suppliers**

As of 2022, the Top-10 most popular brands of pharmaceutical cosmetics in Russia include two brands from «Pharmtek»: «LIPOBASE» and «ZINOVIT» with a total sales of 1,280 million rubles. There are regional representative offices of the company in 56 cities of Russia. «Pharmtek» has been operating since 2008 and has established itself as a reliable company not only in the eyes of consumers and dermatologists, but also in the eyes of numerous suppliers. The company's image and wide coverage is an advantage in finding new suppliers[[14]](#footnote-14).

**S2S4T4 Informing consumers about the safety of Russian chemicals**

The popularity of the brand and interaction with current dermatologists may contribute to the fact that the Russian consumer does not trust Russian ingredients in cosmetics to a large extent. This will help to make it as easy as possible to convey to interested people the idea that Russian chemicals can be competitive.

It also improves product safety to some extent. Russian companies need to control quality according to the standards set by the state. While it is impossible to completely control the purity of materials from Chinese or Indian suppliers. But to a greater extent, this is necessary for the «Pharmtek» company itself, which is forced to switch from European components to other suppliers.

**W1T2 Positioning the product as a medium price category**

Problems with logistics directly affect the prices of imported goods. Not only longer delivery times affect the price increase, but also the duties. Due to a significant increase in the price of imported goods, «Pharmtek» products and products from other Russian manufacturers of pharmaceutical cosmetics may begin to make up a significant part of the middle price segment.

**W2O1 Use of Russian chemicals for the production of goods**

At the moment, there is a problem with the supply of chemicals from Europe, which used to be indispensable components in the production of Russian pharmaceutical cosmetics. Some companies have completely ceased cooperation with Russian companies, with the rest there were problems with logistics. The threat of an aggravation of the foreign policy situation and the introduction of new sanctions still remains. This may have an impact on the intention of an increasing number of foreign companies to stop working in Russia. It may also affect the exchange rate of the ruble, which is still quite volatile, so reducing dependence on the supply of imported chemicals is now vital for Russian companies.

## 1.7. Conclusion for Chapter 1

In general, «Pharmtek» has several reasons for implementing the strategy of import substitution of chemical components necessary for the production of pharmaceutical cosmetics. First of all, this is due to the due to the current geopolitical crisis which is why many European companies, on whose products Russian manufacturers have been dependent for years, left the Russian market. It also complicated the logistics. And due to the unstable exchange rate of the ruble and difficulties with payment, the long-term prospects for cooperation are vague. On the other hand, the rapidly developing Russian chemical market opens up opportunities for establishing logistical links with new Russian suppliers.

However, in the process of finding new suppliers, difficulties may arise. This is primarily due to the fact that for a long time it was imported chemical components that occupied a significant market share. Many Russian companies could not compete with cheaper chemicals and higher quality European ones, so the number of companies producing some chemical components was significantly reduced due to the inability to compete. Some chemical components have been completely replaced by more attractive imported analogues, so there are currently no Russian production facilities that could provide the Russian market with the necessary chemicals. And they are available only through parallel imports.

The next chapter of this paper will be an overview of the pharmaceutical cosmetics market in Russia, a comparative analysis of foreign and Russian companies supplying cetyl alcohol and stearic acid, since these two chemicals are important components of «Pharmtek's» best-selling brand "LIPOBASE".

# CHAPTER 2. ANALYSIS OF THE RUSSIAN MARKET OF PHARMACEUTICAL COSMETICS

## 2.1 Russian market of pharmacy cosmetics

Over the years, the range of Russian pharmacies has been expanding due to parapharmaceutical types of goods. One of the most sought after products was caring cosmetics. And it is the pharmacy cosmetics market that has felt the consequences of 2022 more than this. First of all, this is due to the departure of some popular brands of caring cosmetics from the Russian market. This is especially true for cosmetics from the United States, where the import of cosmetics and perfumes to Russia is prohibited at the legislative level[[15]](#footnote-15). ). The import of cosmetics from the EU was not banned, but the logistics became much more complicated due to parallel imports, which greatly affected the availability and variety of European brands for the Russian consumer. On average, since February 2022, the assortment in the segments of perfumery and beauty products has decreased by a quarter. Nevertheless, despite all the difficulties, the share of foreign products remained at the same level.

*Fig. 4. Percentage of pharmacy cosmetics sales by country of origin in 2021[[16]](#footnote-16)*

*Made by the author, based on information from the annual report on the state of the Russian pharmaceutical market in 2021 from DSM*

*Fig. 5. Percentage of pharmacy cosmetics sales by country of origin in 2021 in rubles[[17]](#footnote-17)*

*Made by the author, based on information from the annual report on the state of the Russian pharmaceutical market in 2021 from DSM*

*Fig. 6. Percentage of pharmacy cosmetics sales by country of origin in 2022[[18]](#footnote-18)*

*\*Made by the author, based on information from the annual report on the state of the Russian pharmaceutical market in 2022 from DSM*

*Fig. 7. Percentage of pharmacy cosmetics sales by country of origin in 2022 in rubles[[19]](#footnote-19)*

*\*Made by the author, based on information from the annual report on the state of the Russian pharmaceutical market in 2022 from DSM*

The situation is different in the segment of the purchase of European chemicals for the production of cosmetic products in Russia. Russian pharmaceutical companies purchased from abroad more than 5,000 types of chemicals for the production of their own cosmetics, and the main purchase was from Europe. But logistical difficulties, refusal of companies to cooperate with Russian companies and price instability due to fluctuations in the ruble exchange rate jeopardized the security of supplies of the necessary raw materials.

Most pharmaceutical companies have shifted their focus to Chinese, Indian and a few Russian suppliers, but dependence on high-quality European raw materials has forced many companies to abandon part of their product range or make changes to the composition and production process, which inevitably entails additional costs for clinical research and the development of effective formulas. Also, unlike selective cosmetics, which are considered more versatile and less dependent on minor changes in the formula, a certain product name in the pharmacy cosmetics sector is designed to solve some narrowly focused problem, so changes in the formula inevitably entail the loss of part of the effectiveness of the product. Therefore, for Russian pharmaceutical companies focused on the production of pharmacy cosmetics, it is currently very important to find raw materials that would best meet the required characteristics that European suppliers had for raw materials.

Already in 2019, in the context of the COVID-19 pandemic and the departure of many partner companies from the Russian market in 2022, it became necessary to look for substitute raw materials to ensure production. The Russian market for chemical products, especially cosmetics, has long been rather undeveloped and highly dependent on imports.

Therefore, at the moment the main problem of the company is to find strong supply chains with quality products that will fit the required parameters.

The two main ingredients for which new supply chains need to be found are cetyl alcohol and stearic acid, which are two important ingredients in the production of one of the most successful brands for the company, namely «LIPOBASE».

«LIPOBASE» is a brand that focuses on the production of skin care products for the face and body, as well as for lips and hair, including baby care products. Namely, it includes a moisturizer for the skin. As well as a predominantly children's line of care cosmetics. It can be seen, this brand is aimed not only at adults, but also at children from 0+ years old, so the choice of suppliers must be approached with great awareness

This is followed by an analysis of potential suppliers of raw materials. The company was completely satisfied with the quality of products from the suppliers with which they worked until 2022, and mainly German suppliers, so the goal will be not only to analyze to identify the compliance of potential suppliers with Russian safety standards, but also to find raw materials that will be closest to raw materials of European quality .

## 2.2 Comparative analysis of Russian and foreign companies-suppliers of cetyl alcohol

Cetyl alcohol (1-Hexadecanol) is one of the most important components that are used for the production of various cosmetic products (creams, shampoos, deodorants, and so on). Cetyl alcohol performs several functions; first of all it softens the effect of the final product on the skin. Therefore, cetyl alcohol is used not only in decorative cosmetics, but is also an integral component of dermatological cosmetics. Also, cetyl alcohol is used as a moisturizing ingredient, has antibacterial properties. Due to the fact that cetyl alcohol is a fat-soluble product, it is also used in the manufacture of hair cosmetics, most often shampoos. It is also a thickening agent.

Cetyl alcohol is a component for the production of a series of emollients «LIPOBASE» from «Pharmtek».

The main requirement for cityl alcohol is purity. Purity must be at least 95% for successful synthesis, CAS Registry Number 36653-82-4. Basic Appearance Requirements: Waxy, light-transparent solid. Slight yellowness is not a product defect.

Tab. 8. Comparison of physical and chemical properties of cetyl alcohol from different suppliers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Company name** | **Purity** | **Color** | **Consistency** | **Chemical Abstracts Service Number (CAS)** |
| Carl Roth GmbH & Co. KG. | ≥95 % | Light | Waxy, solid | 36653-82-4 |
| Anhui Shengzhikai Biotechnology Co., Ltd. | 99% | Beige-yellowish | Waxy, solid | 36653-82-4 |
| Touchet Flora | 90% | Light | Waxy, solid | 36653-82-4 |
| "Aptechnyj sklad Himfarm produkt" | ≥95 % | White light yellowish | Waxy, solid substance in the form of granules | 36653-82-4 |

*\*Made by the author on the basis of information from the official websites of companies and direct appeals to company representatives using Internet correspondence[[20]](#footnote-20)[[21]](#footnote-21)[[22]](#footnote-22)*

One of the main suppliers of European raw materials for Russian industries was Carl Roth GmbH & Co. KG. German manufacturer and wholesaler of laboratory supplies, laboratory chemicals and biomedical products. As can be seen in the table above, cetyl alcohol from Roth GmbH & Co. kg. Meets all stated requirements and is a reference.

But in 2019, due to logistical problems that were a consequence of the COVID-19 pandemic, as well as the deterioration of trade and political relations since 2022, the supply of raw materials was interrupted, prompting Russian pharmaceutical companies to turn towards Indian and Chinese raw materials.

Anhui Shengzhikai Biotechnology Co., Ltd. It is a major Chinese developer, manufacturer and exporter of chemicals. Despite the fact that Chinese chemicals are usually distinguished by their high purity, up to 98-99%, the consistency, intense color, as well indicate that these are isomers, or compounds with similar composition with different properties and qualities, which can negatively affect synthesis. Or it could also indicate an unsuitable for use in pharmaceutical cosmetics synthetic or vegetable raw materials that were used for production. Therefore, Chinese-made chemicals are considered less suitable for the production of cosmetic products of such a type.

At the moment, there are not many companies in Russia that can supply cetyl alcohol of suitable quality. The following table considers two Russian companies, manufacturers and suppliers of chemical raw materials. Despite the fact that cetyl alcohol produced by Touchet Flora meets the requirements for color, consistency, as well as (CAS) Number indicates that this raw material does not contain unwanted impurities. However, the purity of raw materials is 90%, which is unacceptable for the production of cosmetic products, since the minimum required percentage of cetyl alcohol in the product is 95 or more.

Also in the table is considered a product from "Aptechnyj sklad Himfarm produkt". This company is a well-known supplier of various chemical products on the Russian market. As can be seen in the table, the (CAS) Number is correct, indicating the absence of undesirable impurities in the product. Also, the purity of the product is more than 95%, which is the optimal indicator for a successful synthesis. Also, the color and consistency are acceptable for the production of cosmetic products.

##

## 2.3. Comparative analysis of Russian and foreign companies-suppliers of stearic acid

Stearic acid is used in cosmetic products, both in decorative and pharmacy cosmetics, as emulsifiers, stabilizers and thickeners. Stearic acid is an important component of products such as creams for various parts of the body, foundations, decorative powders, hygienic and decorative lipsticks, and so on. As for «Pharmtek», stearic acid, like cetyl alcohol, is a necessary component of the previously mentioned «LIPOBASE» brand (body emulsions, cream, baby body emulsion, and so on).

The requirements for stearic acid are at least 98% purity, white color (slight yellowing is allowed). Yellow color is not a product defect or an indicator of the quality of the product. But stearic acid with yellowness does not go specifically to the production of cosmetics. Also, the mass fraction of unsaturated compounds in terms of iodine should not exceed 3%. The raw material is acceptable in the form of powder or flakes. The formation of lumps is also not a defect. The liquid form is not used. Melting temperature 66.5 °С - 68.5 °С with an error in both directions of 1.5 °С.

*Tab. 9. Comparison of physical and chemical properties of stearic acid from different suppliers*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Company name** | **Purity** | **Mass fraction of unsaturated compounds in terms of iodine** | **Melting point (mp)** | **Consistency** | **Color** |
| Carl Roth GmbH & Co. KG. | ≥98 % | 2.0% | 69 °C | Powder | white |
| Anhui Sunhere Pharmaceutical Excipients Co., Ltd. | ≥98.5% | ≤4.0% | 70 °C | Flakes/Powder | White/yellowish |
| Jigs Chemical | 98% | ≤4.0% | 69.3 °C | Granules | white |
| «Nefis Cosmetics» | ≥98 % | ≤3.0% | 66,5-68,5 °C | Flakes/Powder | white |
| « Himavangard » | ≥98 % | ≤3.0% | 66,5-68,5 °C | Flakes/Powder | White with slight yellowish tint |

\*Made by the author on the basis of information from the official websites of companies and direct appeals to company representatives using Internet correspondence[[23]](#footnote-23)

The Carl Roth's product, as in the case of cetyl alcohol, is the reference in this analysis. The purity is more than 98%, the type of raw material is in powder, which is acceptable, the color is also white, which fully meets the requirements, as well as the mass fraction of unsaturated compounds in terms of iodine is 2%, which positively affects the quality of the final product, making it more high.

In the case of stearic acid, which will be used in the production of cosmetics from raw materials from Anhui Sunhere Pharmaceutical Excipients Co., Ltd., the use of raw materials with significant yellowness is unacceptable, since this significantly affects the characteristics and appearance of the final product. Also, the mass fraction of unsaturated compounds in terms of iodine exceeds the norm, which also negatively affects the properties of the final product.

With the departure of many European companies, it is Indian companies that have occupied a significant part of the stearic acid market. However, despite the appropriate level of purity and acceptable color, the consistency and mass fraction of unsaturated compounds in terms of iodine do not meet the required standards, which may affect the inefficiency and appearance of the final product. Also, an unsuitable consistency may indicate the presence of unrecognized mechanical impurities in the raw material.

In Russia, «Nefis Cosmetics» until 2011 occupied the absolute leading position in the stearic acid market, occupying about 70% of the entire market. In subsequent years, leadership was lost due to the import of European, and in particular German and Swedish raw materials. But «Nefis Cosmetics» is still the largest Russian company producing stearic acid. Stearic acid is produced in accordance with GOST 6484-96 and therefore falls under all the necessary requirements.

One of the Russian wholesale companies supplying stearic acid in Russia, acceptable for the production of pharmaceutical cosmetics, is Himavangard. with factories and warehouses in Nizhny Novgorod. Stearic complies with GOST 6484-96 and therefore falls under all the necessary requirements.

Stearic acid and cetyl alcohol are the two main components for the production of the most successful and recognizable brand «LIPOBASE» from «Pharmtek», therefore the company is currently interested in restoring strong channels of trade with high-quality raw materials that satisfies the company in the face of the impossibility of the usual use of predominantly European raw materials directly. And thus it is clear that of the potential directions for establishing new supply chains, it is Russian companies that have most of the necessary characteristics.

##

## 2.4. Conclusion for Chapter 2

The choice of supplier is one of the most important parts of success in the production of a quality end product, especially in the context of pharmaceutical cosmetics, where minor deviations from the norm can affect the health of consumers. Since the Russian pharmaceutical cosmetics market has long been dependent on European chemicals, it is necessary to take the characteristics of European chemicals as a standard for further analysis. The selection of suppliers consists of several stages, first of all, it is a quality check of chemicals, which must comply with the characteristics prescribed in the international technical standards GOST. In the case of stearic acid and cetyl alcohol, these are GOST 6484-96 and GOST 30333-2007, respectively. Secondly, it is necessary to identify the most suitable supplier companies according to several criteria that are important for Pharmtek.

The next chapter of this paper will be a multi-criteria analysis of two Russian stearic acid supplier companies in order to select the most suitable supplier for further cooperation by comparing important criteria.

# CHAPTER 3. MULTI-CRITERIA SUPPLIER ANALYSIS AND FINAL RECOMMENDATIONS FOR DEVELOPMENT STRATEGY OF IMPORT SUBSTITUTION

## 3.1 Comparative analysis of Russian suppliers of stearic acid suppliers

From the above analysis, two potential suppliers of have been identified, namely Nefis Cosmetics and Himavangard. To identify the most suitable supplier, it is necessary to conduct a comparative analysis of the two supplier companies. First of all, it is necessary to highlight the key factors that are important for a company when choosing suppliers of stearic acid. These criteria are: Quality, Price, Geographical location of the supplier, Terms of delivery and Financial condition of the company in descending order of importance. For subsequent calculations, which will help to select the most suitable supplier of stearic acid, it is necessary to give each criterion by which the selection is made, a certain weight, the value of which is in direct proportion to the importance of a certain criterion for the company.

*Tab. 10. Value ranking of key factors for supplier selection*

|  |  |  |
| --- | --- | --- |
| Criterion | Importance of a criterion | Value |
| Quality | 1 | 5,00 |
| Price | 2 | 2,50 |
| Geographical location of the supplier | 3 | 1,67 |
| Terms of delivery | 4 | 1,25 |
| The financial condition of the supplier | 5 | 1,00 |

*\*Made by the author based on information from an interview with a company representative (Appendix 1)*

Now it is necessary to analyze "Nefis Cosmetics" and "Himavangard" according to the above criteria.

###

###

### 3.1.1. "Himavangard":

The quality of stearic acid, which Himavangard represents, is suitable for the creation of pharmaceutical cosmetics in terms of its physical and chemical characteristics. However, Himavangard's stearic acid has "White with a slight yellowish tint". This shade is not defective, but may indicate the presence of minor impurities in the chemical or an insufficient thorough cleaning process. These minor deviations may have some effect on the aesthetic qualities of the pharmaceutical cosmetics produced, which may negatively affect the opinion of consumers.

*Tab. 11. Physical and chemical properties of stearic acid from "Himavangard"*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Company name** | **Purity** | **Mass fraction of unsaturated compounds in terms of iodine** | **Melting point (mp)** | **Consistency** | **Color** |
| «Himavangard» | ≥98 % | ≤3.0% | 66,5-68,5 °C | Flakes/Powder | White with slight yellowish tint |

*\*Made by the author on the basis of information from the official website of company and direct appeals to company representative using Internet correspondence*

**Price**

The price for 1 kg of stearic acid with VAT from the company is 290 rubles per 1 kg of stearic acid as of May 19, 2023 in 25 kg bags. The minimum order quantity is 25 kg of stearic acid (one bag)[[24]](#footnote-24)

**Geographical location of the supplier**

Shipment is carried out from a warehouse in Dzerzhinsk, Nizhny Novgorod region throughout Russia. The distance from the warehouse of «Himavangard» to the production site of «Pharmtek» is about 500 kilometers.

**Delivery conditions**

Delivery is carried out by rail through Rail Continent, Zheldorekspeditsiya and other companies by agreement. Or third-party motor transport companies PEK, Business Lines, «Baikal-Service» and «Energia». «Himavangard» is not responsible for the quality of delivery and how the quality of delivery may affect the appearance and properties of the goods.

**The financial condition of the supplier**

«Himavangard» was founded in 2006 in the city of Dzerzhinsk, Nizhny Novgorod Region, one of the centers of the chemical industry in Russia. Today it is a dynamically developing enterprise, annually increasing sales volumes and their geography and the number of permanent partners. First of all, this is due to the convenient geographical location of the company and the dynamically developing market of chemical products in Russia[[25]](#footnote-25).

### 3.1.2. «Nefis Cosmetics»:

«Nefis Cosmetics» is the largest and oldest (the company was founded in 1855) in Russia a manufacturer of household chemicals and cosmetic products, as well as the largest manufacturer of stearic acid and other types of fatty technical products in Russia. The production complex and warehouses are located in Kazan. Currently, it is the largest producer of stearic acid in Russia, supplying the Russian market with about 17 thousand tons of stearic acid per year. The company's annual turnover is 40 billion rubles.[[26]](#footnote-26)

**Quality**

The quality of stearic acid, which is presented by "Nefis Cosmetics", is suitable for the creation of pharmaceutical cosmetics in terms of its physical and chemical characteristics and fully complies with the high standards of Pharmtek. Before the deterioration of the foreign policy situation, Nefis Cosmetics products were supplied to China, Europe, the USA and Australia.

*Tab. 12. Physical and chemical properties of stearic acid from "Nefis Cosmetics"*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Company name** | **Purity** | **Mass fraction of unsaturated compounds in terms of iodine** | **Melting point (mp)** | **Consistency** | **Color** |
| «Nefis Cosmetics» | ≥98 % | ≤3.0% | 66,5-68,5 °C | Flakes/Powder | White |

*\*Made by the author on the basis of information from the official website of company and direct appeals to company representative using Internet correspondence*

**Price**

The price for 1 kg of stearic acid with VAT from the company is 310 rubles per 1 kg of stearic acid as of May 19, 2023.

**Geographical location of the supplier**

The production facilities and warehouses of Nefis Cosmetics are located in the city of Kazan, the Republic of Tatarstan. The distance from the Nefis Cosmetics warehouse to the Pharmtek production site is about 850 kilometers.

**Delivery conditions**

In Russia, transportation is carried out using several modes of transport, including road transport and rail transport. Nefis Cosmetics has its own railway siding. Nefis Cosmetics maintains the infrastructure for railway transport at its own expense.

**The financial condition of the supplier**

Nefis Cosmetics is one of the oldest enterprises in Russia. The history of the enterprise begins in 1855 with the construction of a stearin and candle factory. It is part of the Nefis group of companies, included in the list of backbone organizations in Russia.

For a qualitative comparison of suppliers, we will use a multi-criteria assessment with a five-point rating scale

### 3.1.3. Multi-criteria supplier analysis

Multi-criteria analysis is a method of analysis, the purpose of which is to use the ranking of criteria for an objective and transparent evaluation of various decision options. Ultimately, it is necessary to identify and prioritize the available solutions and evaluate them in order to select the optimal solution. To the context of this paper, it is an analysis of the choice between two providers. The use of multi-criteria analysis to select suppliers for a manufacturing enterprise minimizes the risks associated with switching to a new supplier.

*Tab. 13. Multi-criteria analysis of Russian suppliers of stearic acid for «Pharmtek»*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Criterion | Importance of a criterion | Value | «Himavangard» | «Nefis Cosmetics» |
| Evaluation | Rating | Evaluation | Rating |
| Quality | 1 | 5,00 | 3 | 15 | 5 | 25 |
| Price | 2 | 2,50 | 4 | 10 | 3 | 7,5 |
| Geographical location of the supplier | 3 | 1,67 | 5 | 8,35 | 3 | 5,01 |
| Terms of delivery | 4 | 1,25 | 1 | 1,25 | 5 | 6,25 |
| The financial condition of the supplier | 5 | 1,00 | 3 | 3 | 5 | 5 |
| **Total** |  |  |  | **37,6** |  | **48,76** |

*\*Made by the author*

As can be seen from the above analysis, the products and delivery terms of Nefis Cosmetics are more attractive to Pharmtek, despite the greater geographical distance and price. Thus, when choosing a supplier of stearic acid, Nefis Cosmetics should be preferred.

## 3.2 Calculation of the cost of purchases for one complete production cycle (Stearic acid).

One full production cycle of Lipobase products takes 4 months and requires 625 kilograms of stearic acid. The guaranteed shelf life of stearic acid is 12 months under suitable storage conditions, so there is a need to regularly purchase the required volume of stearic acid at the beginning of each production run for a new batch. A batch of this volume is delivered by trucks as a consolidated cargo.

*Tab. 14. Summary of Nefis Cosmetics Stearic Acid Delivery Conditions*

|  |  |
| --- | --- |
| Minimum supply | From one unit of goods |
| Weight of one unit of goods (polypropylene bags) | 25kg |
| Price for 1 kg of chemicals (rubles) | 310  |
| Price for the required volume of goods for one production cycle (rubles) | 193750 |
| Delivery price (rubles) | 6443 |
| Calculation of delivery time from the moment of conclusion of the contract | 5 business days |

\*Made by the author on the basis of information from the official website of company and direct appeals to company representative using Internet correspondence

## 3.3 Calculation of the cost of purchases for one complete production cycle (Cetyl alcohol).

"Aptechnyj sklad Himfarm produkt" supplies cetyl alcohol in bags of 20 kilograms each. The cost of one unit of goods is 14,000 rubles. One full production cycle of Lipobase drugs takes 4 months and requires 320 kilograms of cetyl alcohol. The guaranteed shelf life of cetyl alcohol is 24 months under suitable storage conditions, so there is a need to regularly purchase the volume of stearic acid required for one production run in order to avoid deterioration of the components.[[27]](#footnote-27)

Delivery is carried out with the interaction of third-party transport companies, such as a «Vozovoz» and and «Business linii». As well as self-pickup or independent involvement of third-party carrier companies. Warehouses of the company "Aptechnyj sklad Himfarm produkt" are located in St. Petersburg.

*Tab. 15. Summary of "Aptechnyj sklad Himfarm produkt" Cetyl alcohol delivery conditions*

|  |  |
| --- | --- |
| Minimum supply | From one unit of goods |
| Weight of one unit of goods (reusable sealed bags) | 20kg |
| Price for one unit of goods (rubles) | 14000 |
| Price for the required volume of goods for one production cycle (rubles) | 193750 |
| Delivery price (rubles) | 10310 |
| Calculation of delivery time from the moment of conclusion of the contract | 2 business days |

*\*Made by the author on the basis of information from the official website of company and direct appeals to company representative using Internet correspondence[[28]](#footnote-28)*

## 3.4. Conclusion for Chapter 3

After conducting a multi-criteria analysis to determine the most promising Russian stearic acid supplier for Pharmtek, the company can be given the following recommendations:

**1. Give priority in import substitution to chemicals such as stearic acid and cetyl alcohol.**

Since the brand "Lipobase" is the most profitable and most popular among consumers, and is also the leading brand of the company, it is necessary first of all to highlight the main components that are necessary for the production of this brand's products and the European suppliers of which left the Russian market. Such components used in the production of products under the brand name "Lipobase" are stearic acid and cetyl alcohol.

**2. Give priority to Nefis Cosmetics as a supplier of stearic acid.**

With regard to stearic acid, the most attractive potential supplier is Nefis Cosmetics. First of all, this is due to the reliability of the supplier. Since Nefis Cosmetics is the largest and one of the oldest Russian manufacturers of household chemicals and cosmetic products, whose stearic acid fully comply with GOST 6484-96. Previously, Nefis Cosmetics could not compete with higher quality chemicals from Europe and cheaper Chinese and Indian products. But in the current conditions of inaccessibility of interaction with European suppliers, and the complicated logistics process, and the weakening of the ruble, which led to a significant rise in the price of imported materials, stearic acid from Nefis Cosmetics has become one of the most suitable materials for the production of pharmaceutical cosmetics by Pharmtek.

**3. Give priority to the company "Aptechnyj sklad Himfarm produkt" as a supplier of cetyl alcohol.**

With regard to cetyl alcohol, the most attractive potential supplier is "Aptechnyj sklad Himfarm produkt", since at the moment there is a very limited number of suppliers in Russia that are able to supply cetyl alcohol of such a quality that would be necessary specifically for the production of safe and high-quality pharmacological cosmetics and whose properties would be completely satisfied directly with Pharmtek. And Russian producers of cetyl alcohol are currently unable to produce cetyl alcohol, the purity of which would be suitable for the production of pharmacological cosmetics.

"Aptechnyj sklad Himfarm produkt" has been engaged in the wholesale supply of chemicals for Russian manufacturers of cosmetics and pharmacological cosmetics for 28 years and has well-established logistics links that allow it to consistently supply the required volumes of chemicals even when most foreign companies leave the Russian market. Despite the risks associated with transportation through third-party carriers, the geographical location of the warehouses of the company "Aptechnyj sklad Himfarm produkt" and the developed infrastructure allow delivery of the order within two working days. Also, "Aptechnyj sklad Himfarm produkt" establishes close cooperation with companies, which allows to establish regular supplies of the required amount of raw materials

# Conclusion

The purpose of this thesis was to create recommendations for development strategy of import substitution for "Pharmtek" company. To achieve this goal, the following steps were taken:

First of all, the profile of the company was analyzed, including its history, products, competitive position in the Russian pharmaceutical cosmetics market. Then the resources and competencies of the company were analyzed in order to identify competitive advantages that would allow the company to more competently build and implement the import substitution process, and were also necessary to provide recommendations. An analysis of key success factors was used to describe the resources and competencies of the company. The most promising chemicals for import substitution were also identified, the lack of which currently threatens the implementation of the company's production processes.

First, it is cetyl alcohol. Secondly, it is stearic acid. Both components are necessary for the production of the most famous and profitable brand "Lipobase", but at present, cooperation with European companies is interrupted, and the products of these companies cannot be bought in Russia, directly from the manufacturer, which makes the complicated logistics even more time-consuming and expensive.

After that, an analysis of the pharmaceutical cosmetics market was carried out, as well as a secondary SWOT analysis to better identify possible solutions to the problem. Also, the analysis of the pharmaceutical cosmetics market became the basis for a comparative analysis of Russian and foreign supplier companies, during which several potential Russian supplier companies were identified. To identify the most suitable Russian supplier, a multi-criteria analysis was carried out, which made it possible to select one of the most suitable supplier companies for each chemical. "Aptechnyj sklad Himfarm produkt" as a supplier of cetyl alcohol and Nefis Cosmetics as a supplier of stearic acid, respectively.

Finally, the risks associated with the process of import substitution were noted. The most significant risks are primarily associated with transportation and logistics, which is complicated by the involvement of third-party transport companies.

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# Appendixes

## **Appendix 1. Interview Transcript**

1. Does the company currently have problems with the uninterrupted supply of the necessary chemicals?
2. What raw materials did you use before European companies left the market?
3. Raw materials from which manufacturers did you start using after the European companies left the market?
4. Are you satisfied with the quality of products from new suppliers?
5. Are you interested in establishing cooperation with Russian suppliers?
6. How much cetyl alcohol is used to make one batch of Lipobase brand products?
7. How much stearic acid is used to make one batch of Lipobase brand products?
8. What are Pharmtec's requirements for the chemical and physical properties of stearic acid and cetyl alcohol?

## **Appendix 2. Contents of the Pharmaceutical Cosmetics Preference Survey**

1. Do you trust Russian-made pharmacological cosmetics?

* Yes
* No
* Doesn't matter
1. Do you trust cosmetics made from Russian raw materials?
* Yes
* No
* Doesn't matter
1. What sources of information do you use when choosing pharmacological cosmetics?
* Advice from friends and acquaintances
* Advertising in magazines
* Social media
* Bloggers
* Thematic blogs
* Doctors' recommendations
* Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Do you trust the effectiveness of pharmacological cosmetics?
* Yes
* Partially
* No
1. How often do you use skin care products?
* Several times a day
* Once a day
* Few times a week
* Several times a month
* Never use
1. Do you prefer to use complex care from one brand?
* Yes
* No
* Doesn't matter
1. Do you use marketplaces to buy pharmacological cosmetics?
* Yes
* No
1. Do you trust cosmetics from pharmacies more than when buying through other sales channels?
* Yes
* No
* Difficult to answer
1. Have you heard of the Lipobase brand or the Pharmtek company?
* Yes
* No
1. Do you have dermatological problems?
* Yes
* No
* I won't answer this question
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