



# **RESINA Ltd. Cosmetics and chewing gums from spruce resin**



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# 1 EXECUTIVE SUMMARY

It all started at the beginning of the school year 2021-22, when Jerca Tehovnik, the current director of *Resina*, came up with the idea to make chewing gums from spruce resin. Without hesitation, three courageous girls, Ema, Beti and Hana supported the idea and quickly we started adding our own suggestions. The journey was about to begin.

We decided not only to make chewing gums from spruce resin, but other products as well. We had lots of ideas, from incenses to body hair removal products, but in the end we opted for salve, lip balm and chewing gums.

Slovenia is a green country with creative and smart inhabitants. This is the reason why our company can identify with it so well. The company wants to be close to nature, because it is the source of our most important ingredient, the spruce resin.



*Picture 1: Spruce resin*

## 2 COMPANY OVERVIEW

The company produces cosmetics and chewing gums from spruce resin. The products include: spruce resin lip balm, spruce resin salve with calendula, spruce resin salve with lavender, spruce resin chewing gums and spruce resin chewing gums with the addition of mint. We collect all spruce resin needed for our products by ourselves in the forest in a way that is not harmful to the trees. In addition, we use home-cultivated herbs: mint, calendula flower and lavender, but we buy beeswax and high percentage alcohol from local beekeepers and farmers. We pack salve and lip balm in recycled packaging made from plastic bottles and bottle caps (we reuse plastic bottles). We use bigger ones for salves and smaller ones for lip balm.

Being a student company, we have not set any long-term goals yet, like renting a space or purchasing equipment and more appropriate tools. Our short-term goals are to improve promotion by putting more effort into social media and communication with our users and potential users. We also plan to organize more sales at school and various events.

## 3 SOLUTION

Three of the team members are horticulture students and one is a student of agriculture. Therefore, we chose a project that is linked to both fields. We all learn about herbalism and trees in our programmes.

Wishing to learn something new, being interested in the topic and wanting to make something that is not so common on the market, i.e. spruce resin lip balm and spruce resin chewing gums, were the main reasons we decided to bring this project to reality.

### 3.1 SPRUCE RESIN CHEWING GUMS

Chewing promotes the production of saliva, which neutralizes acids in dental plaque. This way it prevents caries. It also strengthens face and jaw muscles. Due to its antibacterial properties, resin is beneficial to oral cavity and gum.

When we established our company we were not familiar with the recipe or the process. We read a lot of literature and watched many videos on YouTube on how to make chewing gums from spruce resin. We went to the forest and collected some resin in an empty can. We knew that we have to remove dirt from it before use, which we did, but gums were either too soft or too solid. We tried to melt resin at higher and lower temperatures, we tried to add beeswax and other additives, but nothing helped.

After 163 attempts, we realized that the secret lies in the structure of resin. Therefore, resin for chewing gums has to be completely solid, while the resin for salves and lip balms works best if it is soft and sticky. We also figured out a practical way of removing dirt from resin, without resin getting everywhere. Now it was the time to start production.

### 3.2 SPRUCE RESIN SALVE

Due to its health benefits, people have used resin for centuries. Spruce resin promotes blood circulation and helps speed up skin regeneration. It also has antibacterial and antifungal properties. These all are the reasons that spruce resin is used extensively in the treatment of various forms of skin problems, from cracking fingertips and heels to dry cuticles, lips, scratches and various rashes, age spots, fungal infections such as yeast infections and ringworm, insect bites, burns, sunburn, birthmarks, cold sores, spots, warts, dry skin and scalp, as well as alleviating psoriasis and atopic skin symptoms. Spruce resin can also be useful to treat muscle and joint pain as well as respiratory issues.

The process of making salve and lip balm did not go as smoothly as we had hoped for. After many attempts and observing the results, we wrote the recipe ourselves, trying to get the best ratio of ingredients. The biggest relief was when we discovered that we could melt resin in warm oil and then strain it through a gauze. This way we didn't lose too much resin and the container was easier to clean. Before that we had melted resin alone and destroyed way too many pots along the way.

We also decided that instead of buying packaging we make them ourselves from plastic bottles and bottle caps.



Picture 2: Spruce resin salve, lip balm and chewing gums

The initial capital that we needed to purchase raw materials was obtained through the sale of shares. The value of one share is € 2.50. We sold 21 shares and thus acquired € 52.50 of initial capital.

When setting the market price, we first took into account the costs of raw materials, as well as the time and effort invested (both in the collection of raw materials and the production of the product itself) and of course the scope and prices of competition.

The cost of the product was estimated according to the cost of raw materials. We also calculated approximately what the cost of raw materials comes to one product. Spruce resin salves with the addition of calendula or lavender are sold at the price of 4€, spruce resin lip balms at the price of 2.5€, and spruce resin chewing gum at the price of 3€.

## 4 MARKET AND MARKETING STRATEGY

Our potential users are friends, relatives, classmates, teachers and other staff at our school. We would recommend our products especially to elderly people, housekeepers, people in sports and manual workers. There are no resin chewing gums in Slovenian market, but we can find them elsewhere in the world. When analysing the market, we discovered that there had been pine resin chewing gums made in Slovenia, but only for special occasion, at a seminar at Institute of Forestry. We are therefore the only ones producing resin chewing gums on the Slovenian market. Our product will convince buyers because it is natural, handmade and homemade.

Spruce resin salve is already a well-known and popular remedy. There are many companies that sell them, but there is no mass production. Chewing gums and lip balm, on the other hand, are



not that common, so it would not be too difficult to enter the market with any of the products. All products are completely natural, without plastic and environment or health damaging ingredients. That is the reason the buyers would consider choosing us.

## 5 PRODUCTION PROCESS

Before starting the production, we prepared a plan. Our plan was based on the Business Model Canvas. This model has guided us from the beginning. With equity from the shares, we bought olive oil, wax and gauze to purify the resin. We took marigold flowers, lavender and mint from home, as well as high-percentage alcohol for disinfection, and we collected the resin by ourselves in the forest.

### MANUFACTURE OF RESIN CHEWERS:

- We gathered hardened and non-stick resin and poured it into larger and smaller gauzes and tied them.
- We put scrotums in a pot with water and heated them.
- When the water boiled, the resin softened enough that it began to come out of the gauzes and gather in the form of cream on the water. Garbage, larger particles, and pieces of bark remained in the gauze bags.
- In this way, the resin was purified and heat-treated at the same time, so the resin was removed from the pot with a spoon and placed in another pot with warm water.
- We took the chewing gum mass from the hot water pot, which only needed to be shaped.
- At this point we added well-ground and dried mint to the half of the mass.
- While the mass was still warm, we formed finger-thick rolls. When they cooled we soaked them again in hot water.
- We cut them to proper size and wrapped the finished chewing gums with cut sheets of baking paper.
- We packed 6 chewing gums together by attaching them to the cards with a stapler; separately ordinary ones and separately the ones with the addition of mint, and we also made some packages mixed. We provided them with stickers on both sides of the cards.



*Picture 3: The process of making chewing gums from spruce resin*

### MANUFACTURE OF SPRUCE RESIN SALVE:

- We decided to make salves with marigold and lavender, so we previously prepared olive oil, in which we soaked and heated marigold flowers and lavender at a low temperature.
- We heated resin (the stickier one) and oil over the steam (with calendula or lavender, but without additives when making lip balm).

- We removed bigger pieces of bark from the molten mixture, and then filtered it through gauze into another pot.
- We added beeswax and when it melted, we mixed the melted salve well, then let it cool down a bit. In the case of a lip balm, a larger amount of wax was added.
- The mass was carefully poured into disinfected containers.
- When the salve and lip balm were completely cool, we closed the containers and labelled them.



*Picture 4: The process of making spruce resin salve*

We painted motives and wrote text for the stickers, and then designed them in a computer program. We printed them on a paper sticker and cut them out, glued them to the caps with a glue gun (because the glue from the label didn't stick well).

Salve and lip balm containers are made from used corks and bottles. This way we do not produce additional material that could potentially end up as waste in nature. Also, their production does not harm nature or use energies that would pollute the environment. Empty packaging can also be cleaned and reused.

The main part of the chewing gums packaging is made of cardboard, which is not harmful to the environment.

All our products are 100% natural, free of harmful substances and degradable.

The novelty of the product is reflected in the salve and lip balm packaging which, as already mentioned, is made from used corks and bottles. We are also the first to place spruce resin lip balm on the market and the first on the Slovenian market to produce spruce resin chewing gums.

## 6 SALES AND PROMOTION

Since the establishment of *Resina*, we have had five live sales. We organised three of them in the school hallway. The other two took place at the regional and national meetings of student businesses. We prepared a stand with products and information leaflets in front of the school library and started welcoming curious students and teachers. We presented and offered them our products. They had many questions that we were happy to answer. The sales helped us gain some valuable beginner marketing and customer communication experience. We learnt that in order to attract customers you have to be relaxed with a smile on your face. Thus the customer automatically feels more comfortable around you, which makes it more likely they make a purchase.

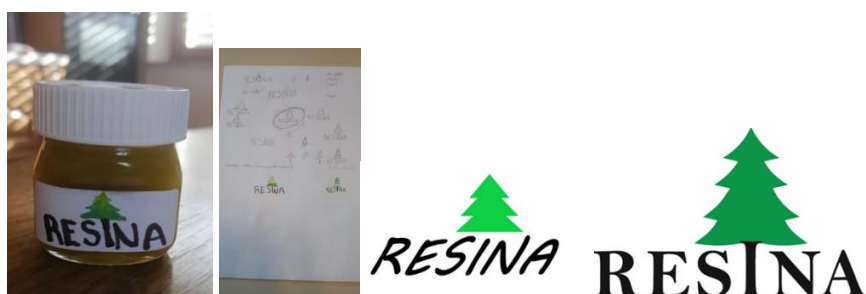


Picture 3: A stand

An important part of running a company is definitely promotion. We promoted ourselves on Instagram with posting our products and things related to it, like spruce resin and forest. We documented current events as well (Instagram – resinadd). We also filmed a commercial and posted it on YouTube (<https://www.YouTube.com/watch?v=84F5BUdSJBg>).

Information leaflets were available on our stand as well.

The logo features the name of the company *Resina* (derived from *resin* in Spanish) and a drawing of a spruce on the letter i. First, we drew a sketch and then put it in a computer program.



Picture 6: Logo development (draft, prototype, computer-designed and simplified logo)

## 4 MANAGEMENT AND TEAM

Jerca Tehovnik - PRODUCTION DIRECTOR AND MANAGER



Tehovnik Jerca

My task is to help the group focus on the task and the division of tasks so that all members of the group participate. I help members to deal with problems, look for alternative solutions, make sure that the group completes the task within the set deadlines and take decisions. As a production manager, I participate in the development of recipes and procedures for the manufacture of our products. I have presented the production process to my colleagues and guided them in their work.



#### Beti Filipič - ASSISTANT DIRECTOR AND PROMOTION MANAGER

I take care of the work of the director in case of her absence and help and advise the director. During her absence, I make sure that everything in the company runs smoothly, but if there is a problem, I consult with my employees and try to find a solution. I prepare advertising materials. I have made a flyer and created profiles on social networks.

I take care of the purchasing of materials and raw materials.



Filipič Beti

#### Hana Kenda – SALES MANAGER



Kenda Hana

My role in the company is sales and marketing management and communication with the customers. This means that I take care of the sale of our products and make sure that our business is as successful as possible. When communicating with customers, I try to dedicate myself as much as possible to the customers and present our product to them.

#### Ema Škrlić - SECRETARY

The role of the secretary in our company is to take care of organization. During the meetings, I write down the key points, which I then arrange and hand over to the director. I also participate in purchasing and inventory planning. I prepare the analysis and control the costs and profits in the company.



Škrlić Ema

## 5 BUSINESS PERFORMANCE AND PROFITABILITY

Our financial report shows that we earned 155€ with sales and had costs of 336€ which means the company is in a loss. The main labour cost is essentially the product development cost (Table 1). According to the results, investors lost because the share value fell. Because of the many attempts to get the right ratio in the spruce resin salve, we valued the development work at 300€, which is a huge cost. We decided to include in the price of the products only the cost of the work we had with the product production. In this case, the revenue is 155€ and the expense 86€. The difference between the tax receivable and tax payable is 8€. The result (gross profit) is 69€, the income tax is 13€ and the net result (net profit) is 56€ (Table 2).

## 6 FINANCIALS

THE INCOME STATEMENT			
	price, cost	VAT	price, payment including VAT
<b>Revenues</b>	<b>217,67 €</b>	<b>39,33 €</b>	<b>257 €</b>
Cosmetics	149,18 €	32,82 €	182 €
Chewing gums	68,49 €	6,51 €	75 €
Product sales/service	0 €	0 €	0 €
Other revenues (donations)	0 €		0 €
<b>Expenses</b>	<b>532,03 €</b>	<b>24,62 €</b>	<b>556,65 €</b>
Supplies	50,06 €	6,59 €	56,65 €
Services and other expenses	81,97 €	18,03 €	100 €
Labour	400 €		400 €
Depreciation	0 €		0 €
tax difference		14,71 €	
<b>Result</b>	<b>-314,36 €</b>		
Income tax 19%	-50,19 €		
<b>Net profit</b>	<b>-264,17 €</b>		

Table 1: Income statement and balance sheet **with** product development costs

THE INCOME STATEMENT			
	price, cost	VAT	price, payment including VAT
<b>Revenues</b>	<b>217,67 €</b>	<b>39,33 €</b>	<b>257 €</b>
Cosmetics	149,18 €	32,82 €	182 €
Chewing gums	68,49 €	6,51 €	75 €
Product sales/service	0 €	0 €	0 €
Other revenues (donations)	0 €		0 €
<b>Expenses</b>	<b>182,03 €</b>	<b>24,62 €</b>	<b>206,65 €</b>
Supplies	50,06 €	6,59 €	56,65 €
Services and other expenses	81,97 €	18,03 €	100 €
Labour	50 €		50 €
Depreciation	0 €		0 €
Tax difference		14,71 €	
<b>Result</b>	<b>35,64 €</b>		
Income tax 19 %	5,69 €		
<b>Net profit</b>	<b>35,64 €</b>		

Table 2: Income statement and balance sheet **without** product development costs

We are a school company that was set up at the beginning of the school year and will close at the end of the school year after the programme. We have not, or at least not yet, set any long-term plans. The current amount of short-term assets is 143€ (capital and revenues less expenses). The tax obligation to the state is 34€ (income tax and the difference between tax receivable and tax payable). The tax obligation to the state is given to the school fund, where the funds are available to help financially weak students (charity) (Table 3).

THE BALANCE SHEET	rate I	rate II
<b>Long-term assets</b>	<b>0 €</b>	<b>0 €</b>
Equipment (machines, inventory)	0 €	0 €
Rights (licences, patents)	0 €	0 €
<b>Short-term assets</b>	<b>143 €</b>	<b>108 €</b>
Money	143 €	108 €
Trade receivables	0 €	0 €
Stocks	0 €	0 €
<b>Total assets</b>	<b>143 €</b>	<b>108 €</b>
<b>Capital (shares)</b>	<b>53 €</b>	<b>53 €</b>
<b>Profit</b>	<b>56 €</b>	<b>56 €</b>
<b>Payables to suppliers</b>	<b>0 €</b>	<b>0 €</b>
<b>Obligations to the State</b>	<b>34 €</b>	<b>0 €</b>
<b>Credits</b>	<b>0 €</b>	<b>0 €</b>
<b>Total passive</b>	<b>143 €</b>	<b>108 €</b>

Table 3: Income statement and balance sheet with product development costs

The current capital value is 109€, the share value has increased from 2,5€ to 5.2€. 2,7€ profit per share.

## 7 FUTURE POTENTIALS

The project has definitely been a success. Although it may not continue in the same form, we have all learned a lot from it. The entrepreneurial experience may one day help us bravely start our own businesses.

The project was a new and interesting experience for everyone. There was a lot of fun and laughter at work, as well as critical moments when something did not go according to the plans. In the end, the passion for "forest science" and team spirit won.

As a head of marketing and customer communication, I have learnt that you have to listen to the customers really well to find out what they want.

As a director and production manager, I once again found myself in the role of a group leader. I have learnt two things: it is much easier to consult with group members before making

decisions; good communication is essential in a group or company; motivation; it is easier to work if the goal is clearly presented to everyone, and of course the team spirit is invaluable.

Some practical findings:

- when gluing pots, one needs to use extra glue to seal them.
- to collect resin use a screwdriver and not a knife (you do not want to damage it and you can harm yourself).
- make sure that the water does not flow into the extension cord to prevent short circuit and alarm

As a secretary, I have learnt how to maintain a good team spirit.

As an assistant director and head of the promotion, I have supervised the project and took care of the recipe corrections. I worked closely with the director which proved very successful.

One final insight: the path to a completely new product not yet on the market is long and thorny. Developing a successful product takes a lot of time. We also understand better why new products are so expensive. We realized that development costs are included in new products. Their price, however, drops over time.