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**HOUSEHOLD SANITARY PRODUCTS**

# **SMEs EXPORT**

## **Argentine technology and innovation**





# CONTENTS



## Household sanitary products

### EDITORIAL

Page 5

**PYAM** Chlorine tablets for dilution

Page 7

**CLOROTEC** Argentine technology that goes beyond pool purification

Page 10

**DIONE QUIMICA** When cleanliness becomes industry and development

Page 13

**LIMBRIL QUIMICA** Liquid soap from the north of Formosa, a formula that is going strong

Page 16

### INTERNATIONAL COOPERATION

Page 20



## Editorial



The industrial sector of household sanitary products involves various items that include household and laundry hygiene and disinfection products, as well as producers and suppliers of raw materials and packaging.




Behind every container of detergent, fabric softener, bleach or any other disinfectant that we use on a daily basis, there is science, there are controls, there is development. There is industry. The National Institute of Industrial Technology (INTI) works to make that industry, discreet but essential, safer, more innovative and more competitive. Far from being simple items for household cleaning and/or disinfection, household sanitary products combine innovation, quality and a strong commitment to health and sustainability.

Many companies have managed to grow and position themselves in international markets thanks to their efforts, but also to the technical support they receive from INTI to achieve demanding quality standards.

Sanitary products must comply with the legislation in force in each country and for this it must be proved that they are safe and effective in the conditions of use foreseen and established by their manufacturer. From the Institute we provide technical assistance to develop them, improve production processes, verify regulatory compliance, control the quality of the finished product and its raw materials and perform a large number of tests required during their registration with agencies such as the National Administration of Medicines, Food and Medical Technology (ANMAT), the regulatory authority in Argentina, a fundamental step for their formal commercialization.

In a specific product we can evaluate from its physicochemical properties, the percentage composition of its active components, the stability to estimate its useful life, its efficacy or capacity to fulfill the function for which it was designed, to the containers that contain them or their biodegradability, among others. We also focus on the development of innovative chemical formulations, promoting the incorporation of state-of-the-art technologies in the industry.

In short, INTI offers a growing range of services aimed at promoting, supporting and innovating technological and industrial development, particularly in this type of mass consumption articles.



In this edition, we present the case of four companies to which we provide technical assistance in the development of formulations, evaluation of the quality, stability and efficacy of their products, improvement of processes, and adoption of new technologies. We do this in laboratories that not only offer solutions, but also offer future.

**Marisa Arcángelo**

**Head of Laboratory of Cosmetics and Health Care Products**

**María Victoria Defain Tesoriero**

**Head of New Formulation Technologies Department**



## PYAM



## Chlorine tablets for dilution



It was a mixture of urgency and enthusiasm. Pyam was born in 1991, when a cholera outbreak was crossing borders and the slogan “to make drinkable” was not yet part of the daily vocabulary. Jorge Vigliani, who was neither a chemist nor an engineer and had no experience in the field, traveled to Ireland in pursuit of an idea: pills that purified water under extreme conditions. He returned with the conviction of producing them in Argentina. And he succeeded. Step by step, with reverse engineering, with the support of professionals, with teams assembled with patience and vision, he made his project a reality.

And then came the most complex part: adjusting this development to the requirements of the United Nations, since these tablets are destined for humanitarian camps in Africa, in the Middle East, where urgency does not wait. They must resist humidity and heat and have a long shelf life.

Today, the company has had a 19-year contract with UNICEF. It competes in the market for time, reliability and responsiveness. Each Pyam box can make up to 280 thousand liters of water drinkable. Each product is a guarantee, not a promise.

Another great achievement was the addition to its production of disinfectant tablets that replace liquid bleach. Marcos Vigliani, communications manager, explains it clearly: **“A single one of our tablets is equivalent to 5 liters of disinfectant solution.** But there is no margin for error. All you have to do is dissolve a tablet in a bucket and you get an exact dose. It’s home and professional safety.”

In this technical and challenging path, the assistance of the National Institute of Industrial Technology (INTI) was key. Gonzalo Difeo, head of the Chemical Process Engineering Department, explains: **“Together with Pyam we worked on several occasions. We evaluated clarifiers for swimming pools and a flocculant that managed to reduce 90% of arsenic in water through jar tests.** On the other hand, the Institute also evaluated the algacide efficacy of other products, as well as the determination of active components and/or organic and inorganic contaminants as required by the National Administration of Medicines, Food and Medical Technology (ANMAT). In all cases, our work strengthened the development and technical validation of their products”.

Marcos values this support clearly: “INTI is a guarantee. It allows us to access certifications that we could not achieve on our own; to technically understand complex problems and to validate humanitarian developments that save lives. It is our common language with the industry, it means the code of trust”.

**Pyam exports 70% of its production. So far it has reached 113 countries, with a focus on Africa, Central America and the Middle East. But there is a pending challenge: Brazil.** “Due to its proximity and necessity, it would be ideal; we have the capacity and standards to enter this market”.





What makes them different? Marcos sums it up without marketing: “We are the only ones in Argentina and in the region that manufacture these products. Only three companies in the world do it. But we also offer real solutions and our plant complies with pharmaceutical standards”.

**PYAM SA LABORATORIO****Guauguaychú Industrial Park, Entre Ríos.**

*Manufacture of biological water purifiers and surface disinfectants in tablets and effervescent powders.*

- Annual production capacity: 1,500 million tablets.
- Production plant 8.000 m<sup>2</sup>

**• HS Code:**

- 3808.94.19 / Water purification tablets and powders and disinfectants.



## CLOROTEC



### Argentine technology that goes beyond pool purification




History is not always written in ink. Sometimes it is dissolved in water. And if that water is safe, clear and reliable, it is likely that behind it there is a company that has been defending that purity for decades. "In 1974, when Argentine swimming pools were still unaware of the benefits of solid chlorine, David Alejandro Rotger, founder of Rotec SA, today known as Servicios Bioaguas SRL, spotted an opportunity. He decided to import what no one else was offering: solid chlorine tablets, an innovation that would forever change the way recreational water was treated," says Roberto Souto, founding partner.

Clorotec, the company's flagship brand, would become synonymous with cleanliness and prevention in thousands of homes. Half a century later, its products are still present, but now with a more ambitious horizon: to also take care of the water used by industries, municipalities and communities that depend on it not only for recreation, but also as an essential resource.

But none of this would be possible without technical validation. This is where the National Institute of Industrial Technology comes in. Since Clorotec's inception, the link with the Institute has been key, and once again the company relied on the agency to take solid steps. Literally.

**"INTI accompanies the company in every innovation process,"** says




Marisa Arcángelo, head of the Domestic Sanitary and Cosmetic Products Laboratory. **“One of the most interesting cases was the analysis of a metal controller that allows decanting iron and other metallic substances present in certain waters.** It was a novel product. We had to develop an unprecedented methodology, make simulations, adjust variables, obtain images and validate results. It was so interesting that we put together a visual report. This product is now exported to Uruguay”.

INTI's work goes beyond formality. In order to market disinfectant products, it is mandatory to register each formula with the National Administration of Medicines, Food and Medical Technology (ANMAT). In this process, the studies carried out by ANMAT are decisive. These analyses determine the composition, verify shelf life, evaluate bactericidal efficacy, control metals, simulate extreme conditions and certify the absence of dangerous contaminants.

Alejandro Muratorio, general manager of Bioaguas SRL, sums it up clearly: “INTI represents a guarantee. Their reports give us peace of mind that our products not only comply with the regulations but also with our quality standard. No supplier or new product is presented to the ANMAT without first passing through its analysis. It is part of our corporate DNA”.

Servicios Bioaguas SRL not only preserves the legacy, but expands it. To its traditional products -such as granulated chlorine, triple action tablets and clarifiers- it has added new lines for the treatment of industrial and municipal water. From solutions for cold storage plants that lack treatment plants, to technologies such as zeolite, a mineral capable of filtering metals such as arsenic or manganese in areas with contaminated water.

While many companies launch themselves into the market with ephemeral strategies, Clorotec is sustained by a logic that seems simple, but requires commitment: to offer products of proven quality, to guarantee on-time deliveries and, with more than 50 years in the market, to have an impeccable track record with no technical complaints.

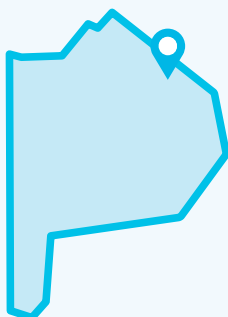


**“We want to expand our exports, reach Uruguay and Chile more strongly; and respond to markets that value what we do, such as Europe, the United States, South Africa and the Middle East,”** anticipates Muratorio.



“But we want to do it well. With validated products, backed by history, with a solid brand. With the certainty that what comes out of our plants carries the same standard that we have defended since 1974.”

Some companies adapt. Others resist. And some, like Bioaguas Services, reinvent themselves without losing their identity. What began with a chlorine tablet is now a comprehensive commitment to water. Because when health is at stake, transparency cannot only be visual. It has to be real and verifiable.



#### SERVICIOS BIOAGUAS SRL

**Escobar and Bancalari, Buenos Aires**

*Manufacturing of cleaning products*

- Production capacity: 2,000,000 to 2,500,000 kilos/liters of products for swimming pools and other industrial and municipal uses.  
Outsourced production plant in Gualeguaychú, Entre Ríos with 2,000 m<sup>2</sup> and in José León Suarez in Buenos Aires with 2,000 m<sup>2</sup> more.

#### • HS Code:

- 3808.94.19 / Trichloro tablet
- 3808.94.29 / Granular dichloro
- 3808.94.29 / Trichloro granular



## DIONE QUIMICA



## When cleanliness becomes industry and development



There are companies that advance in silence. That do not promote themselves with fireworks, but let their work speak for itself. That do not wait for luck to change, but make their own paths. This is how Dione Química was born, with the dedication of a passionate chemist, the simplicity of a garage and the commitment that still stands today to offer concentrated, high quality, affordable and sustainable cleaning products.

In 1985, Roberto Prefumo and his wife Beatriz started manufacturing detergent, dishwasher and degreaser for the residents of Wilde. Roberto, a chemistry teacher, understood before many manufacturers that the key was not to copy the big brands, but to surpass them. He achieved this by creating formulas with high active matter content and lower water content. In addition, he was the first to bet on bulk sales in a country where this practice was almost unknown. Four decades later, his son-in-law Ezequiel Martínez continues that vision, leading an SME that leads the segment of concentrated and biodegradable products in Argentina.

Dione produces more than 600 products, including bleach, disinfectants, cleaners for the food industry and premium quality detergents such as DELEC2, its flagship product. **They also manufacture customized products for third parties and export 10% of their production to Chile, Paraguay, Uruguay and Peru.** The Prefumo Fragrances division, which operates under IFRA standards,



markets more than 800 concentrated fragrances and positions Dione in demanding and sophisticated markets.

“For years we promoted sustainability, even when no one knew what to call it yet. Our products need less packaging, less fuel and less water. Today, the market is beginning to appreciate it. And we are going for more: the Middle East will be our next destination, since we are one of the few companies in Argentina with HALAL certification”, says Ezequiel Martínez, with the clarity of someone who understands that his differential is not only in the product, but also in the coherence with which he defends it.

A fundamental part of this consistency is supported by the technical **support of the National Institute of Industrial Technology (INTI). Thanks to its analytical capabilities, Dione was able to register risk 2 products with the National Administration of Medicines, Food and Medical Technology (ANMAT).** These products include bleaches, hypochlorites, bactericides and liquid disinfectants. **The joint work included efficacy tests, stability analysis to establish expiration dates and biodegradability studies.**

“INTI was decisive in ensuring that our products were not only effective, but also reliable. The registration with ANMAT positions us above many competitors, while the biodegradability analyses allowed us to reaffirm our environmental commitment with concrete data,” explains Ezequiel.

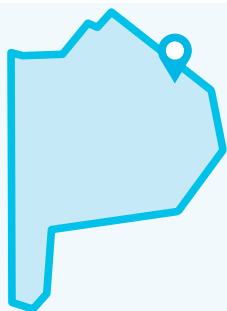
From INTI, Marisa Arcángelo contributes her technical approach by commenting that:



**“risk 2 domestic sanitary products, such as bleach waters, sodium hypochlorite solutions or other general purpose disinfectants, must demonstrate their efficacy under the conditions of use declared by the manufacturer. In addition, we evaluate their stability in order to establish a real expiration date.** This company approached us with a willingness to do things right, and we went through every step of the process. **During the pandemic, we even evaluated a 70% alcohol for surface disinfection, which proved vital for its commercialization. Moreover, biodegradability tests confirmed that their products meet demanding criteria, which not all SMEs dare to face”.**

Today, Dione Química is recognized for its personalized service, customer care and a corporate culture that responds before insurance does. If an export gets stuck along the way, Dione doesn't wait, it resends and fulfills its commitments. Because trust - like cleanliness - is spotless.

And so, with the same formula that was born in a garage and that today is based on science, commitment and international projection, this Argentine SME continues to write a story that cleans, perfumes and demonstrates the excellence of its product.

**DIONE QUIMICA****Avellaneda, Buenos Aires***Manufacture of concentrated cleaning products*

- Production plant: 2,500 m<sup>2</sup>
- Annual production capacity: chemical products: 4 million kilos. Fragrances: 80 tons per year.

**• HS Code:**

- 3302.90.19 / Essential oils and resinoids; perfumery preparations, perfumery, cosmetic or toilet preparations. Other.
- 3301.29.90 / Other. Essential oils





## LIMBRIL QUIMICA



### Liquid soap from the north of Formosa, a formula that is going strong



Limbril is not just a brand name. It is a word that was born in the imagination of a father from Formosa who one day, three decades ago, decided that “cleanliness and shine” could be more than just a wish. They could be the future.

In 1995, Norberto Hasne and his wife founded a small family cleaning products business in El Colorado, Formosa province. The start was as austere as it was determined: selling single items from the garage of the house. There was not enough stock, no plant, no employees. There was will, and that was enough to get the ball rolling.

Thirty years later, Hernán Hasne - Norberto's son and current partner - remembers those beginnings with gratitude and vision. “My dad didn't just found a company. He founded a way of doing things based on humility, perseverance and commitment. That legacy remains present today in every package.”

The company produces and markets more than 100 products. From bleach, waxes, detergents and floor deodorants to insecticides, textile softeners and its star product: liquid soap. This last product is a technical and commercial development that marks a before and after in the history of this SME.

Achieving this formulation - biodegradable, effective, crystalline, designed to take care of clothes, equipment and pockets - was not an easy task. This is where the National Institute of Industrial Technology (INTI), as a technical and strategic partner, played a fundamental role.





In 2021, Limbril began to work with specialists from INTI's headquarters in Formosa to implement the Kaizen system and the 5S, which allowed it to organize its production and operational processes in a context where the company was growing faster than it could organize itself. This order was the starting point to advance towards a more complex development.

Regarding the product, Hernán comments: "I knew that I could replace part of the very expensive sodium lauryl ether sulfate (LESS) with sulfonic acid, but I did not know how to do it without losing quality. So I approached INTI and what I received was much more than a formula. They helped me to professionalize a key product. And that changed us.

Julián Baccaro, a technician in the Institute's Analytical Services Department, summarizes the process as follows: "For three months we worked together: we reformulated the product, adjusted the process and validated each change with tests. The result was even better than expected. We came up with three new versions. The most cost-efficient was also the most effective. Today Hernán has a robust, competitive and sustainable formula.

That technical breakthrough did not remain locked up in a laboratory. It turned into sustained sales, new customers and loyalty. "Many wholesalers make a living from reselling our products. That price-quality relationship is what defines us and we owe much of that to INTI", says Hernán.

The industrial project continues to advance. It has incorporated packaging technology, automatic labeling machines and developed its logistics. All this happens from Formosa, more than 1,600 kilometers from the center of the country.

Today, Limbril is already looking abroad. "In Paraguay, many people cross from the cities of Asunción and Clorinda just to buy our products. They can't find similar products there. We want to grow in that market because we know there is a real opportunity: the consumer chooses what we offer."

Throughout its history, Limbril Química has not lost its focus. On the contrary, it became its identity. And from this corner of Formosa on the banks of the Bermejo River, it shows that it is possible to produce with professionalism, innovate with tools offered by the State and compete with genuine quality products.





**LIMBRIL QUÍMICA - SÁNCHEZ AMÉRICA OLGA**

**Colorado, Formosa**

*Processing, fractioning and packaging of cleaning products, insecticides and perfumery*

- Plant: 1000 m<sup>2</sup>
- Annual production capacity: 6000 Tn

**• HS Code:**

- 3401.30.00 / Liquid soap in retail bottle. Preparations surfactant preparations packaged for retail sale.
- 3401.20.90 / Liquid soap in bulk / industrial. Other soaps in other form other (not toilet).







## International Cooperation



The National Institute of Industrial Technology (INTI), with the institutional support of Latin American and Spanish associations, has organized and developed the Argentine Conference on Detergents, Surfactants and Related Products (JADTA), a biannual event that brings together professionals from the household products, cosmetics and related industries to exchange knowledge and experiences, reflecting its international scope and its commitment to innovation and technological development.

The main focus of this activity is to strengthen the sector through the dissemination of global trends, the promotion of innovation and knowledge, and the updating of regulatory aspects.

Since its creation, the conferences have generated great interest and have been a successful case of linkage between the public sector and the productive sector. The ninth edition was held in 2024, with the participation of more than 100 participants from companies and public and private organizations.

Each edition continues to grow, the tenth will be in the first half of 2026. This continuity shows that JADTA is an important space for international cooperation and knowledge exchange in the domestic sanitary and cosmetic products industry and that INTI is a key player in its organization and development.





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