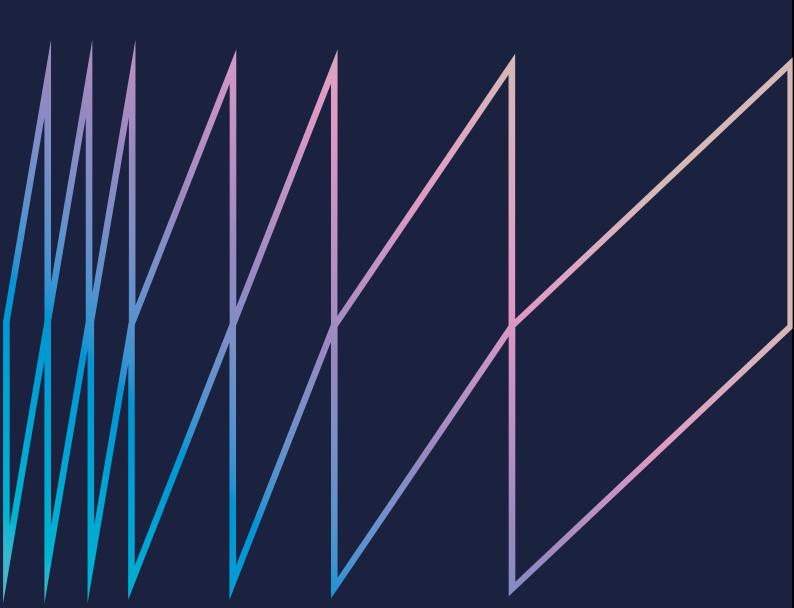
## SEQENS

## **Press Kit**

Seqens, a company committed to everyone's safety

For any information: press@SEQENS.com





### **SEQENS GROUP PRESENTATION**

Seqens is an integrated global leader in pharmaceutical solutions and specialty ingredients, delivering outstanding performance, unrivaled market responsiveness and custom-made solutions to its customers. In the pharmaceutical industry, Seqens supports its customers in developing, scaling up and manufacturing drug substances from the pre-clinical phase to the commercial phase. Seqens also offers a large portfolio of APIs and proprietary products.

Sequens operates 24 industrial plants and 3 R&D centers in Europe, North America and Asia. More than 300 scientists, engineers and other experts develop tailor-made solutions for our customers and ensure that products are successfully transferred into production.

Driven by true entrepreneurial spirit, our success at Seqens is built on our culture of excellence that aims to provide our customers with the best product performance.

Moreover, respect and care for individuals and nature define our identity. The company always aims to provide collaborators with working conditions that are conducive to their professional development and accomplishing their goals. Attentive to the locations where we are based, Sequens is committed to local development that cares for communities and the environment.

Finally, Seqens and all of our affiliates are committed to complying with the laws and regulations (especially anti-corruption laws) that govern our activities around the world by following a strict line of conduct. Seqens aims to ensure that all persons involved in Seqens' business relations (employees, suppliers and customers), and in particular those who are hired or act in our name, commit to complying with the legal provisions and rules defined by the Company's Code of Conduct while conducting their activities.



#### **KEY FIGURES**



**24** manufacturing sites



3 200 employees



R&D center in the EU and US



**300** scientists, engineers, and other experts



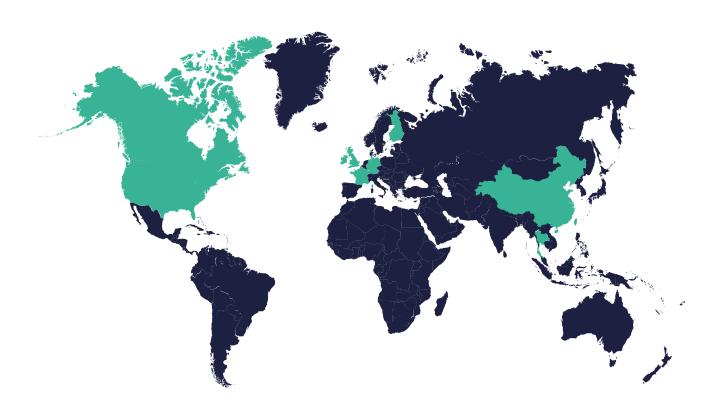
1000 customers in more than 80 countries



€ 1,1 billion revenue



#### **SEQENS AROUND THE WORLD**



#### **EUROPE**

- GERMANY
- FINLAND
- FRANCE
- UNITED-KINGDOM

#### **North America**

- CANADA
- USA

#### **ASia**

- CHINA
- SINGAPORE
- THAILAND



### **SEQENS IN FRANCE**



**14** manufacturing sites



**1800** employees



€ 290 million of investment





## **TABLE OF CONTENT**

SEQENS GROUP PRESENTATION	P 2
SEQENS, A COMPANY COMMITTED TO EVERYONE'S SAFETY	
Safety is at the heart of our activities	P 5
From laboratory to factory	P 6
Process risk management	P 8
When the processes are safe, the risks are elsewhere	P 10
Ergonomics at the workstation	P 12
The human factor	P 1/2

## SEQENS





### SAFETY IS AT THE HEART OF OUR **ACTIVITIES**

As a key player in pharmaceutical synthesis and specialty ingredients, Seqens deploys all its know-how to provide its customers with quality products.

Our activities in chemistry, development and manufacturing of active pharmaceutical ingredients have one thing in common: they are a source of potential hazards for the environment, for the populations living near the plants, and first and foremost for the personnel involved in the daily operations of production, maintenance and logistics.

From then on, the central objective always remains the same: «Risk control», at all times, at all levels, in all circumstances.



Ensuring health and safety at all our sites means preserving our most important asset: the men and women who make up the company. This is why we make it an absolute priority.

Yann grevillot – EHS director





### FROM LABORATORY TO FACTORY

Our research centers, pilot plants and production facilities are fully dedicated to the development and production of active ingredients, pharmaceutical intermediates and specialty ingredients.

Controlling the risks inherent in processes is an important part of our business. Beyond industrial hygiene, it is particularly important to guarantee the thermal safety of chemical reactions (hydrogenation, Grignard, ethoxylation, Friedel-Craft...).

For this purpose, Sequens has a process safety laboratory, located at the Porcheville R&D center. It is supervised by Laurent FOSSET, PhD in chemistry and expert in process safety and associated tests.

Very well equipped, this laboratory has all the apparatus necessary for the characterization and prevention of the risks of runaway reactions and decomposition.

- Apparatus for screening the thermal stability of raw materials, intermediates, reaction media and finished products: DSC (Differential Scanning Calorimetry), SETARAM C80 Calvet Calorimeter.
  - Reaction calorimeters: RC1 calorimeter, Algochem automated reactor
  - Adiabatic calorimeters: Phi-TEC

This equipment allows the acquisition of experimental data essential to the understanding and control of chemical reactions. At each step of the scale-up, a technical safety file is elaborated which allows us to design and develop robust and safe processes.

The process safety laboratory and our know-how also enable us to support our customers in solving problems and manufacturing their molecules in complete safety.













### **PROCESS SAFETY MANAGEMENT**

#### Controlling technological risks is our top priority.

In order to guarantee a high level of safety and to reduce risks to the lowest possible level, Seqens relies on a rigorously applied organization and specific provisions.

Firstly, each country has regulations aimed at controlling industrial risks. These regulations are strictly applied in all the Group's plants.

In France, the regulation is based on two main lines of action:

- Many technical safeguards are directly applicable.
- A hazard study is drawn up; it characterizes the major risks of each activity. Consequences and probabilities are evaluated according to strictly defined criteria. Safety measures are defined and implemented to reduce the risk to a very low level.

In addition to regulatory requirements, Sequens deploys an HSE management system on its sites that integrates process safety and is based on several inseparable pillars, as illustrated below:



Risk analysis is at the heart of this management system. It is based on a wide range of basic data, including studies by the process safety laboratory.

- The risk analysis is based on a specific and systematic methodology, which enables the identification of all process drift scenarios that could lead to consequences on people, the environment or property.
- The safety barriers that are essential to risk control are identified and their effectiveness is verified.





Mechanical integrity programs are deployed. They have the following objectives:

- To ensure that the process equipment and piping used for the processing of hazardous products are maintained in good condition.
- To guarantee the reliability of the technical safety barriers by means of an adapted preventive maintenance, inspection and testing program.

Any modification to a system or a safety barrier can cause a regression in the level of risk control. To avoid any drift over time, a system is in place to ensure a systematic review and approval prior to any change.

All significant accidents and incidents are analyzed, and steps are taken to prevent their recurrence. This data, known as «return of experience», is considered in risk analyses.

If, despite all the preventive measures in place, an accidental event should occur, our teams are trained and prepared to manage emergency and crisis situations in order to limit the consequences. Emergency response plans are drawn up in advance in collaboration with the authorities and public rescue services. They are subject to regular exercises.





## WHEN PROCESSES ARE SAFE, THE RISKS ARE ELSEWHERE

Work on the installations can be the cause of serious accidents, even fatal for those involved: Seqens makes work safety management a top priority.

In the chemical and pharmaceutical industry, thanks to all the preventive measures that are deployed, industrial accidents causing injury or death fortunately remain very rare events.

The most frequent serious accidents occur during maintenance work or work by external companies on installations that are at a standstill. Stoppage of equipment operation is not a guarantee of safety for those involved.

There are many hazards involved in working on a chemical plant.

- Fire start, explosion during hot work (welding, cutting, grinding)
- Spraying, exposure to dangerous fluids when opening pipes or equipment
- Explosion, anoxia or intoxication during interventions inside process equipment (tanks, reactors.)
- Electrification during electrical work

The fundamental safety principles associated with all these activities are the same:

- Analyze the risks / identify the hazards present.
- Physically isolate sources of danger (energy, product).
- Completely eliminate any energy or hazardous substances still present.
- Lockout and tagout to prevent untimely return to service.
- Verify the absence of danger and the proper implementation of the lockout devices.
- Put in place collective and individual protection measures



#### **SEQENS IS STRUCTURED**

Since 2017, in an effort to eliminate serious work-related accidents, standards have been established to regulate high-risk activities. They are deployed uniformly across all Group entities.



## **EVALUATION OF THE LEVEL OF PERFORMANCE / ACCOMPANIMENT OF THE PRODUCTION SITES**

The strict application of the Group's requirements at all our sites is regularly audited either by internal teams or by external experts appointed by the Corporate HSE department.

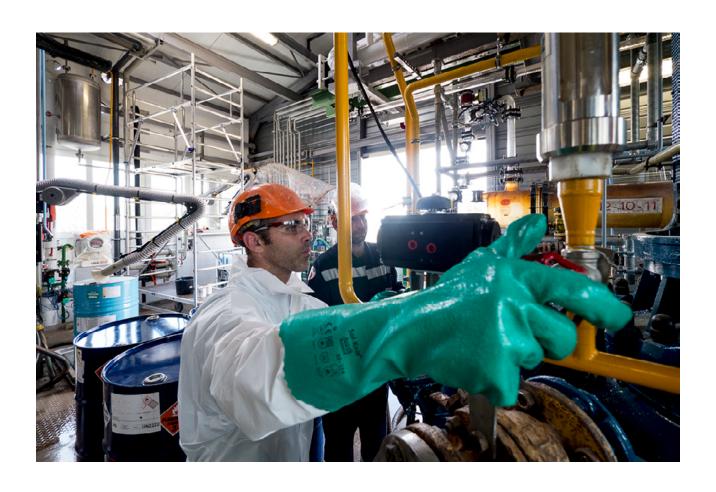
The high level of demand for the standards established has de facto imposed a change in culture and organization, particularly in the way maintenance work and contractors are managed.

Because nothing is possible without adequate support, training is provided to all those involved in the work processes (Lockout Tagout supervisors, works managers, maintenance teams, HSE departments, contractors).





Significant improvements are now visible and measurable through indicators and inspection visits. In safety nothing can ever be taken for granted, but the foundations are solid and we will continue our efforts to guarantee the safety of our operations.





#### **ERGONOMICS AT THE WORKSTATION**

## Sequens is committed to a program to improve workstation ergonomics and reduce accidents related to manual handling.

Manual handling exposes SEQENS employees to the risks associated with physical activity. Carrying, moving, pushing, pulling, lifting, and placing loads involves physical effort and biomechanically demanding postures. Performed repetitively, at a sustained pace and/or in poor conditions, manual handling is the cause of many occupational accidents and diseases, the most well-known of which are MSDs (Musculoskeletal Traumatism).

The reduction of risks generated by handling operations is a strong concern as these operations represent more than 50% of the causes of accidents at SEQENS over the last 3 years.

In addition to the mandatory «Gestures and Postures» training courses, Sequens is committed to a program to improve the ergonomics of handling operations. Working groups have been set up in each of the production sites. These working groups have benefited from the support of an ergonomist and are responsible for carrying out analyses of workstations according to an established program. The ITAMAMI method, created by the CARSATs, makes it possible to formalize the observation and analysis of work situations by collecting elements on all facets of the operators' activity.

The aim is to identify high-risk positions, set priorities, study these positions using an ergonomic approach, develop and prioritize recommendations and monitor their implementation.

To describe the actual work, the method classifies the elements of the work situation into five categories:

- I Individual: Who? Who are you?
- T Task («prescribed» work): What? What tasks do you have to perform?
- A Activity («real» work): How? How do you do it?
- MA Material: With what? What are you working with?
- **MI Environment:** What Environment. Where do you work? When do you work? Who do you work with?

The observation of the work situation consists in questioning each of these 5 components. A precise note-taking takes place during the sequences of observations and exchanges with the operators. Photos and/or videos are used for analysis and to illustrate the findings and recommendations.

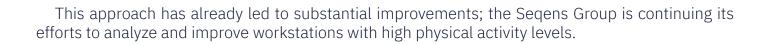
Following these observations, the working group:

- Analyses the observed work situations according to the ergonomic approach.
- Develops a summary document of the highlights identified.
- Proposes improvements and complementary prevention measures:
  - Technical = handling assisting devices
  - Organizational = work organization and communication actions.
  - Human = information, awareness and training actions.

The choice of prevention measures takes into account their effectiveness in reducing or even eliminating exposure to risks.

The detailed methodology is described in a Good Handling Practices guide.









#### THE HUMAN FACTOR

Regardless of the management system and technical safety measures in place, controlling the risk of accidents depends first and foremost on people.

Developing the skills of our employees and subcontractors and strengthening our safety culture are the pillars of the Seqens approach.

- Efforts are focused on risks of potentially high severity. Performance indicators reflect this focus on predictive rather than reactive indicators (such as the accident frequency rate, which alone is not representative of an organization's ability to prevent serious accidents).
  - Roles and responsibilities for safety and environmental protection are clearly defined.
  - Safety is built into every decision we make and into our daily practices.
  - Safety results are part of each employee's individual performance evaluation.
- Our staff and the staff of our subcontractors have the required training and qualifications for the tasks they have to perform.
  - Safety rules and procedures are clear, known and strictly enforced.
  - An organization is in place to share information, feedback and best practices.
- Group entities are regularly audited in order to verify the effectiveness of programs and changes in their level of maturity.

Group management guarantees the necessary resources and needs to control risks and is constantly considering ways to improve EHS performance. Each year, Seqens invests several million euros in projects to improve health and safety and environmental protection conditions.

In each plant and R&D center, health, safety, environment and process safety professionals support the production, maintenance and logistics teams, support continuous improvement programs and ensure the proper application of safety rules and procedures.

Finally, the active participation of our employees is encouraged because it is recognized as essential to the development and maintenance of know-how and shared vigilance.





# SEQENS

**WWW.SEQENS.COM** 

For any information: info@SEQENS.com

