



**TAILOR-MADE  
INGREDIENT  
DEVELOPMENT**

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FULL SERVICE &  
PRIVATE LABEL

WE MANUFACTURE ACTIVE INGREDIENTS  
AND PROVIDE PERSONALIZED SOLUTIONS

**b** groupe  
berkem

[health-beauty.groupeberkem.com](https://health-beauty.groupeberkem.com)



**INTEGRATING  
NATURE INTELLIGENCE  
INTO EVERYDAY LIFE**

# Groupe Berkem

# 60

## YEARS OF EXPERTISE

GROUPE BERKEM, CREATED IN 1964, HAS BEEN A LEADING EXPERT IN THE EXTRACTION OF PLANT-BASED MATERIALS SINCE THE 1970S.



In addition to our historical plant extraction activity, we have been specialized in drying techniques for 30 years.

Constant investment has been made in the development of industrial processes with the aim of refining our techniques. We are committed to ongoing innovation in order to maintain our position at the cutting edge of the industry.

We offer our rich manufacturing expertise to support all your projects.



YEARLY PROCESSING CAPACITY

- > 4,000 tonnes of plants
- > 2,000 tonnes of marine extracts

YEARLY PRODUCTION CAPACITY

- > Over 100 tonnes of floral waters and over 30 tonnes of dry extracts for the cosmetic market
- > Over 100 tonnes of plant and marine extracts for the nutraceutical market

You can rely on us to provide unparalleled **advice and support**, built on **experience** and **unwavering passion**.

# Your project is unique. So is our scope of services.

Our flexible, reactive & efficient teams are dedicated to assisting you in developing your project.

- > A dedicated multidisciplinary team: Project Manager, Sourcing Manager, Marketing Manager, Regulatory Expert, technicians and doctors.
- > A Quality System to validate reliability, safety and compliance in the market.
- > A regulatory department to ensure compliance with the various regulations.
- > Upon request: several certifications, commitments and labels (COSMOS standard, ECOCERT standard, Kosher, Halal, etc.).

Developing customized innovative extracts that fully meet your specific needs.

We support you during each step of your product development.

From full service to private label, the best possible assistance with your success in mind.

- 1  YOUR UNIQUE PROJECT
- 2  MARKET RESEARCH & REGULATORY RESEARCH
- 3  TARGETED SOURCING
- 4  R&D LABORATORIES
- 5  PILOT - SCALE TESTING
- 6  INDUSTRIAL - SCALE PRODUCTION
- 7  ANALYSIS AND QUALITY CONTROL
- 8  FINAL DELIVERY

A unique, exclusive, innovative and specifically tailored product in the form and shape you need.



Tell us about your project and we'll craft **the right product to meet your needs and target markets.**

## Markets & applications

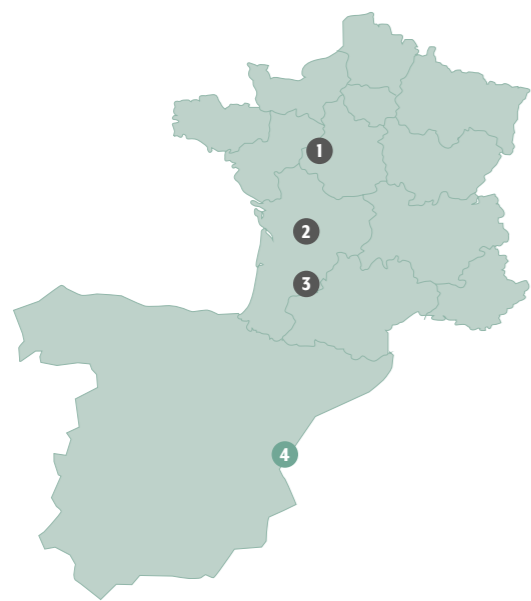
COSMETICS

FOOD

NUTRACEUTICALS

LIFE SCIENCES

# Industrial Sites at Your Disposal



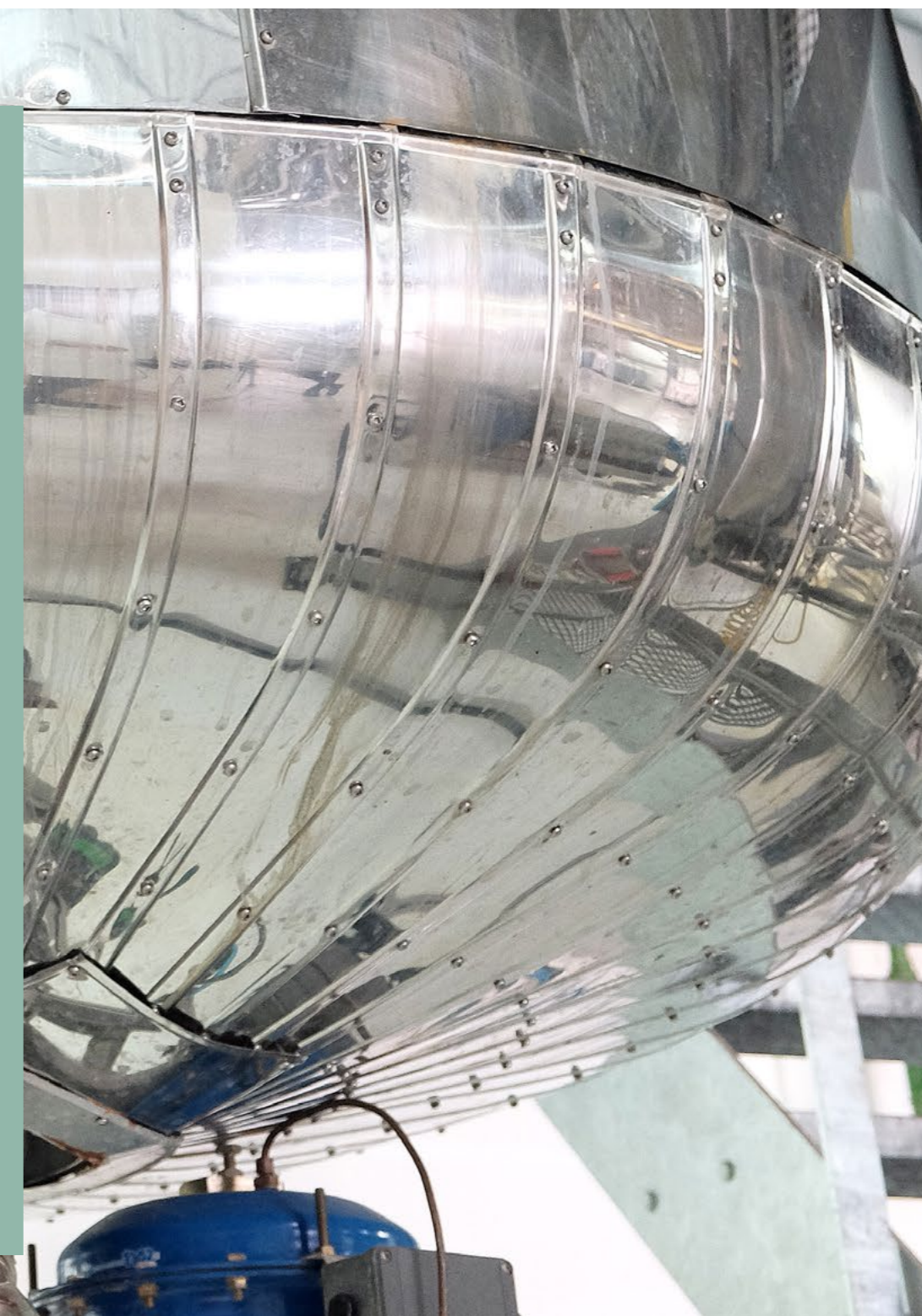
- 1 Chartres: *Freeze-drying***  
> 1,700 m<sup>2</sup> and 130 m<sup>2</sup> for processing  
> ISO 9001 / ISO 22000
- 2 Gardonne: *Plant Extraction & Spray-drying***  
> 5 ha  
> ISO 9001 / ISO 22000
- 3 Tonneins: *Vegetable Oils & Proteins - Oil bottling***  
> 12,800 m<sup>2</sup> covered area  
> 1,500 m<sup>2</sup> for pressing  
> 10,000 m<sup>2</sup> for packaging & storage
- 4 Valencia: *Plant & Marine Products Extraction***  
> 11 ha  
> 8 containers for chilled and frozen storage  
> FSSC 22000/MSC (Marine Stewardship Council)



GARDONNE - FRANCE



VALENCIA - SPAIN



# Ethical & Premium Sourcing

Particular attention is paid to plant sourcing, with a view to guaranteeing the traceability and excellent quality of raw materials.

At Groupe Berkem, we believe that independence is key. We source our plants directly from growers and define with them sustainable production volumes.

We promote local sourcing and short supply chains, we foster long-term partnerships with producers, and we value upcycling.

Our dedicated botanical sourcing team works tirelessly to find the best plants for their valuable benefits, under the best development conditions.



UPCYCLING SAFFRON FLOWER FROM QUERCY, DOMAINE DE MIROULET IN FRANCE



HARVEST OF DAMASK ROSES, DADES VALLEY IN MOROCCO

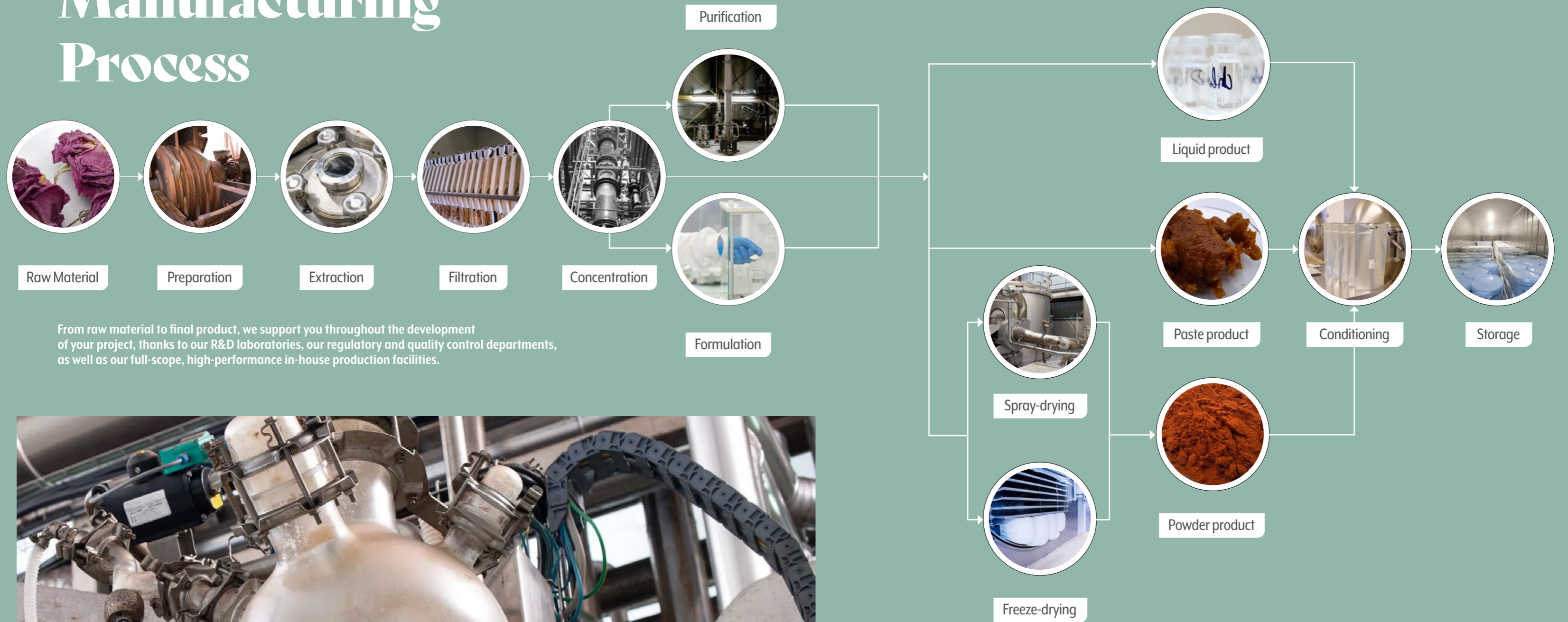
MOROCCAN DAMASK ROSE FIELDS BEFORE THE HARVEST



Our experts will handle your raw material search and provide top-of-the-line sourcing options.

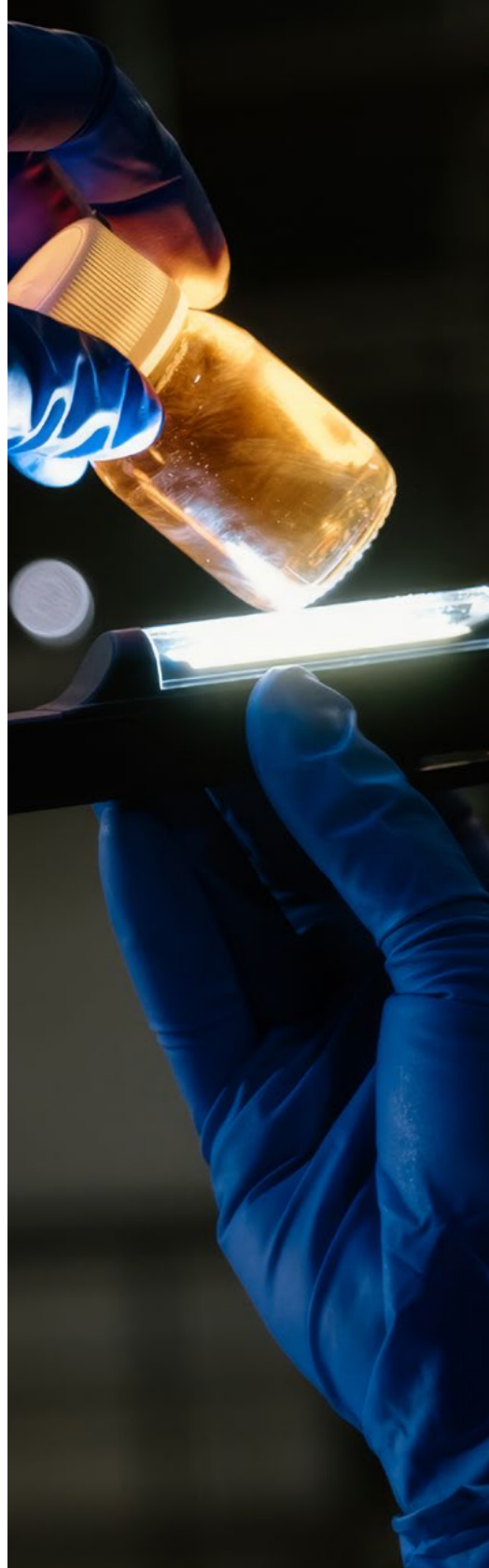
Trust us for **the best possible assistance** from **field to finish**.

# Manufacturing Process



From raw material to final product, we support you throughout the development of your project, thanks to our R&D laboratories, our regulatory and quality control departments, as well as our full-scope, high-performance in-house production facilities.





# Bring Agility to Your Project

Our pilot unit is a crucial step in your industrialization process.

#### *Process validation*

Small-scale tests are conducted before mass production.

#### *Parameter optimization*

We fine-tune production conditions before further implementation.

#### *Validation of R&D lab stage*

Laboratory results are confirmed in a production context to reproduce laboratory tests on a larger scale but below industrial volume.

#### *Cost evaluation*

We strive to estimate and reduce production expenses.

#### *Staff training*

We value continuous improvement to keep our employees up-to-date with new equipment.

#### *Regulatory compliance*

Securing necessary approvals is key to meeting international requirements.

#### *Safety and sustainability*

Identifying and mitigating risks helps us protect health and the environment.

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A pilot unit helps minimize risks, optimize production, and provide flexibility before scaling up.



"It's a real privilege to collaborate with **passionate and dedicated** team members! **Our customers always value this commitment.**" Julie CHÉRUBIN Process & Extraction Laboratory Manager



# Extraction Tools

## Reception – Preparation:

### Dry raw material

- > 1 knife grinder
- > 1 hammer mill / spindle mill

### Marine or wet raw material

- > 2 shredders dedicated to crustaceans and fish carcasses
- > 1 rotary sieve for carcasses

## Extraction – Separation – Concentration:

- > 14 distillation concentrator reactors
- > 10 evaporators (falling stream, filter bottom, falling film, vacuum)
- > 7 reactors
- > 4 percolators
- > 2 centrifugal decanters
- > 2 stirred tanks
- > 2 bottom-filtering extractors
- > 1 ATEX Flottweg centrifugal tricanter

### KNOW HOW

- Extraction of all solvents (water, ethanol, methanol, ethyl acetate, hexane, acetone, heptane, etc.)
- Fine chemistry, esterification, etherification, hemisynthesis, vectorization, encapsulation
- Acid and enzymatic hydrolysis, micro and nanoemulsions

Our extraction capacity per project ranges from 20 kg to several hundred tonnes, tailored to fit your specific needs and raw material factors.

## Purification – Filtration:

- > 4 fading columns
- > 2 columns of ion exchange resins
- > 2 ethanol rectification columns
- > 1 pulsed column
- > Multiple moving filters

### TYPE OF FILTRATION

- Ultrafiltration
- Nanofiltration
- Reverse osmosis

### AVAILABLE METHODS

- Filtration on membranes: cloths, bags, plates, presses
- Sterilizing filtration

## Blending – Drying:

- > 2 ventilated ovens
- > 1 continuous vacuum dryer
- > 1 continuous liquid cooling line before packaging
- > 1 ploughshare vacuum dryer mixer
- > 1 vacuum oven
- > 1 horizontal coulter vacuum dryer
- > 1 coulter mixer
- > 1 cryogenic grinder
- > 1 grinder
- > 1 sieve





# Drying Tools

We offer a wide range of drying technologies to meet the unique needs of preserving and protecting your sensitive raw materials.



RESOLVED STORAGE AND TRANSPORT ISSUES



IMPROVED AND LONGER SHELF LIFE

## Freeze-drying:

Cold drying technique by sublimation that extracts the maximum amount of water contained in a product to improve its stability and extend its shelf life.

- > Preservation of the benefits of your products without alteration
- > Improvement of the stability of your active ingredients
- > Maintaining the bio-activity of active ingredients

- > 1 R&D freeze-dryer  
1-6 kg input
- > 11 Industrial freeze-dryers  
1-200 kg input

## Spray-drying:

Drying and dehydration process where a liquid solution is sprayed into fine droplets within a vertical chamber, interacting with hot air, resulting in a powder enriched with the required molecules.

- > High efficiency, speedy method in a single-step
- > Cost efficiency and procedural simplicity

- > 1 pilot spray-dryer
- > 1 single-acting turbine production spray-dryer

Experts in drying all types of materials, including plants, algae, food ingredients, organisms (bacteria, fungi, etc.), probiotics, marine extracts and much more!



THE WORKING ZONE IS ISO 7 RATED, TO GUARANTEE A CONTROLLED ATMOSPHERE.

"Our customers often highlight our professional and caring approach, responsiveness and **the excellent quality of our products**" Sébastien DECOURTYE Site and Production Manager, Chartres

# Research & Development Laboratories

Our continuous investment in innovative research and development enables us to consistently improve our techniques, ensuring that you always receive the best support.

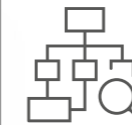
Each of our sites has a Research and Development laboratory where we conduct studies before large-scale production.



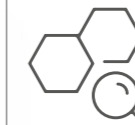
BIBLIOGRAPHIC STUDIES



FEASIBILITY STUDY



OPTIMIZATION PROCESSES



ACTIVE INGREDIENTS CHARACTERIZATION



PLANT STABILIZATION TECHNOLOGY

Protecting polyphenols with our **Phytovector®**

# Biology Laboratory

Focused on two core areas of research:

- > *In vitro* tests on different biological models: 3D models (reconstructed tissues), 2D cells (skin cells, intestinal cells).
- > Acellular tests, with a wide array of biochemical and enzymatic assays.



CONDUCT A HIGH-PERFORMING  
AND INNOVATIVE EVALUATION  
OF THE EFFICACY OF YOUR PRODUCT



UNDERSTAND THE MECHANISM  
OF ACTION



ASSESS THE PERFORMANCE  
OF YOUR PRODUCT



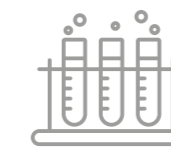
## 4 Business Areas

**b** Construction & Materials

**b** Health, Beauty & Nutrition

**b** Hygiene & Protection

**b** Industry



French chemical manufacturer since **1964**

## 5 expertise areas, 1 objective



Integrating bio-based chemistry into conventional chemistry

- Extraction
- Formulation
- Drying (spray-drying and freeze-drying)
- Resin synthesis
- Production of edible and technical vegetable oils, and manufacture of vegetable proteins



## 1 Synerkem® technology

dedicated to the development of plant-based boosters

Over

**250 employees**



European production **100%**



**1 head office**

Bordeaux area (Gironde)

## 5 industrial sites

- Chartres (Eure-et-Loir)
- Gardonne (Dordogne)
- La-Teste-de-Buch (Gironde)
- Tonneins (Lot-et-Garonne)
- Valencia (Spain)



## 5 laboratories near Bergerac

- 2 dedicated to R&D
- 2 for quality control and analysis
- 1 biology laboratory

## 5 laboratories near Bordeaux

- 1 laboratory for formulating materials protection products
- 1 laboratory for synthesizing resins

## 1 laboratory Valencia

- 1 quality control and analysis laboratory

## 1 laboratory for developing decorative products

- 1 quality control and analysis laboratory
- 1 biology laboratory

More than

**500 product references**





Let's  
innovate  
together



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