

### A DROP OF NATURE'S POWER















## ATELIER | EXTRACTION | SÉLECTIVE

THE BEST INGREDIENTS THAT NATURE HAS TO OFFER

By exploring biodiversity, we discover the rarest and finest raw materials. We produce high quality vegetable extracts from natural Mediterranean raw materials. Our selections are high quality natural ingredients with tailor-made constituents profiles and volume flexibility, to meet the niche market's expectations in:

- Natural perfume
- Organic cosmetic
- Nutraceutical
- Phytopharmaceutical



# OUR COMPANY IN NUMBERS DYNAMIC | INNOVATIVE START UP

# ACTIFS PRECIEUX, a dynamic and innovative start up

Our extraction workshop and our laboratories are located at the center of a rich and varied flora, our plants develop exceptional asset profiles.

- 1600 m<sup>2</sup>
- 15 employees
- Pilote unit 5L/ 600 bar
- Development unit of 60L/ 600 bar
- Industrial unit of 250\*2 L
- Processing capacity of 600T/year
- Investment of 4 Million euros
- 4 Patents in progress.





### **OUR OFFER**

#### WE PROVIDE THE BEST OF PLANTS EXTRACTS

We offer **high quality** cosmetic ingredient mainly focused on plants of the Mediterranean, our products are **100% natural**, free from additives and any chemical solvents.

- TAILOR MADE SOLUTIONS : Customized ingredients
- NATURAL PREMIUM INGREDIENTS: Active CO2 Eco-extracts SELECTIVE / TOTAL
- CUSTOMIZED R&D: Interdisciplinary collaborative innovation / Research and Development Contract / Open Innovation Project.

In the **high-growth sector** of vegetable substances, our main purpose is to **improve** the health and well-being of people all over the world throughout **innovative active ingredients** by exploring the health and beauty benefits of **natural** ingredients.



# Natural ingredients are the heart of ACTIFS PRECIEUX expertise

Our State-of-the-art plant extraction allows us to develop tailor-made natural ingredients. From the development of inspirational extracts and active ingredients to exclusive customized projects.

A real expertise on a specific ecosystem. Through an advanced and continuous research and development procedure on the market's latest trends, we intend to gain a valuable expertise in our key domain in order to ensure our customers' satisfaction by providing a diversity of raw materials.

We manufacture active ingredients extracted selectively, such as :

- Lipo-active extract.
- Aromatic compounds.
- Colorants.
- Antioxidants.



### **EXPERTISE**

PREMIUM INGREDIENTS



### **DOUBLE MISSION**

PRODUCE SUSTAINABLY

# ACTIFS PRECIEUX's commitment to being a responsible company is deeply rooted in our values

Discover, offer and provide our customers and consumers with innovative, sustainable and responsible active substances as new green alternatives to contribute to their health and wellbeing.

- ACTIFS PRECIEUX sources itself through fair trade cooperatives by creating jobs opportunities with the best social practices for rural employees and by valorizing the Mediterranean and Tunisian plant heritage.
- We contributes to the protection of the environment, by reducing our ecological footprint.
- By joining the United Nations Global Compact in 2018, ACTIFS PRECIEUX is committed
  to aligning its activities and strategy with the ten principles of the convention on
  human rights, labor standards and the fight against corruption.



### GREEN TECHNOLOGY

THE ART OF EXTRACTION USING SUPERCRITICAL FLUIDS

We develop natural ingredients by contributing to the protection of the environment and respecting the principles of green chemistry.

As part of a sustainable development approach, ACTIFS PRECIEUX adopts the supercritical carbon dioxide extraction as a novel eco-technology allowing:

- · the reduction of energy consumption and
- the use of alternative solvents for the production of high quality natural ingredients.
- Eco-friendly process compared to other methods of extractions.

Further, the Federal Drug Administration (FDA) has labeled  ${\rm CO_2}$  safe for industrial extractions. CO2 acts as a cleaning agent, so microbial bacteria, molds, and mildews are killed during the process.

Our expertise consists in modulating the extraction parameters to obtain innovative pure concentrated extracts of high quality obtained with an environmentally friendly technology.



### SUPERCRITICAL FLUID EXTRACTION

THE ART OF EXTRACTION USING SUPERCRITICAL FLUIDS

Supercritical fluid extraction (SFE) is the process of separating one component from another using supercritical fluids as the extracting solvent.

Carbon dioxide (CO2) is the most used supercritical fluid, sometimes modified by cosolvents such as ethanol or methanol.

The properties of the supercritical fluid can be altered by varying the pressure and temperature, allowing effective and selective extraction.

#### For example:

- Extraction of volatile compounds from a plant at low pressures (100 bar).
- Extraction of lipo-active compounds from a plant at high pressure.

Our Innovative Green technology operates at very high pressure up to 600 bars. which makes it possible to extend the fields of application with a capacity ranging from pilot to industrial scale.



### SUPERCRITICAL FLUID PROPERTIES

THE ART OF EXTRACTION USING SUPERCRITICAL FLUIDS

Due to its interesting properties CO2 (carbon dioxide) is the most used fluid.

In its supercritical phase, it has the advantage:

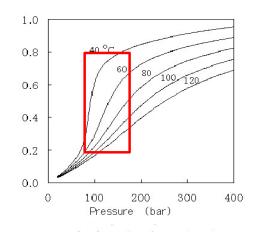
- Being a "green" solvent completely neutral.
- Being non-toxic.
- Can be used at temperatures close to ambient and at high pressures.
- · non-polluting.
- non-flammable.

Working area: 31 - 80°C / 74 - 600 bar

Solvent power is related to fluid density

(Pressure / temperature)

Supercritical CO2 is a selective solvent, according to temperature and pression, it can extract selectively the desired compounds from the plant.







# ADVANTAGE OF OUR TECHNOLOGY

ECO-DESIGNED NATURAL
ACTIVE INGREDIENTS

#### SUPERCRITICAL FLUID EXTRACTION TECHNOLOGY ADVANTAGES:

- Inert atmosphere.
- Moderate temperatures conditions.
- Absence of harmful solvents and oxygen.
- Finished products without residues.
- Effective and selective extractions.
- Generation of different fractions in a process.
- Achievements of high yields.
- Immediate application of all fractions.

#### SUPERCRITICAL EXTRACT SPECIFICATIONS:

- 100% natural, Pure
- Do not contain any solvents or additives.
- Meet the strict criteria of natural cosmetic standards.
- Highly concentrated and have a good efficacy at a low dosage.
- Sterile and do not need any preservation.
- Free from water, carbohydrates and proteins.
- Very stable and stand out due to a very long shelf life.