



Unlocking potential: White label production of **Bioactive natural food supplements**

EXPLORE OUR SOLUTIONS
BROCHURE



MADE IN
FRANCE

Welcome to the world of bioactive, functional, natural and clinically-proven microalgae- based French nutraceuticals

A pioneer in deriving value from microalgae

AlgoSource is a French company that has been based in the Pays-de-la-Loire region for three decades, specifically on the Guérande peninsula in the Atlantic Ocean. **It holds an unparalleled international reputation in deriving value from the active properties of microalgae and from the mother liquors of Guérande.** AlgoSource

boasts a **unique track record of rigorous and groundbreaking clinical trials**, showcasing the functional activity of its products.

A guiding principle: quality

AlgoSource produces exceptionally functional bioactive extracts, and quality lies at the heart of our industrial efforts. Our approach is based on **three key pillars**: upholding the natural integrity of our extracts, ensuring uncompromising traceability, and maintaining local production, from raw materials to finished products.

AlgoSource maintains end-to-end control of the value chain, allowing consistent quality control. We have an in-house R&D laboratory to refine our processes and formulas, we cultivate the microalgal biomass in our own algae farm,

utilize our patented in-house bio-extraction process, sterilize our food supplements, and conduct bulk or finished product packaging (ampoules or bottles) within our Guérande facilities.

Our extracts are available in both **Organic Agriculture and conventional certifications**. They are also **certified Halal** to cater to diverse customer needs.

Because our products are intended for human consumption, no batch leaves our production site without prior **validation through microbiological and physical-chemical testing by our in-house laboratory as well as an independent external analysis facility**.

100% IN-HOUSE PRODUCTION





Continuous innovation

AlgoSource's commitment to ongoing innovation is evident through its active contribution to the microalgal ecosystem flourishing in Loire-Atlantique. Thriving in this stimulating and pioneering environment, AlgoSource has forged **an exceptional partnership with the GEPEA laboratory, a CNRS unit at the University of Nantes**. This partnership, unique in Europe for its expertise in process engineering applied to microalgae, fosters a constant drive for scientific and clinical progress.

The high-caliber R&D team at AlgoSource consistently works towards **enhancing the properties and functionalities of microalgal and Guérande mother liquors extracts**. Their aim is to create exceptional, naturally-derived food supplements that are 100% made-in-France and that redefine norms, while also maintaining a vigilant scientific and clinical watch.

Development of customized food supplements

In support of our clients' nutraceutical innovations, AlgoSource boasts a dedicated "go-to-market" team **focused**

on market trends and tailored solutions. This team leverages a deep understanding of our extracts, alongside expertise in sourcing additional ingredients and **custom formulation**, to drive your developmental aspirations.

AlgoSource possesses a unique blend of expertise and technical mastery in formulation, enabling the creation of extracts that are 100% natural, packaged under sterile conditions, and free from any preservatives.

Their liquid form ensures the preservation of all active molecules in their native state, thus maintaining their full functional and biological efficacy and significantly enhancing their bioavailability.

A company committed to corporate social responsibility (CSR)

As a biodiversity ambassador for the Pays-de-la-Loire Region, AlgoSource has been **deeply committed, since its inception, to preserving natural resources and fostering sustainability**.

Its cultivation and bio-refining processes are designed to optimize inputs, minimize their usage, avoid synthetic solvents or chemicals, and

Liquid bioactive extracts: enriching your nutraceutical range

rigorously control and recycle waste. In this mindset, AlgoSource became the first microalgal company to conduct a life-cycle analysis of its spirulina biomass production. Furthermore, it underwent an independent audit for its CSR policy and received a "remarkable" score of 77/100 in comparison to its benchmark (Gaïa score).

AlgoSource stands as a truly unique enterprise, drawing from over thirty years of experience in deriving value from the active properties of microalgae and from the Guérande mother liquors. This experience is channeled to serve nutraceutical actors in pursuit of ground-breaking, authentic and effective products.



“

What I love about my job is the innovation aspect and the associated dynamism, allowing us to offer our clients natural, bioactive, effective and ground-breaking food supplements.

VICTORIA CALLIGARO
Bioprocess Engineer and
Go-to-Market Manager

”

3 galenic forms to fulfill all your needs



Our extracts are presented in liquid form to ensure their functional performance and enhance the bioavailability and assimilation of their bioactive components.

PRIMARY PACKAGING



CUSTOMIZABLE AMPOULES

Pharmaceutical-grade ampoules, available in transparent or amber glass:
5 ml, 10 ml



CUSTOMIZABLE GLASS VIALS

Pharmaceutical-grade vials:
15 ml, 30 ml



STERILE BULK BAGS

Pharmaceutical-grade sterile pouches, ranging
from 1 to 500 liters

SECONDARY PACKAGING



Customized ampoules and vials are packaged in branded boxes **according to your needs**. Packaging units are adaptable to the recommended dosage for your customers.

CUSTOMIZABLE DISCOVERY PACKS



To complement **your marketing efforts and cater to your sampling requirements**, we offer **customizable packs of 5 ampoules or 2 bottles**.

Our products are
bio-extracted,
sterilized, and
packaged in **our
production facility
in Guérande, France**





Spirulysat®, the only clinically-proven spirulina extract

The bioactive extract of spirulina is at the core of AlgoSource's expertise. Spirulysat® owes its name to the lysis of spirulina biomass (*Arthrospira platensis*), which is cultivated and rigorously controlled at our algofarm in Loire-Atlantique, France.

Spirulysat® comes from biomass whose **cultivation is 100% dedicated to intensifying the presence of active molecules**. The bio-extraction process, patented by AlgoSource, uses only **water, without synthetic solvents or chemicals**. It is carried out at cold temperatures to fully preserve the functional properties of phycocyanins, the main molecule of interest.

A concentrated extract rich in phycocyanins and polysaccharides

Spirulysat® is concentrated in **phycocyanins**, the primary molecules of interest in spirulina, which are responsible for the 100% natural blue color of our extract. The red highlights that appear in the light are the best demonstration of the product's bioactivity.

Spirulysat® is more than just phycocyanins. The bio-extraction process preserves all the water-soluble components, especially **polysaccharides** (sugars). **It is the synergistic action of these polysaccharides with the phycocyanins that accounts for the incredible functional effectiveness of Spirulysat®.**

A liquid extract for guaranteed biological efficacy

Thanks to the patented bio-extraction process, **the molecules retain their quaternary spatial structure in Spirulysat®. Their biological properties are thus perfectly preserved.** By way of comparison, AlgoSource subjected its Spirulysat® to various drying processes, including cold and prolonged drying: the antioxidant activity of the resulting dry product was found to be fifty times less significant than that of the original liquid extract.

Functionally very potent, Spirulysat® contains only spirulina extract and water (+ an acidity regulator, less than 0.1%, when necessary). It contains **no preservatives**. Spirulysat® undergoes cold sterilization and is packaged in pharmaceutical-grade containers. This approach focuses on the essential: **providing consumers with all the richness and functional potency of spirulina's active compounds.**



What I love about my job is that, behind an extremely complex process, we create a natural, bioactive extract that is very simple in its composition.

YLIANA PANHELLEUX
Nutraceuticals
manufacturing manager



SPIRULYSAT® Bioactive extract of *Arthrospira platensis* spirulina

THE BENEFITS OF SPIRULYSAT®

- It's the only concentrated spirulina extract, rich in **phycocyanins**, whose antioxidant activity has been clinically demonstrated through human trials.
- It's also the only spirulina extract for which **preventive** activity against **hepatic pathologies** (NASH syndrome) and **cardiovascular** issues (atherosclerosis) has been observed in humans.
- **High bioavailability:** the liquid form ensures high availability of the molecules present and rapid absorption by the body.
- **100% Natural:** Spirulysat® is a pure extract without the addition of chemicals or synthetics.
- **Ease of use:** due to rigorous, in-house control of the entire value chain, AlgoSource produces an extract that is **neutral in taste and odor**.
- **Customizable** in phycocyanin concentration (from 1,000 to 10,000 mg/L); Shelf life ranging from 12 to 36 months.
- Available in conventional or organic certified.



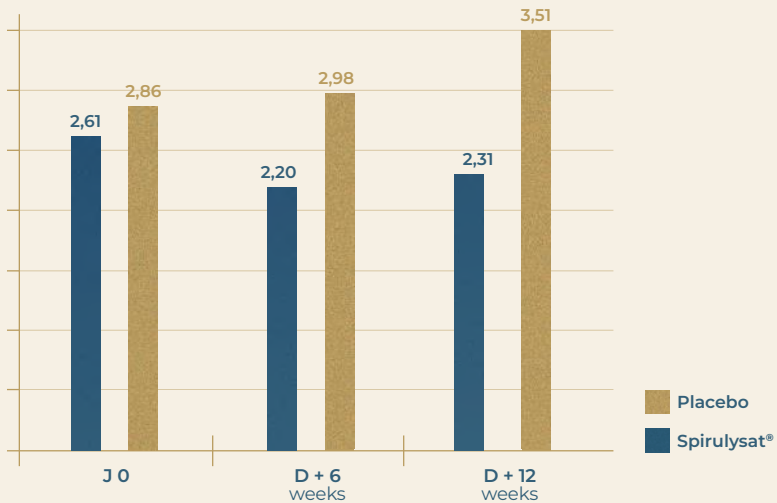
The only spirulina extract to undergo human clinical trials

Spirulysat® is the world's only spirulina extract to have been subjected to a double-blind, placebo-controlled clinical trial on humans. This clinical trial demonstrated, for the first time in humans, the **antioxidant activity** of a concentrated spirulina extract rich in phycocyanins and polysaccharides. It also highlighted a significant effect on **reducing triglycerides and the Fatty Liver Index**, indicating broad-spectrum functionality without toxicity.

In a concentrated form, Spirulysat® is currently undergoing a second clinical trial on humans, conducted in a hospitals setting on patients with cancer undergoing chemotherapy. This multicenter, randomized, double-blind, and placebo-controlled trial is a world first for a bioactive spirulina extract.

OXIDATIVE STRESS LEVEL

(measurement of urinary isoprostanes)



OUR FORMULAS	POSITIONING
SPIRULYSAT® & COPPER	Antioxidant Immune defenses Energy metabolism Nervous system Hair and skin pigmentation Iron transport in the body
SPIRULYSAT® & MAGNESIUM	Support for athletes Normal muscular function Reduction of fatigue General well-being Training and endurance Muscle recovery
SPIRULYSAT® & SELENIUM	Antioxidant Immune defenses Male fertility Strengthening of nails and hair Support for thyroid function
SPIRULYSAT® & ZINC	Fertility Spermatogenesis reinforcement
SPIRULYSAT® BEAUTÉ Formulated with an extract of <i>dracocephalum moldavica</i>	Nutricosmetics: hydration, elasticity, skin densification, anti-ageing
SPIRULYSAT® & CHOLINE	Prevention of liver pathologies
GUMMIES SPIRULYSAT®	General well-being Antioxidant Original blue color



THE TWO POSSIBLE USES OF OUR INGREDIENT

1

You can use **our ready-to-use catalogue of key formulas as provided** below.

2

You can customize your formulas: combine our bioactive extracts with other ingredients to expand their functional scope, support more targeted marketing communication, and cater to specific organoleptic preferences.

Spirulysat® can also be formulated to target specific organoleptic profiles: flavoring (mint, lemon, orange, mango, caramel, etc.), essential oils (eucalyptus, maritime pine, camphor, etc.), vegetable glycerin, stevia, and more.

NECTAR OF CHLORELLA®

Bioactive extract of *Chlorella vulgaris*

What is Chlorella?

Similar to spirulina, Chlorella is known as a **"superfood."** It's a **freshwater microalga** that serves as a natural source of essential nutrients such as **proteins, vitamins, minerals, and amino acids.** As a eukaryotic organism with a distinct nucleus enclosed by a membrane, Chlorella is exceptionally rich in chlorophyll and naturally contains **significant amounts of vitamins A and B12.** This makes it a particularly valuable supplement for individuals following a vegan diet.

Liquid form for improved digestibility

Chlorella is known for having an extremely tough cellular wall, which makes digesting it difficult and sometimes uncomfortable when consumed in its dry form. **That's why AlgoSource has chosen to develop Nectar of Chlorella®, the first liquid of *Chlorella vulgaris* extract.**

To create Nectar of Chlorella®, AlgoSource employs innovative grinding technologies that are specifically designed to break down the cell wall. Next, a separation process is applied to preserve **the molecules of interest while removing the less digestible part of the biomass.**

It's this dual process of breaking down the cellular wall and molecular separation that gives Nectar of Chlorella® **its powerful functional**



properties and exceptional bio-assimilation. In a final step, the liquid extract is stabilized using an exclusive, mild technique to ensure its preservation without the need for added preservatives.

Nectar of Chlorella®: a detox ally

This precious nectar provides plant-derived vitamins and amino acids that the body cannot synthesize on its own. The porphyrin rings in Chlorella's chlorophyll and vitamin B12 contribute to enhancing glutathione production, positioning Nectar of Chlorella® as **a powerful agent for detoxifying cadmium, dioxins, various heavy metals, toxins, and pesticides.**

The liquid form releases beneficial dietary fiber that promotes **healthy and regular digestion**, and also contributes to maintaining a balanced gut flora, thereby supporting gastrointestinal health.



THE BENEFITS OF NECTAR OF CHLORELLA®

Liquid form for improved
digestibility

Natural source of
vitamin B12

Natural source of
vitamin A

Rich in chlorophyll for
detoxification action

Release of fiber through
an exclusive bio-extraction
process for **better intestinal
comfort**

Vitamin A

Immune defenses
Maintenance of normal skin and
mucous membranes
Normal iron metabolism

Vitamin B12

Energy metabolism
Proper functioning of the
nervous system
Normal red blood cell formation
Immune defenses
Reduction of fatigue

EVEN MORE
CUSTOMIZED
FORMULAS?

Nectar of Chlorella® smells and tastes like fresh grass.

Available in its standard formulation, **our nectar can also be adapted to target specific organoleptic profiles:**

- Flavors (mint, lime, orange, mango, caramel...)
- Essential oils (eucalyptus, maritime pine, camphor...)
- Vegetable glycerin, stevia...

Nectar of Chlorella® can also be combined with other ingredients:

- Minerals,
- Vitamins,
- Fruit and plant extracts,
- Specific ingredients, and more...

COMPOSITION OF NECTAR OF CHLORELLA®

Nutritional Information		/ 100 g	Minerals		/ kg
Energy value / kJ		62 kJ	Calcium		22,50 mg
Energy value / kcal		15 kcal	Copper		0,112 mg
Proteins		2,6 g	Iron		2,44 mg
Carbohydrates (by difference)		1,0 g	Magnesium		17,80 mg
Total fats		< 0,6 g	Phosphorus		74,20 mg
Ash		0,27 g	Potassium		82,30 mg
Moisture		96,1 g	Sodium		5,91 mg
			Zinc		0,357 mg
Pigments		/ 100g	Essential amino acid profile		/ 100g
Chlorophyll		412,9 mg	Histidine		46,8 mg
Lutein		4,17 mg	Isoleucine		79,3 mg
Zeaxanthin		1,13 mg	Leucine		183 mg
Vitamins		/ 100g	Lysine		134 mg
Beta-carotene (provitamin A)		1 540 ug	Methionine		47 mg
Vitamin B12		3,8 ug	Phenylalanine		113 mg
			Threonine		98,7 mg
			Tryptophan		26,2 mg
			Valine		140 mg



This precious nectar provides **plant-based vitamins A and B12**, as well as **essential amino acids** that the body cannot synthesize on its own.



LOW-SODIUM MARINE MAGNESIUM extract from Guérande mother liquors

Where does AlgoSource's marine magnesium come from?

AlgoSource's marine magnesium comes from the salt marshes of the Guérande peninsula in France. Specifically, it originates from the seawater in the final evaporation basins of the salt pans, where salt workers harvest salt throughout the summer season. These waters, known as "mother liquors," are naturally rich in minerals and trace elements, including magnesium, calcium, phosphorus, sodium and potassium.

This concentration of richness is something only nature can produce. This is the primary reason behind the quality of AlgoSource's Low-sodium Marine Magnesium.

To ensure impeccable quality, AlgoSource meticulously selects its salt workers as partners, taking into account the location of their

salt pans to minimize proximity to roads, which can be a source of pollution. As part of the ISO 9001-14001 quality approach, their environmentally-friendly practices, the natural origin of their products and their storage conditions, are subject to ongoing control.

The only marine magnesium compatible with salt-free diets

Concentrated seawater cannot be used without further processing. Therefore, AlgoSource has developed an exclusive cold-water bioprocess to filter and purify it. Additionally, the company has pioneered a unique process for desalination, which involves no heat treatment, synthetic solvents, or chemicals. Through this exclusive

method, which significantly reduces the sodium content, AlgoSource is able to offer the only marine magnesium compatible with salt-free diets.

In its ongoing commitment to quality and to preserving the natural properties of its products, AlgoSource sterilizes them during packaging.

By maintaining the product's integrity, from harvest to packaging, all its biological properties are preserved.



THE BENEFITS OF LOW-SODIUM MARINE MAGNESIUM

It participates in **over 300 interactions within the body** and notably helps with:

- Improving neuromuscular transmission and balance
- Energy metabolism
- Reducing fatigue

- Contributes to normal functioning of the psychological functions of the nervous system

It's 100% natural and 100% bioavailable, free from any synthetic solvents or chemicals. It's also **compatible with salt-free diets**.



Ionized Mg2+ form

AlgoSource's Low-sodium Marine Magnesium is **100% bioavailable**. Preserved in its original liquid form, it prevents **Mg2+ molecules from associating with oxide molecules**, thereby providing the body with direct access only to the molecules it can assimilate. Low-sodium Marine Magnesium is not a magnesium salt. This lack of molecular association also prevents the potential side effects sometimes associated with marine-origin magnesium.

This significantly sets it apart from magnesium salts, whose bioavailability is, at best, 30 to 40%. **This advantageous difference is due to its liquid form.**

Concentrated naturally by sunlight and wind, Low-sodium Marine Magnesium is a raw marine extract that offers a natural, preserved, and bioavailable solution.



OUR FORMULAS	POSITIONING
LOW-SODIUM MARINE MAGNESIUM + red vine	Blood circulation Muscle comfort Reduction of fatigue
LOW-SODIUM MARINE MAGNESIUM + marine hydrolysates of collagen (type II)	Prevention of joint pain Reduction of development of osteoarthritis Normal muscular function Reduction of fatigue
LOW-SODIUM MARINE MAGNESIUM + Spirulysat®	Support for athletes Normal muscular function Combatting fatigue General well-being Training and endurance Muscular recovery
LOW-SODIUM MARINE MAGNESIUM + Sage extract, sage essential oil	Improvement of memory Increase in cognitive performance Combatting mental fatigue and stress
LOW-SODIUM MARINE MAGNESIUM + Microencapsulated essential oil of Citrus sinensis with acacia gum	Improvement of sleep Stress management Mental and emotional well-being Reduction of fatigue
LOW-SODIUM MARINE MAGNESIUM + Guarana	Support for athletes Physical and mental performance Concentration Muscle comfort
LOW-SODIUM MARINE MAGNESIUM + Guarana (titrated in caffeine), ginseng	Reduction of fatigue Energy
LOW-SODIUM MARINE MAGNESIUM + verbena, passionflower	Muscle comfort Reduction of stress Relaxation



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Low-sodium Marine Magnesium can also be formulated to target specific organoleptic profiles: flavoring (mint, lemon, orange, mango, caramel, etc.), essential oils (eucalyptus, maritime pine, camphor, etc.), vegetable glycerin, stevia, and more.



The only marine magnesium compatible with salt-free diets



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FRANCE



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