SEPPIC

Expertise serves Health & Beauty

An affiliate of

AIR LIQUIDE Healthcare

Profile

- SEPPIC has been a **wholly-owned affiliate of the Air Liquide Group** since 1986 and an activity of Air Liquide Healthcare since 2012.
- SEPPIC designs specialty ingredients for health and beauty applications. Prized for its proximity and reliability, SEPPIC inspires its customers worldwide with a **unique combination of expertise** and boldness.
- SEPPIC is a **recognized** for many product lines, bringing together **scientific expertise** in the field of chemistry, biology, formulation and objectification. These include polymers, surfactants and emulsion technologies, immunology, transformation of natural products and more.

Key Figures

- **5,000** customers in over **80** countries
- **620** employees in **14** countries, including approximately **100** researchers
- A global network of over **80** distributors and agents
- **16** international sites including **3** manufacturing plants
- **4** CTSC: Customer Technical Service Centers

Ingredients that inspire

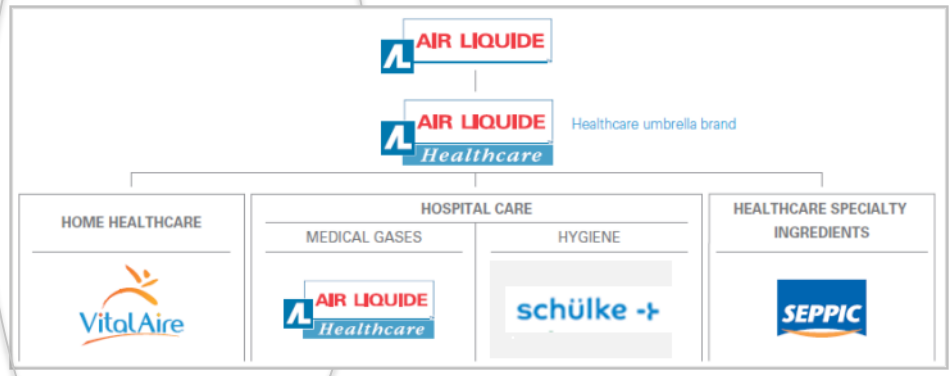
SEPPIC

Strategy

From Strategy to M&A

- 2015 Identity and Strategy redefined
- Focus on Health & Beauty
  - BeautyCare & Vaccine adjuvant
  - Boost Pharma & Nutrition BU
- Air Liquide Sponsorship for acquisition
  - BiotechMarine acquisition

Air Liquide sponsorship on our strategy



Ingredients that inspire

SEPPIC

BiotechMarine
Sustainable Ingredients from the sea

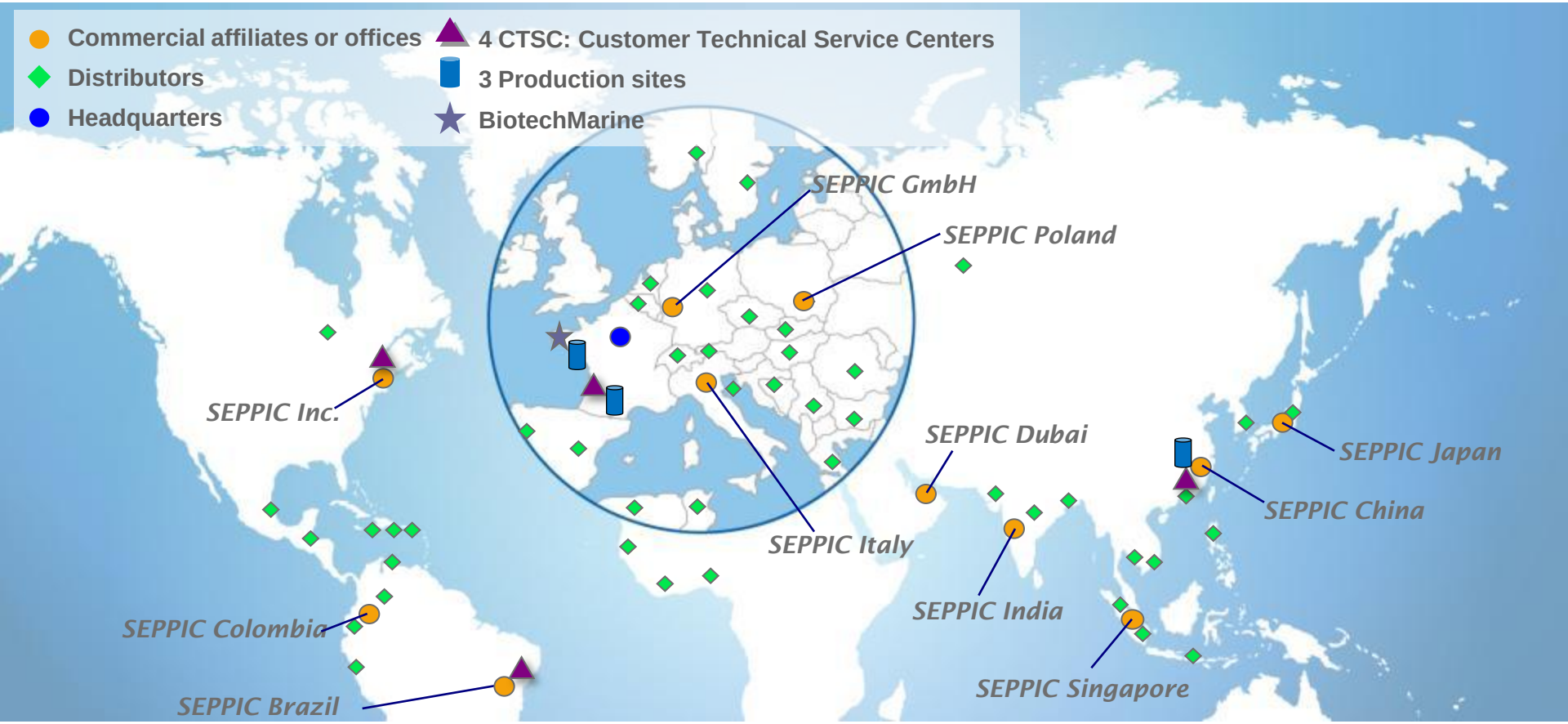
January 2013: acquisition of BiotechMarine, one of the world's leading producers of Personal Care Active ingredients derived from algae and marine biotechnologies.

- A natural alignment with SEPPIC's strategy and complete range of cosmetic actives :
  - Anti-aging products
  - Moisturizers
  - Sun protection products
  - Hair care products
  - Color cosmetic ingredients
- BiotechMarine was established in 1988 in Pontrieux, Brittany (France).
  - Sales worldwide to all cosmetic producers including major key accounts
  - 60% revenues made internationally
  - International network of 30 distributors
- 35 employees, 1 US subsidiary and a network of international distributors
- New technologies for SEPPIC
  - Marine technologies
  - Cell Culture
- A strong signal to our markets and internally

Ingredients that inspire

SEPPIC

SEPPIC present in 80 countries



Our Businesses

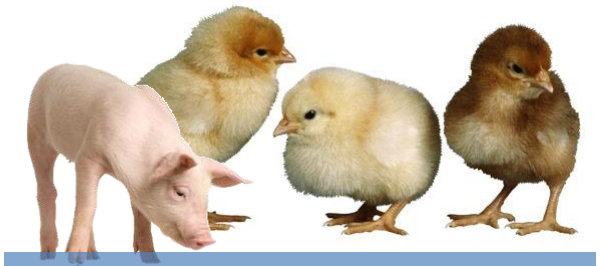
Contributing to health and well-being

Contributing to health and well-being

- SEPPIC has become a leading supplier in the dynamic markets of **health** and **beauty** and in the **industrial sector**.

Beauty Care

Human Health



Animal Health

Performance MaterialS

Ingredients that inspire

SEPPIC

Beauty Care

By your side throughout the world, SEPPIC Beauty Care imagines & develops ingredients for Active Beauty and for Sensorial Beauty, to inspire the cosmetics of tomorrow.

- ACTIVES
  - Anti-aging
  - Daily defense
  - Skin complexion
  - Skin balance
  - Moisturization
  - Body shape
  - Hair & Scalp care
- POLYMERIC THICKENERS & STABILIZERS
- EMULSIFIERS
- FUNCTIONAL ADDITIVES
  - Texturizing agents
  - Foaming & solubilizing agents
  - Preservatives & boosters

Nutrition

SEPPIC is a specialist and a reference supplier of excipients and actives for the Nutraceuticals sector.

PRODUCTS

- Ready-to-use coating excipients
- Functional excipients
  - Direct Compression
  - Binders / Flow aids
- Active ingredients
  - Natural extracts : skin beauty, vitality
  - High quality minerals
- Natural sweeteners
- Encapsulation solutions platform
  - Taste-masking
  - Sustained release
  - Protection of actives
  - Aspect & texture

FORMULATIONS

- Dietary suplements
  - Tablets
  - Capsules
  - Sticks
  - Drinks

Human Health

SEPPIC designs and develops innovative active pharmaceutical ingredients, API, and excipients.

PHARMARCEUTICAL

- Ready-to-use coating excipients
- Functionnal excipients
  - Direct Compression
  - Binders
  - Flow aid
  - Modified Release
- Solubilizers, Emulsifiers
- Polymers

FORMS

- Dry Form / Liquid Form / Semi-solid Form
- Drug Delivery System (DDS) / Controlled Release

ADMINISTRATION

- Oral or Topical (creams, ointments, etc.)

BIOLOGICAL PRODUCTS & INJECTABLES

- Therapeutic vaccine adjuvants: oily adjuvants for vaccines against cancer, auto-immune or infectious diseases
- Injectables: surfactants to improve the solubility and stability of active ingredients

Animal Health

SEPPIC is a global leader in veterinary vaccine adjuvants and a key player in injectable excipients, solubilizers and active ingredient carriers.

ADJUVANTS FOR VACCINES & INJECTABLES

- Vaccine adjuvants for farm animals (cattle, swine, poultry etc.)
- Vaccine adjuvants for companion animals
- Feed additives
- Intelligent excipient for topical application (mucosal, dermal…)
- Pharmaceutical excipients with possibility of customized formulations

Performance Materials

SEPPIC provides strategic products in a variety of markets.

- TEXTILE
  - Pretreatment, finishing, dying auxiliaries, etc.
- DETERGENTS
  - Biodegradable surfactants, polymers, bactericides, anti-corrosives
- OIL and AQUIFER DRILLING
  - Foaming agents and emulsifiers designed for well drilling, biodegradable surfactants and geological protection polymers
- TELECOMMUNICATIONS
  - Filling and protective products for fiber optic cables: grease or gels
- PAPER
  - Synthetic fibers, deinking agents (Liptol), softening and surfacing agents, non-stick agents, repelling and preserving agents
- CONSTRUCTION
  - Specialties for cements, mortars and concrete
- GLASS
  - Frosting agents

Spotlight on carbon footprint reduction

SEPPIC is committed to **reducing the carbon footprint** of its **manufacturing processes** and **transportation systems**.
SEPPIC products also contribute to **sustainable development**: the use of surfactants derived from sugar and not hydrocarbons, stain removing agents for paper recycling, cold technologies which reduce energy consumption in customers' processes (e.g. cold glues) and more.

Encapsulation / Drug Delivery Systems

SEPPIC produces a comprehensive encapsulation technology platform for its customers

- **Encapsulation** and **pharmaceutical active ingredients**
  - Taste and odor masking
  - Controlled release
- **Encapsulation** of **cosmetic active ingredients** or **fragrances**
  - Visual effects
  - Controlled release
- **Encapsulation** of **food additives** or **flavors**
  - Protection of additives
  - Targeted release

Spotlight on our dedicated team

SEPPIC designs, optimizes and manufactures microcapsules. Through a uniq
stage to industrial manufacturing, SEPPIC uses its expertise in several complementary encapsulation technologies and offers raw materials which are tailored to each project.

A sustainable Innovation

To advance Health and Beauty

A Unique Combination of Expertise

Within an organization of **human scale**, each SEPPIC business benefits from the whole range of the company's expertise. When combined with its in-depth knowledge of its customers' businesses, SEPPIC is able to offer a unique synergy of expertise.

- **CHEMISTRY AND PROCESSES**
  - Polymers, surfactants, plant chemistry, alkoxylation, etc.
- **FORMULATION AND APPLICATIONS**
  - Emulsion, hygiene, controlled release, encapsulation (DDS), etc.
- **ANALYSIS**
  - Characterization, trace analysis, etc.
- **BIOLOGY AND IMMUNOLOGY**
  - Cell culture, histology, biochemistry, study of action mechanisms, objectivation & sensory analyses, etc.
- **INTELLECTUAL PROPERTY**
  - Trademark, Patent, etc.
- **REGULATIONS AND PRODUCT SAFETY**
  - International and trade regulations, toxicology

Innovation, SEPPIC's business driver

- 20 years of major innovations! With a long history in Green Chemistry, SEPPIC fine tunes innovations to meet market needs and also to anticipate them.

- These innovations enable SEPPIC customers to design, produce and market easy-to-use products with enhanced performance and controlled actions. For SEPPIC, innovation also means:

- **100** researchers
- **3,500 m²** of laboratory space
- **4** Customer Technical Service Centers for customers in Europe, in the United States, in South America and Asia
- **10-15 patent** applications filed per year
- **175** patent families currently in force
- Sep'Innov, an **Open Innovation program**

Sustainable Innovation

- SEPPIC produces emulsifiers and other specialty products of plant origin. **35% of the input** at the main SEPPIC factory (Castres) is **plant-based.**
- SEPPIC's commitment to responsible innovation is reflected in the achievement of ecolabels (COSMOS, Natrue, etc.), its signature of the Responsible Care© Chart and its membership of the RSPO©Roundtable Sustainable Palm Oil.
- SEPPIC has always strived to practice chemistry in a way that respects nature. This pioneering vision means that it already fulfills most Green Chemistry principles.

- Manufacturing molecules with respect for ecological and social criteria
- Reducing waste, re-using and recycling
- Avoiding the use of harmful substances and mineral components
- Scientifically certifying the use of renewable or plant-based (plant chemistry) materials
- Aiming for optimal energy efficiency
- Reducing the carbon footprint: in our manufacturing plants, downstream in the production line, and in the way our customers use our products

Partnerships: Open Innovation

The SEPPIC Research and Development teams (Analysis, Synthesis, Immunology, Applications, Hygiene and Skincare) work with internationally renowned organizations, including:

- In Europe
  - IFP Énergies nouvelles, AXELERA (environmental chemistry competitiveness cluster, Lyon Rhône-Alpes), IAR (Association of Industries and agro-resources), ARRIAH (All Russian Research Institute of Animal Health), AGRIMIP (Agricultural and agro-industrial competitiveness cluster), ENVA (French Veterinary School of Alfort)
- In the United States
  - USDA (United States Department of Agriculture)
- In Asia
  - Konkuk University (Korea), TANUVAS (Tamil Nadu Veterinary and Animal Sciences University, India), LVRI (Lanzhou Veterinary Research Institute, China)

Beauty Care Innovations

- **SEPIMAX™ ZEN**
  The latest innovation that revolutionizes thickeners with its extreme tolerance to stress-inducing hydrophilic active ingredients.

- **MONTANOV™**
  1st range of green moisturizing emulsifiers, with various textures that may be used across a wide range of pH levels.

  The Montanov product line has enabled the creation of a new generation of skincare products that is 100% in line with Green concepts.

- **SEPIGEL™ 305**
  1st ready-to-use, thickening, stabilizing and texturizing liquid polymer. Effective over a wide range of pH levels.

  This innovation has been improved continually since its creation and has enabled the development of a new concept: gel-creams.

- **AQUAXYL™**
  The 1st multi-purpose moisturizing restructuring product of natural origin. Derived from glucose and xylitol. It has high skin tolerance and may be used in various applications.

- **SEPIWHITE MSH™**
  The number one brightening active ingredient with characteristics including purity, tolerance and high performance.

- **EPHEMER™**
  Ephemeral cells in the lifecycle of macroalgae . Protects the genes of Eve

- **GELTRAP™**
  Cutting-edge new concepts which offer new textures while revolutionizing the way they are produced.

Nutrition Innovations

Excipients

SEPIFILM ™ LP

Ready- to-use film coating agent based on HPMC in granule form, with effective protection against moisture.

Offers excellent barrier and core sealing properties

SEPIFILM ™ NATCOL

High quality ready-to-use film coating.

Naturally colored and TiO2-free to answer the need for naturalness in nutrition

Actives ingredients

CERAMOSIDES™

Patented complex, highly concentrated source of phytoceramides from wheat

Contains a booster of efficacy: digalactosyl diglycerides (DGDG)

Moisturizing effect and exclusive anti-aging action scientifically proven by 2 clinical studies

Available in oil and powder form
Natural, vegan, and gluten free
No GMO, no additives, and no preservatives

PROVINOLS™

Natural source of antioxidant polyphenols form selected French red wine (Languedoc Rousillon region) which properties are known as “The French Paradox”

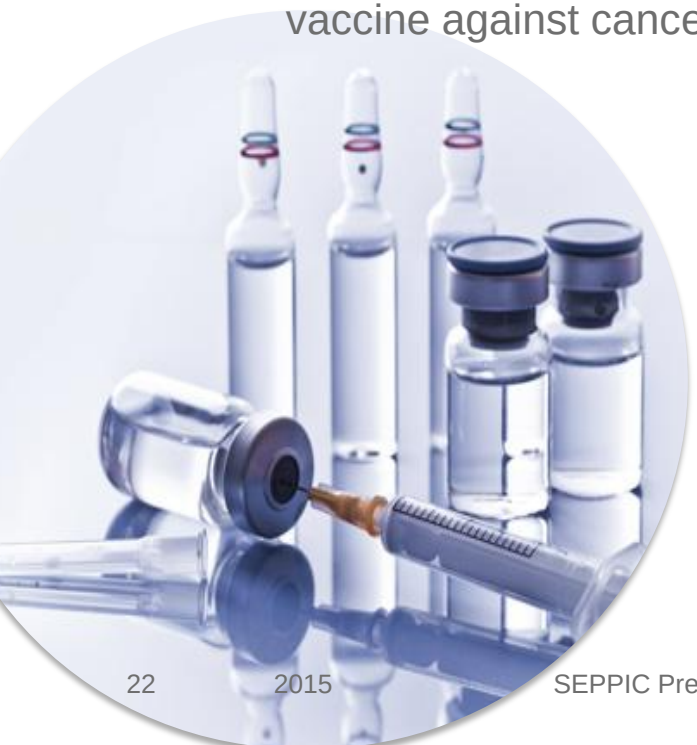
Dry extract contains minimun 70% of total polyphenols

Cardiovascular health benefits supported by scientific studies

Human Health Innovations

Biological Products & Injectables

- MONTANIDE ISA 51™ & 720™
  - The number one adjuvant for therapeutic human vaccines and the first commercial success in a vaccine against cancer.



Pharmacy

- SEPIFILM™
  - The number one coating product line in the form of granules, which are easier to use than powders.
- SEPINEO™P600
- SEPITRAP™
  - The number one powder solubilizer which improves the bioavailability of active ingredients.

Animal Health Innovations

Adjuvants for Vaccines & Injectables

SEPPIC is one of the first companies to have implemented **Good Manufacturing Practices** (GMP) to produce injectable excipients and prepare for tomorrow's vaccines in the best possible way.

ANIMAL HEALTHCARE

First range of veterinary adjuvants suitable for large-scale vaccination, injectable, oral and mucosal vaccinations

- **MONTANIDE ISA™**
  Oily adjuvants for veterinary vaccines. Strengthens and focuses the immune response.
- **MONTANIDE™ GEL**
  Ready-to-use adjuvant on a polymer base.
- **MONTANIDE IMS™**
  Aqueous adjuvants which integrates micro-emulsion processes

Performance Materials Innovations

MONTAGEL™

Geological filling polymer to seal natural hydrocarbon reservoirs and avoid water leakages in oil-well and gas drilling.

LIPTOL™

A deinking surfactant for recycling printed material

SIMULSOL™

New additives increase the performance of polyurethanes (glues, etc.) which has enabled the development of a new generation of blade for wind turbines.

International and Responsible Growth

- SEPPIC's sustainable development strategy centers on total **openness**, **teamwork** and **forward-planning** on the part of all teams, enabling them to to rise to the challenges they have established:

  - External growth through **acquisitions**
  - **Innovation** in product ranges and production methods, with particular emphasis on **Green Chemistry**
  - Expansion into **new territories**, following the recent opening of affiliates and offices in **India, Poland, Colombia, Dubai** and **Japan**
  - Guidance for our **international customers**
  - A reinforced commitment to **sustainable development**

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Nota

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