

novéal

INGREDIENTS FOR BEAUTY

A L'ORÉAL STRATEGIC ASSET IN...



*ingredients
we trust*

L'ORÉAL
FOR THE FUTURE

GREEN SCIENCES AT THE HEART OF THE TRANSFORMATION FOR L'ORÉAL FOR THE FUTURE



Over the past 10 years, L'Oréal has undergone a profound transformation to reduce its impact across its entire value chain and accelerate its transition to a portfolio of high-performance, flawless and sustainable raw materials and formulations. We have entirely reinvented the way we design and manufacture our products, making sustainability a fundamental requirement. Today, we are going further with the L'Oréal for the Future programme, and Green Sciences are one of the driving forces behind this transformation towards meeting the challenges of transparency, performance and respect for the environment.

NOVÉAL, THE INDUSTRIAL EXPERT IN GREEN SCIENCES : GREEN CHEMISTRY, PLANT EXTRACTION AND BIOTECHNOLOGIES



Novéal, formerly Chimex, is a development entity created in 1938 by Eugène Schueller, and an integral part of the L'Oréal group. At the interface between Operations and Research, our passionate teams are committed to developing eco-responsible processes and sustainable industrialisation of the performance ingredients of the Group's Advanced Research.

Novéal is taking action to enable the group to reach its environmental objectives at several levels:

1

IMPROVING THE PERFORMANCE OF OUR PRODUCTION UNITS

Since 2005, we have reduced our CO₂ emissions by 72%, two of our three sites are CO₂ neutral and we have reduced our water consumption at our industrial sites by 63%. Our ambitions for L'Oréal for the Future are fully aligned with those of the Group between now and 2030 to drive a radical transformation.

2

INNOVATION AND PROCESS DESIGN

As experts in the field of green chemistry, biotechnology and plant extraction, we strive on a daily basis to develop and innovate processes that reduce our environmental footprint and we are fully committed to the L'Oréal for the Future programme.



GREEN CHEMISTRY, A WINNING SUSTAINABLE APPROACH TO DEVELOP L'ORÉAL GROUP'S STAR INGREDIENTS

Mastering the **12 PRINCIPLES OF GREEN CHEMISTRY** commits us to a **SUSTAINABLE** and **ENVIRONMENTALLY-FRIENDLY** approach of continuous improvement.

The reduction of **ENERGY EXPENDITURE**, use of **RENEWABLE NATURAL RESOURCES** and reduction of the **NUMBER OF DERIVATIVES** in order to limit the production of waste are concrete examples of this.

Producing ever more natural ingredients while meeting performance requirements is increasingly necessary to achieve our common goals and **REDUCE OUR ENVIRONMENTAL IMPACT**.



EXAMPLES

GREEN PROXYLANE[®]

Improvement in the naturalness of ProXylane giving it a naturalness index score of 3.8, in compliance with the L'Oréal Natural Charter, minimisation to just 2 synthesis stages, 90% yield improvement, 20 times less waste produced since 2007 per kg of finished product.

MEXORYL SX

This exclusive organic sun filter of renewable origin is unique on the market, its main raw material is derived from camphor.

LAURYL LAURATE

A fatty ester of natural origin, COSMOS certified, allowing the substitution of silicones in certain forms by providing melting, emollient qualities while remaining light and non-sticky.



CAPTURING THE BEST OF NATURE THANKS TO DEDICATED PLANT EXTRACTION TECHNOLOGIES



Novéal has expertise in the field of **PLANT EXTRACTION**, both in classical extraction and in innovative extraction technologies.

We can therefore extract the best from nature using sustainable **HIGH-TECH PROCESSES** based on the principle that **RESPECT FOR NATURE** is our driving force for the creation of renewable alternatives.

Novéal's plant extraction technology is a unique **ECO-EXTRACTION** process that makes it possible to extract molecules trapped in the parts of the plant that are the most difficult to extract, such as wood. While preserving the naturalness of the extracts, this technology releases the active ingredients from their matrix and protects the molecules most sensitive to oxidation, while concentrating them to make them even **MORE EFFECTIVE**.

We can access active ingredients from plant parts that are not used in other industries and are **UPCYCLED** using neglected plant products to extract **THE COSMETIC ACTIVE INGREDIENTS OF TOMORROW**.

EXAMPLES

QUINOA HUSK EXTRACT

Novéal has industrialised the extraction of quinoa husk, SOLSO



PLANT CELL AND BACTERIAL CULTURE TO PRODUCE HIGH-PERFORMANCE AND NATURAL INGREDIENTS



BIOTECHNOLOGY is an asset for the future of cosmetics and will enable us to meet the major challenges of the L'Oréal for the Future programme: inspired by nature, it gives us access to natural ingredients of interest while **PRESERVING THE ENVIRONMENT**. Cultivated in fermenters, our ingredients are obtained without pesticides or GMOs and do not compete with agricultural land. Sourcing is **SECURE**, independent of the seasons, sustainable and located in France, close to the factories.

Novéal has been a **VISIONARY** and **PRECURSOR** in biotechnologies, in 1997 creating a dedicated factory in Tours which will be a **"WATERLOOP FACTORY"** by 2022.

In association with our Research and Development team, it provides the Group with our expertise in:

- **PLANT CELL CULTURE:** producing dedicated differentiated cells to access the genetic potential of plants in a controlled environment while preserving biodiversity. .
- **BACTERIAL CULTURE:** based on fermentation, it increases the growth rate of fragile bacteria while preserving their properties until formulation.

Today, we are developing cutting-edge active ingredients, particularly on the microbiome, to produce natural, high-performance cosmetic ingredients in the most respectful culture conditions possible.

EXAMPLES

BIOThERM PLANKTON

Life plankton is a particularly fragile micro-organism with extraordinary properties. With our know-how, we can put this strain in ideal conditions in terms of feeding, agitation and temperature. These optimal conditions allow it to develop (1 cell division every 6 hours vs. every 6 months in nature), thus allowing us to cultivate it while preserving its naturalness (Cosmos product), concentrating it and allowing to enjoy its benefits in our skin care products.

LANCÔME ROSE CELLS

Exclusive anti-ageing performance active ingredient derived from the culture of dedicated cells of a unique species of Delbard rose.

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