



**ROOTED IN SCIENCE,
POWERED BY NATURE**



**TAKE THE NATURAL
NEXT STEP
WITH LUBRIZOL
LIFE SCIENCE**

It's no secret that consumers are increasingly mindful about what they apply to their skin and hair, and the impact those products have on our environment.

Yet, compromising effectiveness or sensory experience isn't an option—they still expect products to work well and feel wonderful.

Lubrizol Life Science's (LLS) Nature-Based Portfolio offers high-performance, aesthetically-pleasing ingredients that check every box on your customers' "must have" list.

With this natural extension of our business, LLS is poised to help add innovation and growth to yours.



**Science +
Synergy + Naturals
= Success**

Science and efficacy are the foundation of our business, which lends bedrock support to our top priorities:

Strong customer partnerships based on proactive innovation and speed-to-market.

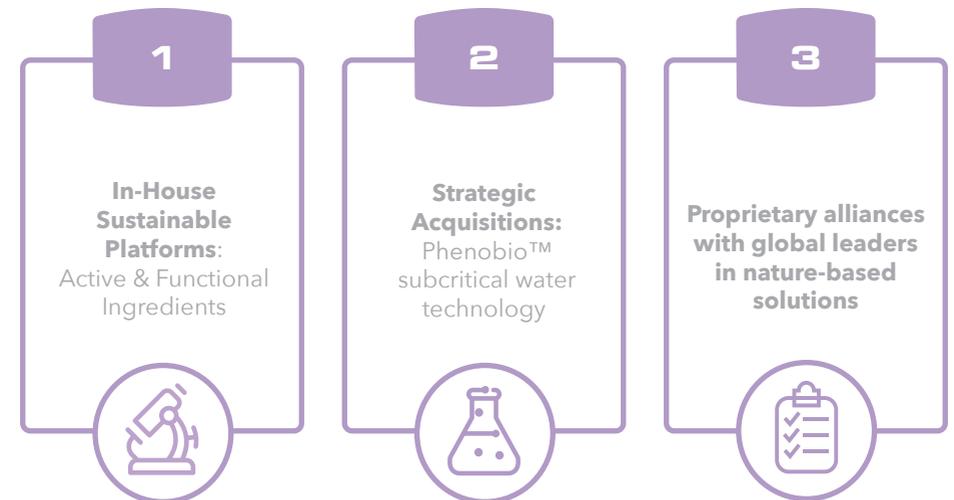
Lubrizon Life Science encompasses our Beauty, Health and Home businesses – linking our world-renowned scientific expertise with the everyday lives and needs of people.

Here, partnering with you is paramount as we work together to create market-ready solutions that are not only life-enhancing and life-advancing, but environmentally friendly as well.

**You know the destination,
we'll help you reach it
sustainably.**

**Charting the surest
course to sustainability
and growth**

LLS has expanded capabilities in three key areas to continually enhance your business while satisfying the evolving needs of your customers.



1. In-House Sustainable Platforms

By deepening the expertise within our own walls, LLS has advanced and streamlined three nature-based platforms, bringing you and your customers closer to more innovative sustainable solutions.

› Botanical Extracts & Performance Ingredients

Since the integration of Active Organics, Inc., **we have enhanced our presence in the natural ingredients market.**

By processing natural extracts and performance ingredients from over 1,000 plants, fruits, vegetables and herbs every day, we deliver:

- Cutting-edge botanical ingredients with claims-driving benefits supported by *in vitro* and *in vivo* efficacy

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- Customized single botanical extracts, blends and aromatic extracts backed by traditional knowledge-based claims

- Naturally-sourced exfoliants for an eco-friendly alternative to microplastic beads
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➤ Biotechnological Ingredients

Lipotec™ Active Ingredients develops **natural molecules obtained from living microorganisms through highly sustainable bioprocesses.**

Respecting the biodiversity of their origins, we have perfected a fermentation process that requires only a small sample of these microorganisms and leverages their natural abilities to multiply, eliminating the need for additional harvesting.

Shield properties developed by microorganisms living in extreme conditions are used to protect the skin from harmful environmental elements, as well as offer cosmetic benefits.

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- Non-genetically modified organisms
 - No harvesting or extracting from nature
 - No toxic solvents
 - Reduced water consumption
 - Biodegradable
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➤ Renewable & Nature-Based Functional Ingredients

LLS can offer you a broader portfolio of sustainably sourced emulsifiers and sensory modifiers. Derived from vegetables, our emulsifiers perform with efficiency and versatility while providing appealing aesthetics and sensory properties.

Our nature-based sensory modifiers, including specialty esters and humectants, **deliver a full spectrum of benefits with different sensory profiles.**

2. Phenobio™ Subcritical Water Technology

LLS now offers forward-thinking science like Phenobio™ subcritical water technology.

This sustainable extraction method is an alternative to hazardous organic solvents using only water to obtain pure and environmentally friendly extracts.

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- Short extraction time
 - No chemical solvents are used
 - No thermal degradation
 - Wide range of phytoactives in high concentration
 - Extraction of poorly water-soluble compounds
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**Eco-sensitive solutions
for consumers who care deeply
about their own beauty, as well as
the world around them**

3. Proprietary Alliances with Global Leaders in Nature-Based Solutions

LLS is aligning with experts in nature-based ingredients who **complement our formulation experience and market knowledge.**

Through these relationships, we're able to expand our high-performing, nature-based offerings to you.

- Cellulose by CP Kelco
- Algae-based Ingredients by Corbion

Arbalon™ Cellulose Liquid
a fermentation-derived cellulosic rheology modifier

Kelco-Care™ Diutan Gum
a naturally-derived stabilizer

AlgaPūr™ High Stability High Oleic Algae Oil



*Lubrizon has a global collaboration agreement with Corbion for the AlgaPūr™ High Stability High Oleic Algae Oil and with CP Kelco for Arbalon™ Cellulose Liquid in the beauty and personal care markets

Take the natural path towards more robust sustainability and growth with the ingredients, expertise and collaboration only Lubrizon Life Science can provide

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