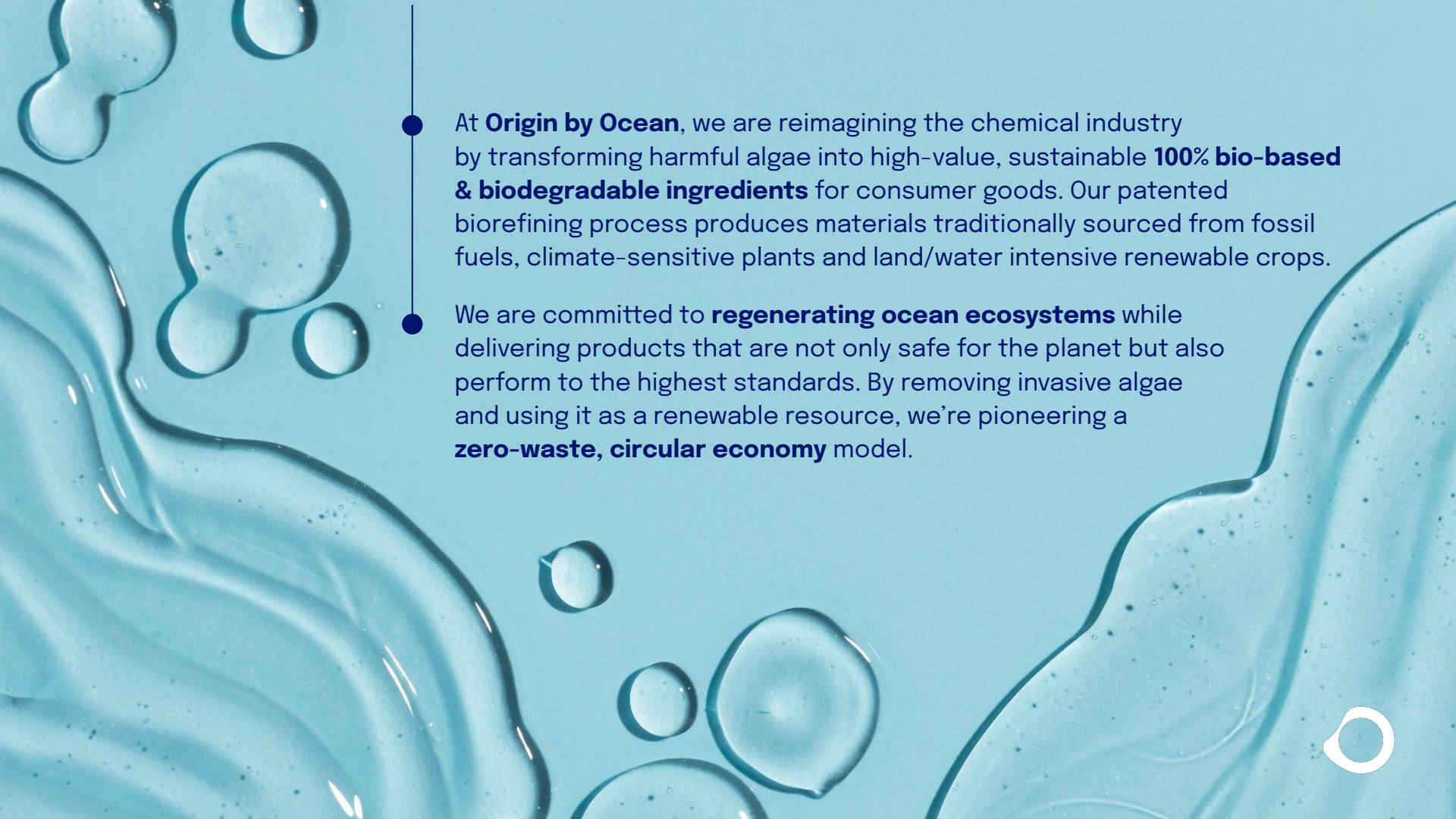


OCEAN PRODUCTS



ORIGIN<sup>BY</sup>  
OCEAN



- At **Origin by Ocean**, we are reimagining the chemical industry by transforming harmful algae into high-value, sustainable **100% bio-based & biodegradable ingredients** for consumer goods. Our patented biorefining process produces materials traditionally sourced from fossil fuels, climate-sensitive plants and land/water intensive renewable crops.

- We are committed to **regenerating ocean ecosystems** while delivering products that are not only safe for the planet but also perform to the highest standards. By removing invasive algae and using it as a renewable resource, we're pioneering a **zero-waste, circular economy** model.



# OUR PATENTED MULTI-PRODUCT BIOREFINERY PRODUCES SIX PRODUCTS IN ONE INTEGRATED PRODUCTION PROCESS.

The commercialisation of our products is planned between 2025 - 2027.



# OCEANTHIX™ LV

OCEANTHIX™ LV is a low viscosity anionic biopolymer extracted from Sargassum Natans/Fluitans, an invasive brown algae species through a highly-optimized patented biorefining process that uses the principles of Green Chemistry.

OCEANTHIX™ LV is a multi-functional texturizing agent & rheology modifier. In cosmetics, it creates unique sensorial effects, boosts the viscosity & improves the sensorial aspect of other biopolymers while smoothing, plumping & improving skin hydration. In food preparations, it improves the texture, mouth-feel & stability.

PRE-COMMERCIAL LAUNCH:	April 2025
	in-Cosmetics Global
PRE-COMMERCIAL PRODUCTION:	from Q2 2025
2026 COMMERCIAL PRODUCTION:	from Q2 2026
2027 FULL PRODUCTION CAPACITY:	from Q1 2027

**INCI:** Algin

**FOOD ADDITIVE:** E401



## OCEANTHIX™ LV COSMETIC APPLICATIONS

OCEANTHIX™ LV shows great compatibility with other biopolymers such as Xanthan Gum & Guar Gum. Not only does it improve the viscosity, it reduces the “slimy” texture of these gums and improves their absorption, reduces tackiness & provides hydration.

Thanks to the 3-D viscoelastic properties of OCEANTHIX™ LV, toners, essence & serums formulated with 1% or more create low-drip formulations. These textures improve the user experience and facilitate targeted application of formulations to body, face & hair.

In spray formulas, OCEANTHIX™ LV's thixotropic properties create ultra fine mists that provide even coverage on the skin. This low-molecular weight biopolymer improves sprayability, reduces dripping of the product and reduces drying time.

OCEANTHIX™ LV is a natural low-molecular weight polymer that exhibits instant and long lasting hydrating benefits. Even without supporting active ingredients, OCEANTHIX™ LV can provide hydrating benefits to the skin.

OCEANTHIX™ LV tolerates electrolytes well, and is stable across a broad range of pH (4 - 10), making it an ideal candidate in surfactant systems. When combined with other natural biopolymers, we can create an acrylate-free thickening system for natural body wash & shampoo that provides hydrating benefits.

In “foamer” style pump bottles (liquid-to-foam), the film-forming properties of OCEANTHIX™ LV provide improved foam density and a rich, creamy & hydrating lather.

OCEANTHIX™ LV has a higher Guluronic Acid content, resulting in a unique M/G ratio that is different from other Alginates on the market. It creates very strong & rigid gels in the presence of divalent cations such as Calcium & Magnesium.



## OCEANTHIX™ LV FOOD APPLICATIONS

- OCEANTHIX™ LV shows great synergy with pectin, creating an excellent smooth & stable textures of jelly candy (known as marmalades in Finland), jams, jellies & preserves. This combination can also be cold processed, resulting in significant energy savings and lowering the carbon footprint of the manufacturing process.
- Due to OCEANTHIX™ LV's higher Guluronic Acid content, the unique M/G ratio provides strong gelation when in contact with divalent cations such as Calcium & Magnesium. OCEANTHIX™ LV is therefore a great stabilizer, thickener & mouth-feel enhancer for dairy products such as yogurt.
- OCEANTHIX™ LV is an outstanding stabilizer for ice cream, reducing the formation of ice crystals and air bubbles, resulting in a slower melting ice cream.
- Other applications for OCEANTHIX™ LV include a mouth feel enhancer in plant-based foods.



Alginate can be widely used as a thickener and rheology modifier in textile printing, providing the necessary viscosity and fluidity in color inks and pastes to ensure superior printing quality.

- Prevents capillary action
- Enhances line-width precision and reduces bleeding on substrates (e.g., cotton fabric)
- Delivers greater color depth
- Can be used in pre-treatments for improved printing quality

OCEANTHIX™  
Non-toxic and environmentally friendly, turning ecological challenges into sustainable solutions.





## OCEANBOOST™ LF

OCEANBOOST™ LF is a Low Molecular Weight Fucose-Containing Sulfated Polysaccharide (FCSP) also known as Fucoidan. It is extracted from Sargassum Natans/Fluitans, an invasive brown algae species through a highly-optimized patented biorefining process that uses the principles of Green Chemistry.

OCEANBOOST™ LF is a hygroscopic multi-functional hydrating & soothing agent with an average molecular weight of 300 kDa. This complex biocompatible polysaccharide can increase skin hydration and modulate inflammatory markers resulting in a soothing effect that calms the appearance of irritated skin and visibly revitalizes dry skin.

PRE-COMMERCIAL LAUNCH:	April 2025 in-Cosmetics Global
PRE-COMMERCIAL PRODUCTION:	from Q2 2025
2026 COMMERCIAL PRODUCTION:	from Q2 2026
2027 FULL PRODUCTION CAPACITY:	from Q1 2027

INCI: Fucoidan (pending)



## OCEANBOOST™ LMF COSMETIC APPLICATIONS



- OCEANBOOST™ LMF can serve as a novel, innovative, and regenerative alternative or as a booster to enhance the efficacy of popular hydrating molecules like hyaluronic acid, beta-glucans or niacinamide.
- More than 50% of the population now identifies having sensitive skin, and consumers are demanding products that not only hydrate, but soothe and improve the comfort of their skin. Thanks to OCEANBOOST™ LMF's high biocompatibility and strong anti-inflammatory effect, it is suitable for use in products for sensitive skin.
- OCEANBOOST™ LMF's strong soothing effects also make it great for post-suncare products. It can provide a regenerative alternative to traditional skin soothing ingredients.
- OCEANBOOST™ LMF's soothing properties have also been reported on chemically irritated skin and can be used in dermocosmetics as a potent skin hydrator & soother post-treatment such as acids, peels.
- FCSP's such as OCEANBOOST™ LMF have been shown to modulate growth factors in the fibroblasts, providing novel anti-aging benefits.



# MARIMEKKO X ORIGIN BY OCEAN

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Fabric printed with seaweed

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Improved LCA of  
manufacturing process

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No microplastics

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Superior printing  
performance



# OLE HYVÄ X ORIGIN BY OCEAN

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Sulphate-free formulation

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Superior moisturiser effect

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Reducing the environmental problem of the oceans while increasing the bio-based and biodegradability content of the products



**Innovative Solutions:** 100% bio-based and biodegradable chemicals that meet the demands of modern industries.

**Regenerative Impact:** Every product actively contributes to cleaning the oceans.

**Sustainable Alternatives:** Replacing traditional materials with eco-friendly options.

**Net-zero carbon footprint.** We are committed to produce our products with a net-zero carbon footprint. The more we produce – the more positive the impact!

Formulation recipes available upon request.

## Contact Us

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