

OCEANTHIX™, the world's first circular biopolymer upcycled from invasive Sargassum, unlocks the potential of alginate.

This novel building block can be used to create **biodegradable, elegant textures, including in surfactant systems**. While not a standalone thickener, it **works synergistically with other gums and hydrocolloids** to create market-standard textures without the tack or stringiness often associated with them.

SURFACTANT COMPATIBILITY	SURFACTANT INCI	TRADE NAME	COMPATIBILITY	VISCOSITY
OCEANTHIX™ LV + Evicare® aquatex 80 were tested with various surfactants (5% total solids) for 4 weeks at 45°C. COMPATIBILITY + Good compatibility within specific dosages or processing parameters + + Compatible across a broad range of concentrations and pH levels VISCOSITY * 5% Solids + 0.5% OCEANTHIX™ & 0.5% Evicare Aquatex 80 (Xanthan Gum): 700 – 1200 cPs ** 5% Solids + 0.5% OCEANTHIX™ & 0.5% Evicare Aquatex 80 (Xanthan Gum): 1200 – 1500 cPs	Caprylyl/Capryl Glucoside	Oramix™ CG 110	+ +	**
	Capryl/Capramidopropyl Betaine	TEGO® Betain 810 MB	+	*
	Cocamidopropyl Betaine		+ +	**
	Coco Betaine	Dehyton® AB 30	+ +	**
	Coco Glucoside		+ +	**
	Decyl Glucoside		+ +	**
	Glycolipids (Acidic)	HoliSurf™ HF, ReNuva™ SL-A70	+ +	**
	Glycolipids (Lactone)	HoliSurf™ LF, ReNuva™ SL-L70	+ +	**
	Potassium Coffeate	KLEANSTANT®	+	**
	Rhamnolipids	ReNuva™ RL-50	+ +	**
	SLES		+ +	**
	Sodium Lauroyl Glutamate	Amisoft® LS-11	+	*
	Sodium Lauroyl Sarcosinate	Oramix™ L30	+ +	*

CASE STUDY: OCEANTHIX™ LV in cleansing-formulations

FRAME FORMULA

Water	QSP
Glycerin	3.0%
Evicare Aquatex® 80	0.5%
OCEANTHIX™ LV	0.5%
Surfactant	5.0% Solids
Evicide® PEHG (Preservative)	1.0%

Origin by Ocean has collaborated with Evident Ingredients range of Aquatex® Xanthan Gums, as they show remarkable ease of use and strong synergistic effects with OCEANTHIX™ LV.

We screened compatibility with a range of common, hard-to-thicken, bio-based surfactants using a standard frame formulation containing 1% thickener, and 5% total solids.

While all surfactants demonstrated good compatibility, formulations with high concentrations of anionic surfactants or high-charge density molecules (like glutamates) yield a lower viscosity due to the anionic nature of OCEANTHIX™ LV.

This OCEANTHIX™ LV + Aquatex® 80 frame formulation allows for cationic compatibility through a 'charge shielding' technique. Premix cationics into your amphoteric surfactants and incorporate them at pH > 5.5, then 'activate' the charge by lowering the pH < 5.5 at the end of the process. Since the use of cationics can lower viscosity, we recommend increasing the total thickener level to 1.2–1.5%.

OCEANTHIX™ allows formulators to **unlock bio-based solutions to non-biodegradable synthetic polymers**—which, while not classified as microplastics, are under increasing regulatory review.

From sprayable hydrogels and fluid serums to stabilizing emulsions and surfactant systems, it proves that **radical circularity and transparency do not need to compromise performance**.



OCEANTHIX™ LV is an ideal alternative to electrolytes in salt-responsive surfactant systems.

By replacing salt, formulators can create **ultra-mild, 'tear-free' products**—essential for baby and pet care—without sacrificing viscosity.

In professional hair care, it provides a **biodegradable, cost-effective, salt-free thickening solution** that avoids the drying, moisture-stripping effects of salt.

sLess is More - Salt-Free Cleanser

Frame Formulation

Water	QSP	QSP
SLES (Total Solids)	15%	15%
CAPB (Total Solids)	3.5%	3.5%
OCEANTHIX™ LV	0.5%	1.0%
Preservative (Evidice® PEHG)	1.0%	1.0%
Viscosity	1500 cPs (Low Yield Stress Fast Dripping)	1000 cPs (High Yield Stress Slow Dripping)



FOR MORE INSPIRATION,
please check out some of our application formulations:

[*SEA-phorolipid Deep Blue Cleansing Gel*](#)

[*SEA-phorolipid Deep Blue Cleansing Gel*](#)

[*Shoreline Circular Powder to Foam Cleanser*](#)

Have a novel surfactant you'd like to see tested with OCEANTHIX™ LV? Please let us know!

TECHNICAL SALES & SUPPORT:
COSMETICS & PERSONAL CARE

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