

Delivery platform based on Sodium Surfactin

Bloomsurfact™ EncapCare RP

Improve bioavailability Improve stability Reduce skin irritation

Bloomsurfact™ EncapCare RP is an innovative retinyl propionate (RP) delivery system derived from Bloomage's patented delivery technology platform. It uses sodium surfactin, a biosurfactant, as a carrier to efficiently wrap RP, aiming to provide a gentler, more stable and more effective solution for the industry.

Bloomsurfact™ Sodium Surfactin, the biosurfactant and encapsulation material at the core of this technology, is sourced from 100% bio-based carbon through fermentation technology utilizing *Bacillus subtilis* strains. It boasts low CMC value, excellent emulsification capacity, High gentler and High biodegradability, making it is an excellent choice as a delivery technology.

The Core of EncapCare Technology Comes From Novel Cyclic Peptide Biosurfactant

Sodium Surfactin



Hydrogen bonding network formed by intramolecular peptide bonds

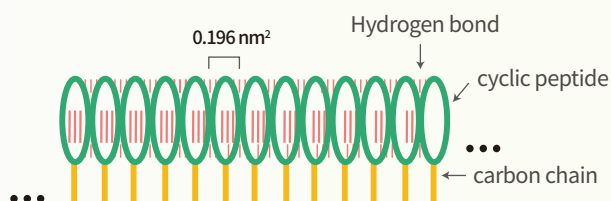
Hydrophilic Group: cyclic heptapeptide

Traditional Surfactants

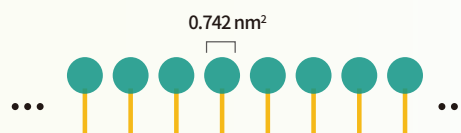


Hydrophilic Group: inorganic salt, amino acid, glucose, betaine, etc.

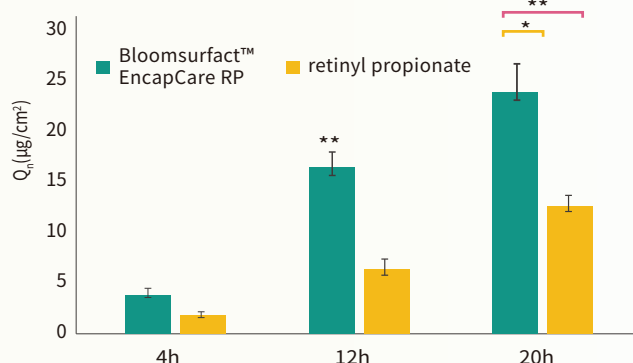
Sodium Surfactin Molecular Interface Arrangement



Glycolipid Molecular Interface Arrangement



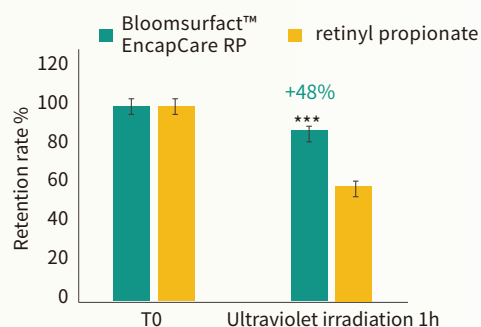
High efficient transdermal absorption, Improve the bioavailability of RP



Compared to control group, **p<0.01, *p<0.05

Bloomsurfact™ EncapCare RP was significantly better than that of retinol propionate for transdermal absorption.

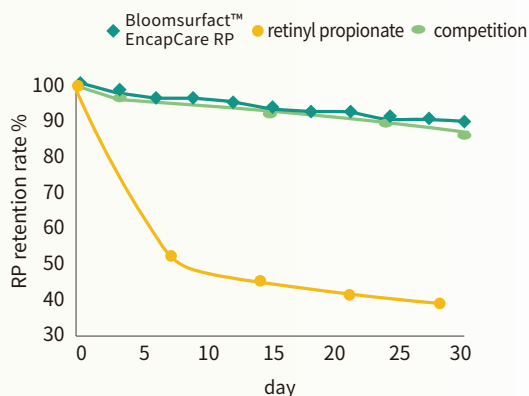
Ultraviolet stability



Compared to control group, ***p<0.001

Bloomsurfact™ EncapCare RP was significantly better than that of retinol propionate for Ultraviolet stability.

High-temperature stability

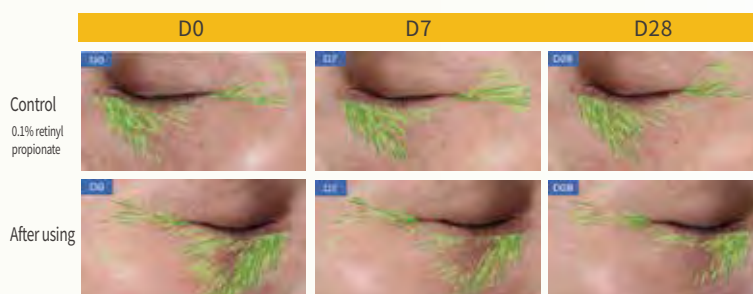


Bloomsurfact™ EncapCare RP is stored in dark 50°C for 30 days, with optimal stability and retention rate of >90%.

Reduce wrinkles (*in-vivo*)

Volunteer 1
5% Bloomsurfact EncapCare RP

Day 28
crow's feet: -31.07%*
eye wrinkles: -34%**



Compared to control group, **p<0.01, *p<0.05

After 28 days, using 5% EncapCare RP, crow's feet and eye wrinkles decreased significantly.

Product Description

Appearance: Milky white to yellowish liquid

Recommended usage: 5%-20%

Application: Lotion, cream and serum and other anti-aging products



CREATIVE TECHNOLOGY FOR VIBRANT LIFE

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