Bloomsurfact™ Sodium Surfactin

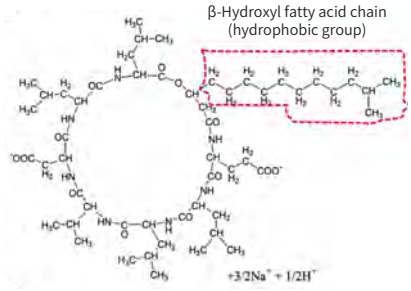
BLOOMAGE's first biosurfactant with excellent properties such as low CMC value, low molecular cross-sectional area and highly stabilized interfacial film.

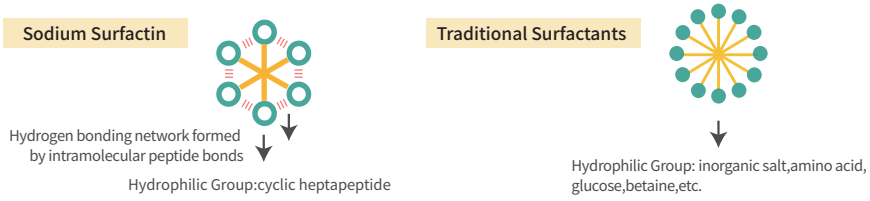
Bloomsurfact™ Sodium Surfactin is a biosurfactant obtained through low foam fermentation technology. The entire production process is green and environmentally friendly, does not involve organic solvent synthesis process, and is biodegradable. Sodium Surfactin' s hydrophilic group is a cyclic heptapeptide, which easily forms hydrogen bonds, has a small molecular cross-sectional area, is tightly arranged at the interface, and has self-assembly properties. Sodium Surfactin has excellent emulsifying, solubilizing, and stabilizing effects, and is widely used in children's skincare products that claim to be mild and sustainable, as well as in skincare products with clean beauty concepts and various dosage forms.

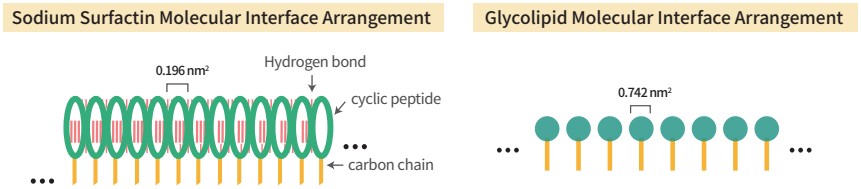
INCI name: Sodium Surfactin
Recommended dosage: 0.05%-0.8%
Solubility: Suggest pre mixing Sodium Surfactin with polyols, mixing well before adding water
Application: Suitable for all non pure oil based skin care products, both resident and washable

Mechanism

The hydrophilic group of Sodium Surfactin is a cyclic heptapeptide, which is easy to form hydrogen bonds, has a small molecular cross-sectional area, is tightly arranged at the interface, and has self-assembly properties.







Efficacy data

High surface activity

Surfactant	CMC	rate
Sodium Surfactin	0.001%	1
AES	0.01%	1/10
sodium cocoyl glutamate	0.05%	1/50

Emulsifying capacity and stability

Sodium Surfactin ⩾ AES > Sodium cocoyl glutamate >165

10000 rpm, 5min

silicone oil/squalane (10ml) +
0.1% Surfactant aqueous solution (10ml)

45°C, 3 months

003: sodium surfactin
AES: ethoxylated lauryl alcohol sulfates (Chemical surfactant)
YG: sodium cocoyl glutamate (Amino acid surfactant)
165: stearin/PEG-100 stearate (Emulsifier)