



## Novosome Hair Growth<sup>®</sup>

A new generation of liposomal hair growth and beauty actives.

- Stably wrapped in a nano-size liposome
- Increased bioavailability of actives
- An excellent complex for the hair and eyelash growth





## NOVOSOME HAIR GROWTH<sup>®</sup>

INCI Name: AQUA, PHOSPHOLIPIDS, CAFFEINE, ACETYL TETRAPEPTIDE-3, BIOTIN, PHENOXYETHANOL, CHLORPHENESIN

### Introduction:

There are plenty of actives that have been claimed to trigger hair growth, however, the fact is how much they are effective. Extra hydrophilicity of some active ingredients affects the efficacy of actives so penetration ability plays a pivotal role in this respect.

To overcome such limitations, we designed a liposomal encapsulated multi-active complex system, called Novosome Hair Growth<sup>®</sup>. Novosome Hair Growth is an innovative formulation that efficiently facilitates the bioavailability of active ingredients for the follicles modulating the barrier properties. It provokes regrowth of hair and eyelashes, using liposome technology used for the first time in this complex. It not only can be used easily in any hair products, thanks to its liposome technology can penetrate fast and deep in the hair follicles and make it the most efficient active for hair growth.

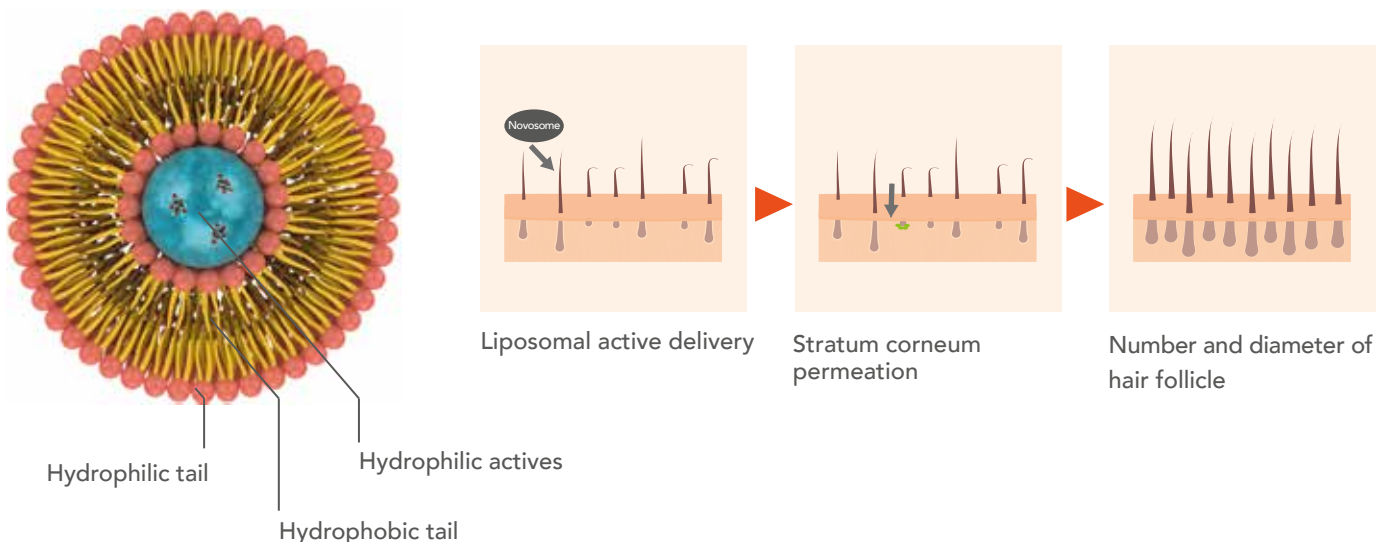
### Technical Data Sheet ( TDS )

Appearance	Yellow phospholipids
Solubility	Insoluble water
Density 20° C	0.995-1.25g/ml
Dry residue	8-9.5%

### Active & Mechanism:

Novosome Hair Growth, a liposomal complex of Caffeine, Biotin, and Acetyl tetrapeptide-3, acts as hair growing/anti-hair loss agent via a new generation delivery system.

This hair fertilizer targets multi-action on hair growth cycle improvement. It provides a fuller, thicker and healthier scalp, hair, and eyelashes. These ingredients modulate DHT via 5- $\alpha$  reductase activity inhibition. It activates hair follicle stem cells and stimulates the hair regeneration process while reducing skin inflammation and soothing the scalp.





### Typical formulation for serum

Navosome Hair Growth	10
Aqua	qs
Preservative	qs
Xanthan	0.3-0.5
Glycerin	3-5
Novosorb WS	0.1-0.3
Fragrance	qs

#### How to use:

- Cold or hot process
- At any steps

#### Dosage: 5-10%

#### Efficacy tests:

##### Group1:

- 16 volunteers (men & women)
- Age: 30-55
- Tonic with non-liposomal complex
- Usage: once at night for 90 days.

##### Group2:

- 16 volunteers (men & women)
- Age 30-55
- Tonic with liposomal complex
- Usage: once at night for 90 days.

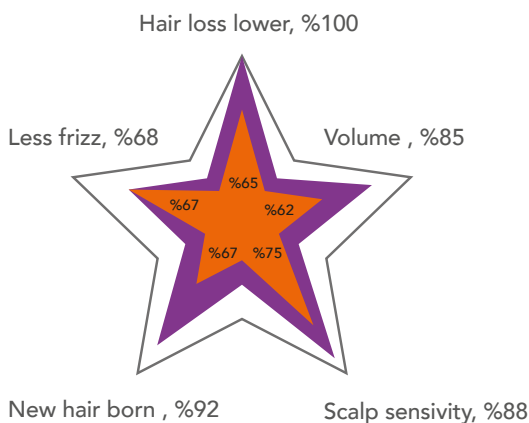
#### Applications:

- Cream
- Serum
- Hair care product (rinse off/leave on)

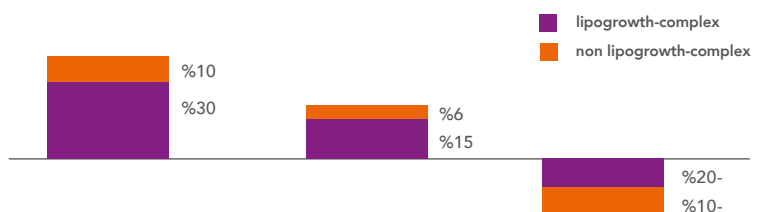
#### Benefits:

- Boosting the efficacy of actives
- Nano size, 500-100 nm
- Chemical solvent free

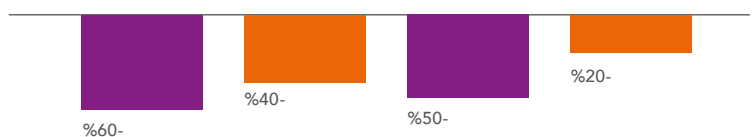
#### Subjective evaluation 90 days, satisfied volunteers



#### Anagen phase improvement vs Telogen phase (90days, %)



#### Combing and washing hair loss (90 days, %)





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