



Novosome Caffeine[®]

An innovative liposome encapsulated system with a high affinity with skin stratum corneum

- Increased bioavailability
- Reaching deep skin layer to the target cells
- Long-lasting stability



NOVOSOME Caffeine®

INCI Name: AQUA, PHOSPHOLIPIDS, CAFFEINE, ACRYLAMIDE/SODIUM ACRYLOYLDIMETHYLTAURATE COPOLYMER, PHENOXYETHANOL, CHLORPHENESIN

Introduction:

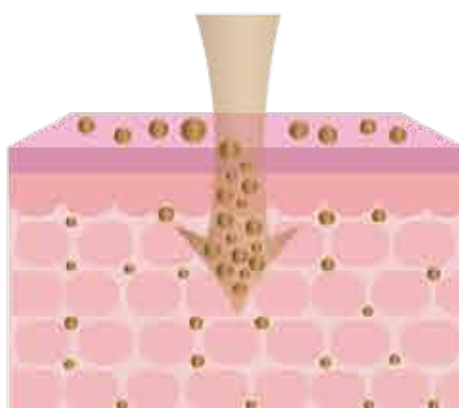
There are plenty of actives that have been claimed to trigger hair growth, however, the fact is how much they are effective. Caffeine hydrophilicity affects the penetration ability considering its target place for the potential action is in the deeper layer of the skin.

To overcome such limitations, we designed a liposome bi-layer encapsulated caffeine system, called Novosome Caffeine. This delivery system with a high affinity for stratum corneum shows the maximum efficacy penetration of caffeine into the scalp and skin, increasing the bioavailability of the active.

Technical Data Sheet (TDS)

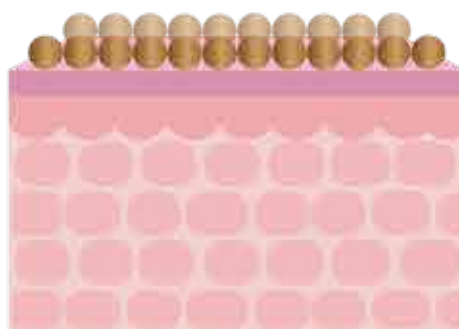
Appearance	yellow liquid
Odor	Characteristic
Density	0.99-1.02 g/ml
pH	5.5-7.5

**Novosome
Caffeine**



Skin permeation to the
liposome-encapsulated caffeine

**free
Caffeine**



Free caffeine stays at the surface
level because of hydrophobicity

Active & Mechanism:

Novosome Caffeine, with a liposomal structure for a higher skin affinity, improves caffeine solubility and releases the caffeine deep into the skin. Caffeine is a famous anti-cellulite, anti-oxidant, slimming, and hair growth stimulating agent.

Typical formulation 3 in 1 Eye serum

Novosome Caffeine	5
Novo Poly-Tight	5
Aqua	qs
Xanthan	0.35-0.5
Glycerin	3-5
Novo Ben 5	1
D-Panthenol	3
Novo Nano vit-E	5
Novosorption ws	5

Benefits:

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

How to use:

- Can be cold process or hot one
- In emulsions should add before thickener
- Could be homogenized

Dosage: 2-10%

Applications:

- Cream
- Serum
- Haircare product (rinse off/leave on)



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