



Novosome Caffeine[®] an innovative liposome encapsulated system with a high affinity with skin Stratum Corneum

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



NOVOSOME Caffeine®

INCI Name: Phospholipids and caffeine

Introduction:

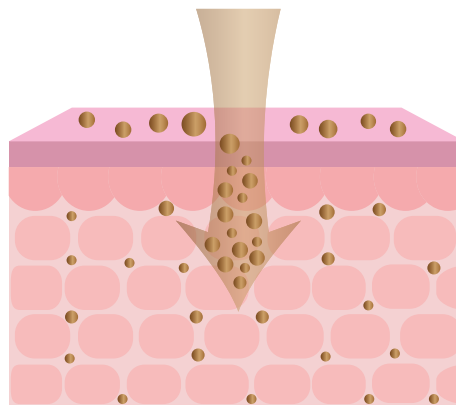
There are plenty of actives that have been claimed to trigger hair growth, however, the fact is how much they are effective. Caffeine hydrophilicity affects the Penetration ability and its efficacy considering its target place for the potential action is in the deeper layer of the skin.

To overcome such limitations, we designed a liposome bilayer 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)

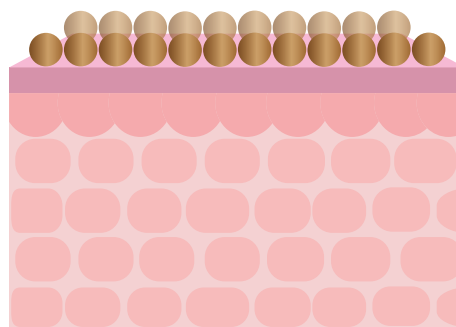
Appearance	yellow liquid
Sulfate	Max 240.0ppm
Heavy Metals	max10ppm
Loss on drying	Max 5%
Residue on Ignition	Max0.1 %

**Novosome
Caffeine**



Skin permeation to the liposome encapsulated caffeine

**free
Caffeine**



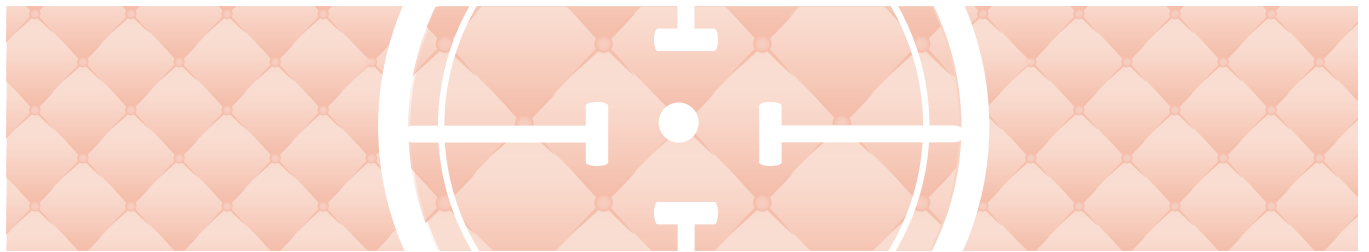
Free caffeine stays at the surface level because of hydrophobicity



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 pullulan	5
Water	qs
Xanthan	0.35-0.5
Glycerine	3-5
Novo ben 5	1
D-panthenol	3
Novosome vit complex	5
Novosorption	5



Benefits:

- Boosting the efficacy of actives
- Nano size, 500-100 nm
- Chemical solvent free
- Stabilizing some actives which are prone to decompose or oxidize, e.g. Vitamin C

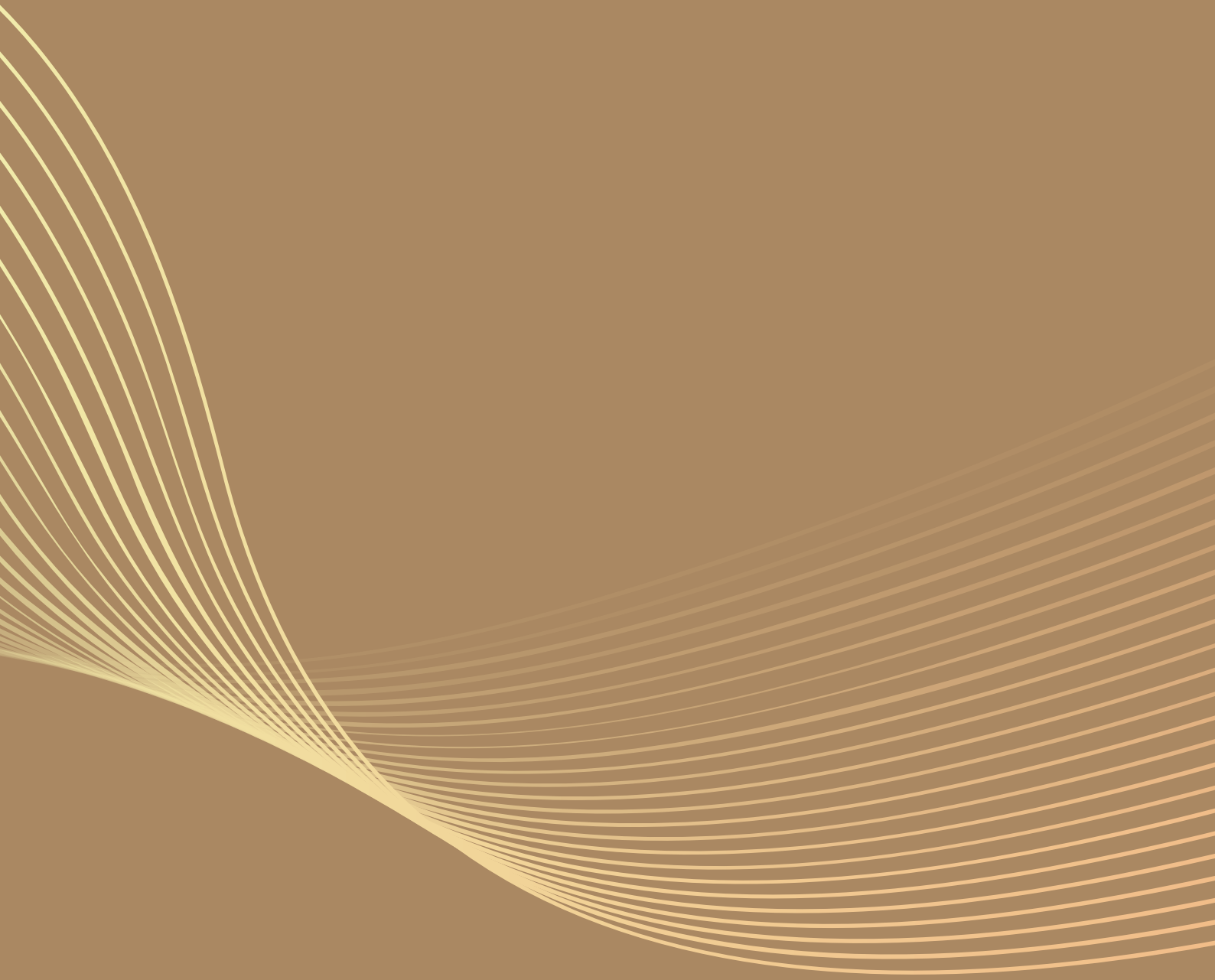
How to use:

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

Dosage: 2-10%

Applications:

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



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