

Nanovec™



SPECIFICATIONS TDS

CAFFEINE LIPOSOMES



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CODE: ECOLIP-5

Last Revision: 11.07.2023

INCI name: WATER (AQUA) (AND) PHOSPHOLIPIDS (from soybean lecithin) (AND) ALCOHOL (AND) CAMELLIA SINENSIS LEAF EXTRACT (AND) SODIUM BENZOATE (AND) POTASSIUM PHOSPHATE (AND) TOCOPHEROL

DESCRIPTION

ECOLIP-5 consists of liposomes (natural delivery systems) made from soybean phospholipids, which encapsulate and transport natural Caffeine (Thein® MM) to the target cells.

This ECOCERT certified Caffeine derives from Camellia sinensis (tea) leaves.

Caffeine, found in coffee berries (*coffea arabica* and *coffea robusta*), tea leaves (*camellia sinensis*), mate leaves (*ilex paraguayensis*) and guarana berries (*paullinia cupana*), among other plants, is the most widely established natural lipolytic chemical, and also enhances blood circulation (caffeine enhances the lipolytic process and boosts circulation via phosphodiesterase and adenosine inhibition on fat cells and blood vessels).

This alkaloid stimulates the degradation of fats during lipolysis through inhibition of the phosphodiesterase activity. Caffeine has potent antioxidant properties. Moreover, caffeine contained in cosmetics increases the microcirculation of blood in the skin and also stimulates the growth of hair through inhibition of the 5- α -reductase activity.

Caffeine is an anti-adipogenic bioactive compound involved in the modulation of mitotic clonal expansion during adipocyte differentiation through the AKT/GSK3 pathway.



BENEFITS

Inhibits adipogenesis

Stimulates the elimination of fats and toxins

Helps to improve the appearance of cellulite

Activates blood circulation

Antioxidant

Promotes hair growth

COMPOSITION (INCI NAME)		CAS #	% (weight)
Water (Aqua)		7732-18-5	82.550
Phospholipids (from soybean lecithin)		8030-76-0	12.000
Alcohol		64-17-5	3.000
Thein® MM – Natural Anhydrous caffeine extracted from tea leaves		84650-60-2	1.000
Sodium Benzoate		532-32-1	1.000
Potassium Phosphate		7778-77-0	0.350
Tocopherol		59-02-9	0.100

Particle size:	100 – 300 nm (Dynamic Laser Scattering – DLS)
Manufacturing method:	Microfluidization.
Net charge of the liposome:	Negative.
Type of liposome:	Oligo-unilamellar.
Color:	Amber.
Appearance:	Semi-translucent to opalescent liquid. Absence of foreign matter.
Odor:	Mild, slightly ethanolic.
pH:	4,75 – 6,00 (25°C) (USP XXVII)
Density:	0,980 - 1,050 (pycnometer) (20°C) (USP XXVII)
Dry residue:	14,0 gr % minimum (0.5 gr. 1 hour 110° C).
Microbiological control:	Mesophilic aerobes: less than 100 CFU/gr. Moulds & yeast: less than 20 CFU/gr. No pathogens.
Dosage:	1 - 10%
Solubility:	Miscible with water.
Application:	ECOLIP-5 is recommended for in anti-cellulite, slimming, leg wellness, contouring and under-eye creams
Storage:	Keep refrigerated (5 - 15° C), in well-closed containers, protected from light. Shake well before use. Under these conditions, the shelf life of Nanovec liposomes is 2 years.
Packing size:	1 kg, 5 kg, 10 kg, 60 kg Sample size: 50 g

EXTERNAL COSMETIC USE

