

A SLIMMING ACTIVE INGREDIENT FOR THE OXIDATIVE CATABOLISM OF LIPIDS

Function and Characteristics:

CoAXEL combines three active substances:

- L-CARNITINE (5%)
- CAFFEINE (1%)
- COENZYME A (CoA) derived from biotechnology (>150 ppm)

COENZYME A and L-CARNITINE induce a "one-way fatty acid pump" effect by fuelling mitochondrial respiratory chains with free fatty acids. Adipocytes are emptied of their excess content of triglycerides. Moreover, CAFFEINE present in CoAXEL intervenes, like all methylxanthic derivatives, as a lipolysis promoting agent by inhibiting phosphodiesterase.

Cosmetic interest (properties):

CoAXEL is a slimming active ingredient intended for the cosmetic remodelling of the silhouette and the treatment of excess fat problems:

- COENZYME A activates fatty acids;
- L-CARNITINE transports fatty acids;
- CAFFEINE controls the process via cyclic AMP

Applications:

Slimming creams and gels.

Recommended use level: 3 to 8 %

CTFA / INCI name:

Water (Aqua) - Glycerin - Carnitine - Caffeine - Coenzyme A

Specifications:

Appearance	: clear liquid
Colour	: yellow brown
Odour	: characteristic
pH	: 5.5 - 7.5
Specific gravity (20°C)	: 1.045 - 1.065
Water content (K. Fischer)	: 77 - 83%
Refractive index (25°C)	: 1.355 - 1.375
Coenzyme A content HPLC)	: 0.01 - 0.02%
Caffeine content (HPLC)	: 0.90 - 1.10 %
Bacteria	: < 100 germs/g
Yeast and moulds	: < 10 germs/g

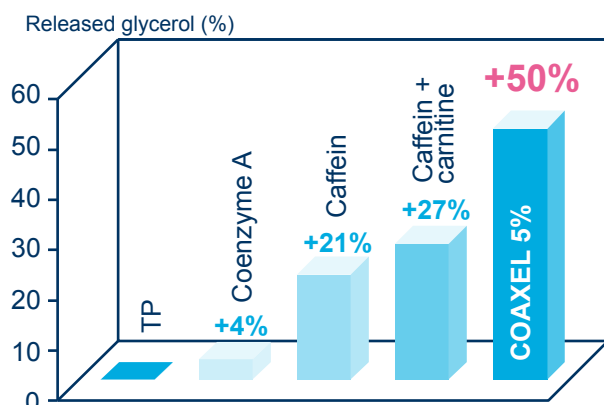
Sederma patent: FR 2 694 195

CLAIM SUBSTANTIATION

IN VITRO

Lipolytic effect:

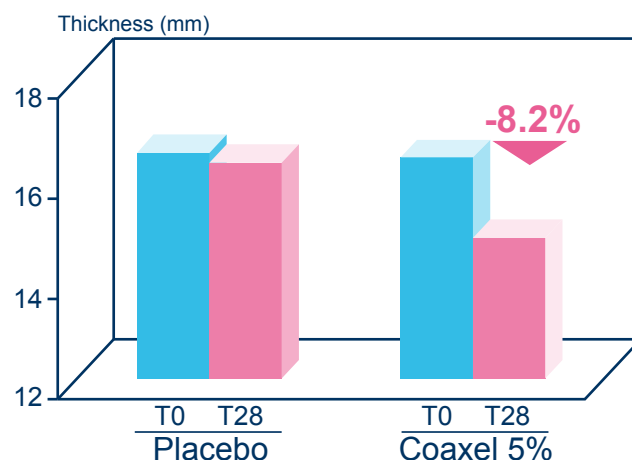
Tested on adipose tissue / 90 minutes incubation / glycerol assay.



IN VIVO

Demonstration of slimming effect by type A echography:

25 people / 28-day treatment / cream containing 5% CoAXEL / Variation of hypodermis thickness.



CoAXEL, due to its complex composition derived from microbial bioconversion, displays an action even more powerful than single components (synergy: +50%), which is confirmed through the *in vivo* study.