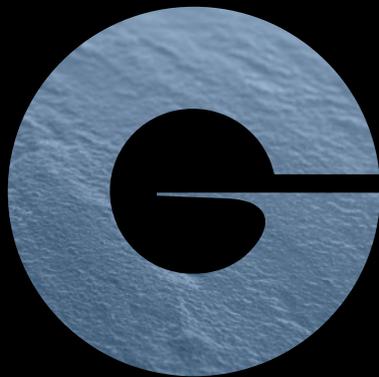


Soliance - Ceramide II
Skin moisturizer
Hair strengthener and conditioner



Givaudan

engage your senses



Ceramide II

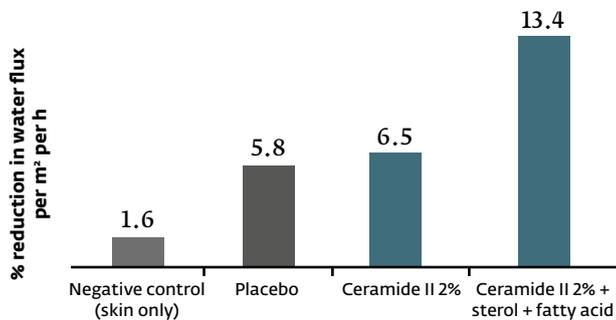
Skin moisturizer / Hair strengthener and conditioner



Ceramide II is one of the lipids that produce the multilamellar layers of the *stratum corneum* barrier. These lipids contribute to control water permeability and maintain skin condition without being occlusive. Ceramide II is a nature identical molecule. It is based upon the sphinganes group, which has also been identified in natural hair lipids. It will positively affect hair strength and resistance to damage, by helping to keep the cuticle in place, and having a side effect of helping to maintain a smooth hair shaft.

Moisturizing effect (In vivo test)

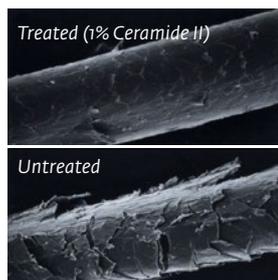
Clinical trial is performed on 19 individuals, with a daily application of a 2% Ceramide II emulsion for 2 weeks. Measurements of TransEpidermal Water Loss are realized by Evaporimeter.



Ceramide II boosts skin moisturization in combination with sterols and fatty acids.

Efficacy on damaged hair (Ex vivo test)

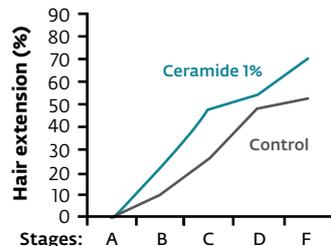
The resistance of the hair swatches to daily constraints (brushings) was evaluated by putting an individual hair fiber, treated or not with 1% of Ceramide II, under extension experiment. Swatches was lengthened progressively and hair scale lifting were rated according to 5 stages monitored by electronic microscopy.



x800 microscope observation of hair under progressive lengthening.

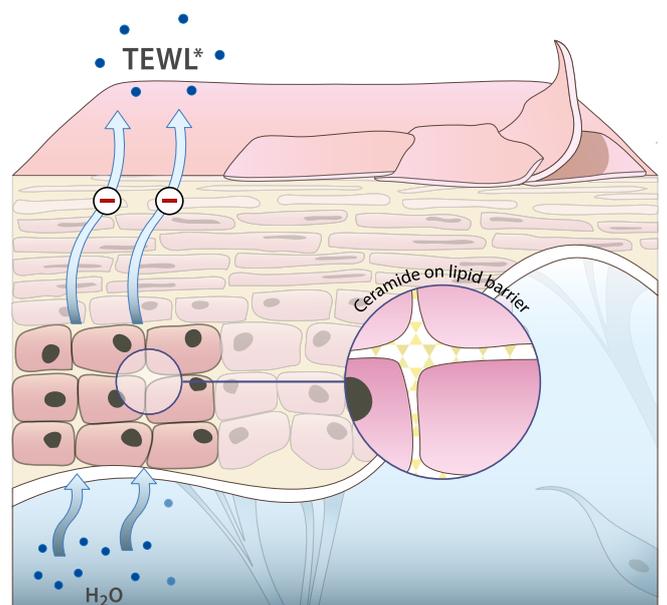
Stages:

- A: Unextended hair fiber surface
- B: Random scale edge lifting and/or bright, fine line at scale edges
- C: Scale edge lifting had become a common occurrence
- D: Extreme scale edge lifting
- E: Hair fiber breakage



Hair is 20% more resistant to brushing constraints. Ceramide II improves hair resistance to daily constraints.

Mechanism of action



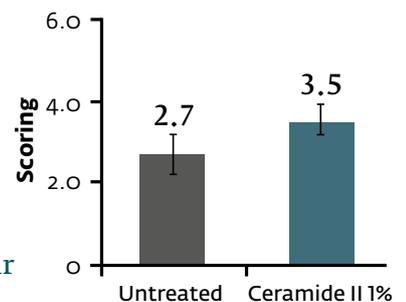
* TEWL: TransEpidermal Water Loss

Ceramide II enhances skin water content through lipid barrier improvement.

Evaluation of hair softness (Ex vivo test)

The evaluation of hair softness was done by 19 untrained panels. Seven tresses were treated with a shampoo containing 1% Ceramide II.

The seven remaining tresses were treated with placebo. Panels evaluated in a random order the softness of hair on a scale from 1 (rough) to 5 (very soft).



Ceramide II increases hair softness.

INCI name: Ceramide NG. | Preservative: None. | Dosage: 0.1% to 1% | Form: powder | Liposoluble

Other cosmetic reference: Uniblend 2G | INCI name: Water (and) PEG 7 Glyceryl Cocoate (and) PEG 60 Hydrogenated Castor oil (and) Ceramide NG

Preservative: Gluconolactone (and) sodium benzoate. | Dosage: 0.5% to 10% | Form: liquid | Water dispersible

Cosmetic applications: Shampoos, conditioners, other hair care products.