



LABORATOIRES
SÉROBIOLOGIQUES
Division de Cognis France

HIBISCIN® LP LS 9321

TROPICAL HAIR CONDITIONER

HAIR

Today, hair is subject to particularly attentive care. Indeed, the use of hair care products (shampoos, balms ...) is now a daily beauty habit.

But hair is submitted to different aggressions:

- mechanical: combing,
- chemical: use of unsuitable shampoos, of perm or dyeing products,
- environmental.

They become fragile, dry, they lose softness, and become difficult to comb.

The use of an active fraction with protective and repairing properties for the formulation of hair care products allow to fight against these drawbacks and helps hair to recover its original beauty.

HIBISCIN® LP LS 9321

DEFINITION / COMPOSITION

HIBISCIN® LP LS 9321 is obtained by bio-transformation of native proteins from the seeds of *Hibiscus esculentus* L.

Hibiscus esculentus L.

Hibiscus esculentus L. (family: Malvaceae) grows in India, Malaysia, the Philippines and Central Africa. It is widely used in traditional medicine, especially for its antiseptic benefits for cleansing and healing wounds.



Fig. 1 - *Hibiscus esculentus* seed.



Fig. 2 - *Hibiscus esculentus* flower.

The seeds of *Hibiscus esculentus* L. contain proteins, calcium and vitamins, and offer excellent nutritive properties. The proteins of *Hibiscus esculentus* L. are similar to those of soybean or milk casein because of their comparable amino-acid content.

Main components:

The active fraction of HIBISCIN® LP LS 9321 is constituted of hydrolyzed proteins.

Molecular weight:

- < 5,000 daltons: approx. 70%,
- 5,000 – 30,000: approx. 30%.

Active fraction \approx 3%

HAIR BENEFITS

As the composition of *Hibiscus esculentus* L. proteins is similar to milk casein, HIBISCIN® LP LS 9321 may be considered as a **hydrolyzed botanical milk** from exotic tropical plant.

HIBISCIN® LP LS 9321 has a good:

- protective and repairing effect on hair fibre, particularly on damaged hair,
- softening effect,
- conditioning effect,
- improves hair sensorial properties.

COSMETIC USE

- Shampoos for dry hair, hair damaged by perm, dye, bleaching.
- Nutritive and revitalizing hair balms, hair conditioners.

DOSAGE / SOLUBILITY / MODE OF INCORPORATION

1. **Dose of use:** 2%.
2. **Solubility:** soluble in water, insoluble in oils and fats.
3. **Mode of incorporation:** HIBISCIN® LP LS 9321 is introduced into the cosmetic product, at the end of the manufacturing process, at room temperature.

ANALYTICAL CHARACTERISTICS

1. **Aspect:** yellow liquid, of characteristic odor.
2. **Specifications:** upon request.

TOLERANCE

Good.

EFFICACY

Test summaries overleaf.

STORAGE

In its original packaging, at 15 - 25°C.

INCI NAME

Hydrolyzed Hibiscus Esculentus Extract.

MANUFACTURER

Laboratoires Sérobiologiques, division de Cognis France.

ACTIVE INGREDIENT FOR COSMETOLOGY

EFFICACY TESTS

IMPROVEMENT OF HAIR COMBING

Aim

To evaluate the influence of HIBISCIN® LP LS 9321 at 2% in a shampoo on hair combing parameters. Hair combing parameters reflect the hair surface condition, which influences hair softness.

Protocol

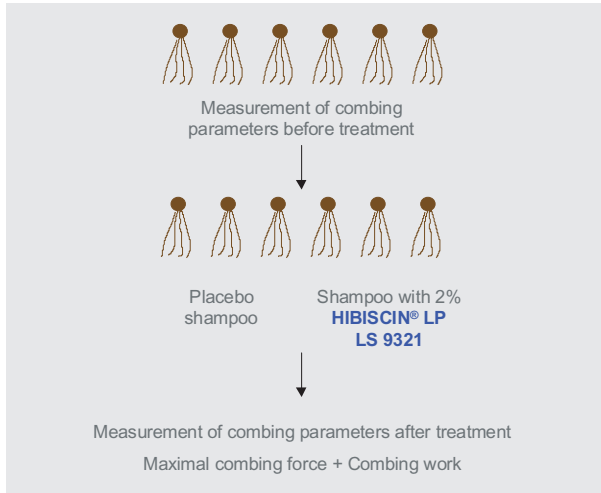


Fig. 1 - Description of the protocol.

Results

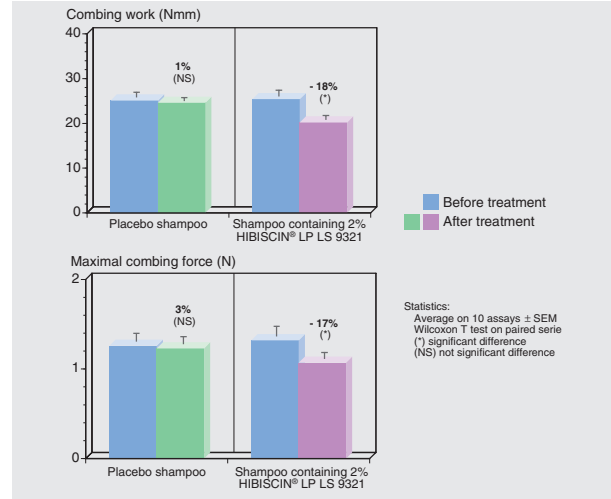


Fig. 4 - Evaluation of the combing parameters.

The treatment of hair with a shampoo containing 2% HIBISCIN® LP LS 9321 has decreased both combing parameters:

- maximal combing force: -17%,
- combing work: -18%.

Conclusion

HIBISCIN® LP LS 9321 improves the hair surface, and the hair combing. It also shows good conditioning effect on hair.

FILM-FORMING REPAIRING EFFECT

Aim

To evaluate the influence of HIBISCIN® LP LS 9321 at 2% in a shampoo on the surface condition of dry hair. Hair surface is visualized and quantified by image analysis using scanning electron microscopy.

Protocol

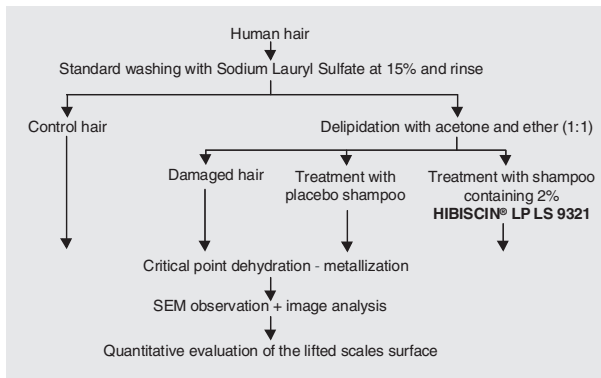


Fig. 5 - Description of the protocol.

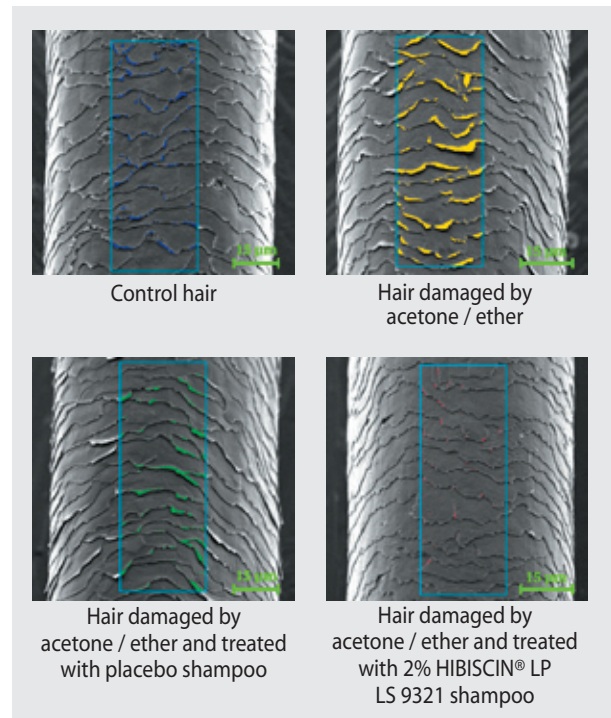


Fig. 7 - Scanning electron micrographs of hair tresses in the different test conditions.

Results

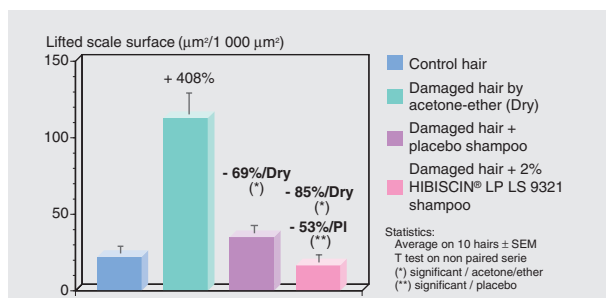


Fig. 6 - Quantification of the surface of lifted scales in the different test conditions.

The treatment of hair with acetone / ether strongly increased the surface of lifted scales, corresponding to an important damage of the hair surface (= dry hair).

The use of a shampoo containing 2% HIBISCIN® LP LS 9321 significantly improves this parameter compared to the placebo shampoo.

Conclusion

HIBISCIN® LP LS 9321 significantly improves the aspect of hair surface and has a good film-forming repairing effect on hair.