



A company inspired by nature and supported by science

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(GFT)[®]

The Green Ferment Tech[®]

Transformation of simple raw materials in a Ferment–Peptide Complex by a process that combines Natural ferment with a natural origin peptide

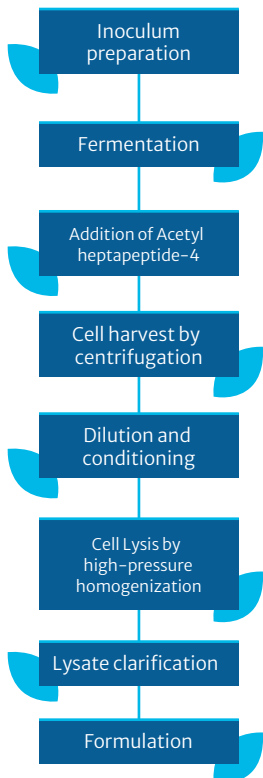


INNOVACTIVE BARRIERFERM

a protective barrier ferment which prevents dehydration supporting a healthy skin microbiota

| TECHNOLOGY | EFFICACY STUDIES | DOSAGE | REGULATORY |
|------------------|---|--------|-------------------------|
| BIO FERMENTATION | Protective activity (TEWL) Moisturizing activity Promoting adhesion of beneficial skin bacteria | 1–3% | EU AU CN KR US CA JP |

FLOWCHART FOR INNOVACTIVE BARRIERFERM PREPARATION



INNOVACTIVE FERMENTATION STRATEGY

Bacillus Subtilis originally obtained from Natto (the oldest Japanese food) during soybeans lactic fermentation, is fermented in the laboratory under controlled technological conditions in a specific medium with natural substrates and natural origin peptides having cosmetic properties.

During fermentation process, Bacillus Subtilis sp. Natto produces several bio actives peptides and enzymes playing key roles in skin cells.

The **INNOVACTIVE FERMENTATION STRATEGY** to obtain a Ferment–Peptide Complex is based on the addition of peptide during natural fermentation of Bacillus Subtilis grown with plant–derived nutrients.

INNOVACTIVE BARRIERFERM

Ferment–Peptide Complex derived from natural fermentation in which Bacillus Subtilis grows in a specific medium including Acetyl heptapeptide–4 to synergize with peptides produced by the bacteria.

KEY ACTIVE INGREDIENTS AND THEIR FUNCTIONS:

At the end of fermentation, the bacteria are filtered and lysed to obtain a concentrate rich in active ingredient such as:

Vitamins Group B/K2/C
Biologically active peptides
Antioxidants

Peptides and Proteins
Catalase enzyme
Lipase enzyme

Peptides and enzymes are titrated as total proteins and specific enzymatic activities which together with the B Group Vitamins make the Ferment–Peptide Complex particularly effective in several activities.

In the BARRIERFERM particularly: **Bacillus Subtilis Ferment** is a key for microbiota balance, barrier reinforcement, moisturizing and protective activity.

Acetyl heptapeptide–4 boosts the skin’s own defense system by promoting microbiota balance, diversity and growth of beneficial bacteria by improving skin.



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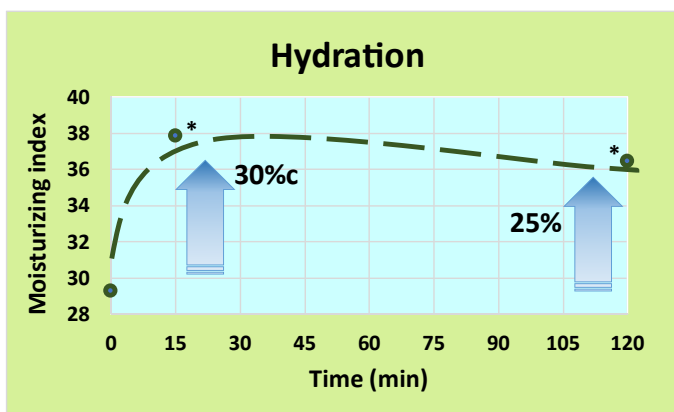
INNOVATIVE BARRIERFERM

INNOVATIVE BARRIERFERM EFFICACY

- 1 Reinforces skin barrier and its functionality
- 2 Supports and protects the healthy microbiome
- 3 Promotes the adhesion of beneficial bacteria to the skin
- 4 Improves protection to prevent dehydration
- 5 Moisturizing activity
- 6 Antioxidant protection from pollution, blue light and UV

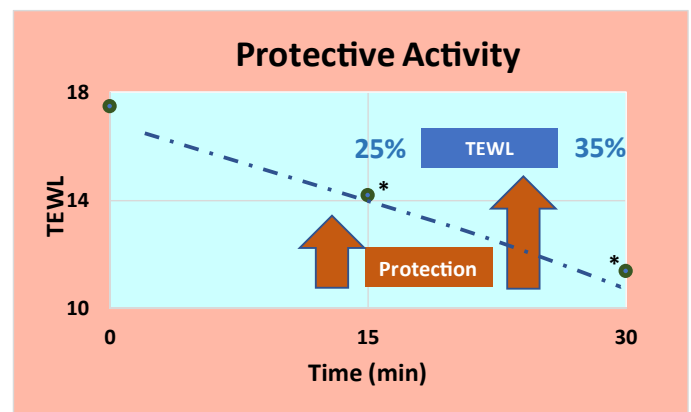
IN VIVO EFFICACY TEST CARRIED OUT USING A CREAM CONTAINING 3% OF BARRIERFERM

Evaluation of the moisturizing efficacy after 15 minutes and 2 h



* Statistical significance $p < 0.05$

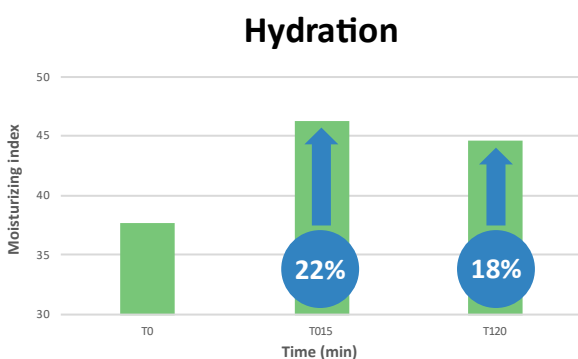
Evaluation of the protective activity after 15 and 30 minutes



* Statistical significance $p < 0.05$

IN VIVO EFFICACY TEST CARRIED OUT USING A CREAM CONTAINING 1% OF BARRIERFERM

Evaluation of the moisturizing efficacy after 15 minutes and 2 h



Evaluation of the protective activity after 15 and 30 minutes

